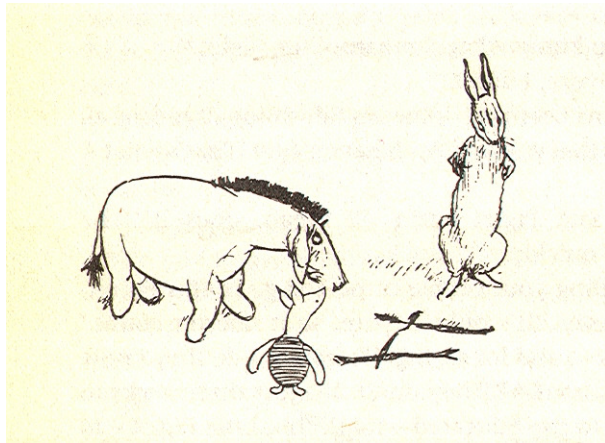# VOCALISM IN THE CONTINENTAL RUNIC

INSCRIPTIONS

Martin Findell, MA.

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Volume I: Text

"… That, for instance, is–"

"An A," said Rabbit, "but not a very good one."

(A.A. Milne (1993 [1928]): *The House at Pooh Corner*. London: Mammoth).

Abstract

The goal of this thesis is the phonological analysis of a corpus of runic inscriptions in order to reconstruct the vocalic system(s) of the West Germanic dialects spoken in the Continental interior between the 5th-7th centuries A.D.. The thesis presents a brief outline of the late Proto-Germanic vocalic system and of the principal sound changes involved in the development of the later dialects of the region (Old High German and Old Saxon). The main part of the thesis surveys the data retrievable from the runic inscriptions in an attempt to determine to what extent (if any) these sound changes are in evidence. In many respects, the data are consistent with the anticipated developments attested in OHG and OS; but for some of the sound changes – particularly those affecting the diphthongs – the existing models do not satisfactorily account for the data. There is also some evidence for processes not normally identified in accounts of the phonological background of the later dialects.

The project endeavours to be rigorously empirical in approach; to avoid making unnecessary assumptions and prejudgements about the nature and content of the runic texts; and to resist the rejection of an interpretation unless it can be shown to be implausible. From this standpoint, we are confronted with the limited power of any conclusions based on such a small dataset, and with the more general problem of the imperfect correlation between written and spoken forms. If the makers of runic inscriptions cannot be relied on for phonological accuracy or orthographic consistency, to what extent is it possible to make inferences about spoken language from the texts which they created?

Acknowledgements

Contents

Prefatory note

The material discussed in this thesis is set out in the accompanying catalogue, which contains an entry for each inscription giving brief descriptions of the inscribed object and its archaeological context, together with references. Inscriptions are referred to throughout the text by their numbers in this catalogue (e.g., 1. Aalen).

Where multiple transliterations are available in the literature, these are reproduced in the catalogue; in the main text, I use my own synthetic transliteration, unless referring directly to that of a particular author.

Abbreviations

Abbreviations for languages and linguistic terms

abl. – ablative

acc. – accusative

adj. – adjective

Alam. – Alamannic

Av – Avestic

Bav. – Bavarian

C – consonant

comp. – comparative

CLat – Classical Latin

CRun – Continental Runic (see §1.1.1)

dat. – dative

dial. – dialect

dim. – diminutive

Du – (modern) Dutch

du. – dual

EFrk – East Frankish

EGmc – East Germanic

ePGmc – early Proto-Germanic

fem. – feminine

FN – female (personal) name

Fris – (modern) Frisian

Frk – Frankish

gen. – genitive

Gk – Greek

Gmc – Germanic

Go – Gothic

Hitt. – Hittite

imp. – imperative

ind. – indicative

inf. – infinitive

inst. – instrumental

It – (modern) Italian

Langob – Langobardic

Lat – Latin

LFrk – Lower Frankish

LG – Low German

LLat – Late Latin

lPGmc – late Proto-Germanic

masc. – masculine

MDu – Middle Dutch

ME – Middle English

MFrk – Middle Frankish

MHG – Middle High German

MLG – Middle Low German

MN – male (personal) name

modE – modern (standard) English

modG – modern (standard) German

N – nasal

neut. – neuter

NFris – North Frisian

NGmc – North Germanic

nom. – nominative

Norw – Norwegian

NWGmc – Northwest Germanic

OGo – Ostrogothic

OE – Old English

OEN – Old East Norse

OHG – Old High German

OLF – Old Low Franconian

ON – Old Norse

opt. – optative

OS – Old Saxon

OWN – Old West Norse

part. – participle

PCelt – Proto-Celtic

pers.n. – personal name

PGmc – Proto-Germanic

PIE – Proto-Indo-European

PItal. – Proto-Italic

pl. – plural

PN – place name

PNorse – Proto-Norse

pres. – present tense

pret. – preterite

R – resonant (i.e., liquid, nasal or semivowel)

RFrk – Rhine Frankish

RN – river name

sg. – singular

Skt – Sanskrit

subst. – substantive

T – tenuis consonant (i.e., voiceless obstruent)

UG – Upper German

V – vowel

Vand – Vandalic

voc. – vocative

WFrk – West Frankish

WGmc – West Germanic

Abbreviations for sources

An – Antonsen 1975.

AZ – Arntz and Zeiss 1939.

BR – Braune and Reiffenstein 2004.

BT – Bosworth and Toller 1898.

CIL – *Corpus Inscriptionum Latinarum*.

DOE – *Dictionary of Old English* (University of Toronto).

DR – *Danmarks runeindskrifter* (Jacobsen and Moltke 1941-1942).

Gr – Grünzweig 2004.

IK – *Ikonographische Katalog* (Clavadetscher et al. 1984-1989).

IRF – *Inscriptions runiques de France* (Fischer 2007).

KJ – Krause and Jankuhn (Krause 1966).

L – Looijenga 2003a.

Ma – Martin 2004.

O – Opitz 1987.

OED – Oxford English Dictionary.

RMR – *Runes, Magic and Religion* (McKinnell et al. 2004).

Sch – Schwerdt 2000.

SUR – *Die Sprache der urnordischen Runeninschriften* (Krause 1971).

Vulg. – Vulgate Bible

1. The Continental runic inscriptions

1.1 General introduction

The object of study for this project is a corpus of 90 runic inscriptions produced on the Continent between the 5th-7th centuries A.D.. These inscriptions, all of which (apart from the Kleines Schulerloch cave inscription) contain short texts on portable objects, provide us with some of our earliest data for the dialects from which the German language developed. The period of production occupies a significant position in the history of the Germanic language family, being (according to Klein 2001:579-580) the period in which the more-or-less unified NWGmc continuum broke up into the dialect groups which we classify as the distinct Gmc languages.

The runic inscriptions, then, constitute a body of data representing a set of dialects at some stage of development between a relatively homogeneous NWGmc (itself a daughter of lPGmc), and the dialects attested in mss. which are classified as OHG (attested between the 8th-11th centuries)[1] and OS (attested between the 9th-12th centuries). Some reference will be made to OLF, OFris and other Gmc dialects, as appropriate. Given the distribution of the

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[1] The term OHG conventionally covers the set of dialects in which the Second Consonant Shift is active to some extent. Within OHG are two major subgroups: UG (Alam., Bav.) and MG (the various Frk dialects) (BR §§4-7).

epigraphical material in what is now southwestern Germany (Map 1), OHG (and especially UG) is of greatest relevance.

The goal of the project is, so far as is possible, to reconstruct the vocalic system(s) of the dialects attested in the inscriptions. If a dialect is understood to be, from a phonological point of view, a cluster of regular sound changes relative to the system of a pre- or proto-language, then the dialects of the inscriptions are likely to involve at least some of the sound changes which distinguish OHG and/or OS from NWGmc. Since we have more detailed reconstructions of lPGmc than of NWGmc, the former will be our starting point. In §2, I briefly describe the lPGmc vocalic system and identify the major sound changes which produce the daughter systems in OHG and OS. The core part of the study (§§3-6) examines closely the epigraphical evidence for these sound changes. §7 continues this detailed interrogation of the material with regard to particular problems of morphophonology (the *n*-declension, the assignment of gender to weakly inflected pers.ns., and the development of the nom.sg. *ō*-stem suffix). In the final chapter (§8), I bring the conclusions of the preceding analyses together in order to give an overview of the vocalic systems attested in the inscriptions.

1.1.1 The dialect(s) of the inscriptions

The choice of a label for the dialects represented in the Continental inscriptions has been a topic of some controversy (see Nedoma 2004a:12; 2006a:110-112). Various authors have described them as "South Germanic", "Continental West Germanic", "*Düdisch*", or "pre-OHG/pre-OS". None of

these labels is without problems, and it might be prudent to avoid the use of a single term altogether. It is probably safe to allow that we are dealing with a set of closely-related WGmc dialects, while recognising that a few of the inscriptions (notably 16. Charnay) appear to show EGmc features; some are classified with greater or less certainty as PNorse;[2] and still others, while WGmc, may contain features associated with OFris and/or OE, rather than OHG or OS. Although the notion of an "Anglo-Frisian" dialect unity is now generally rejected, a distinction may be drawn between an "Ingvaeonic" (I would prefer to say "coastal") as against an "inland" group of WGmc dialects (Parsons 1996; 1999:101-109; Stiles 1995). This is not to say that the two are entirely discrete, of course: OS shares features with OFris and OE, although it is more closely related to OHG.

Given that the bulk of our material comes from what is now southwestern Germany, we are mainly concerned with the "inland" dialect group (the dialects from which OS and OHG developed). Where there are indications that we may be dealing with features associated with the "coastal" dialects, these are discussed in the text. Note that inscriptions which are identifiably Frisian from a runological point of view have been excluded from the corpus (§1.2.2).

Where it is necessary to use a label to refer to the set of inland WGmc dialects represented in the inscriptions, I have opted for the term "Continental

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[2] I have followed convention in using the term "Proto-Norse" when referring to the language attested in the early Scandinavian runic inscriptions, in spite of the well-founded objections expressed by, e.g., Antonsen (2003:12-13). The term "Northwest Germanic" I reserve for a reconstructed stage of language.

Runic" (CRun). This is intended to be a convenient, vague label for "those WGmc dialects represented in the inscriptions", not for a discrete or complete linguistic entity.

1.1.2 Chronology and dating

Dating the Continental runic inscriptions to a period between the 5th-7th centuries is not controversial. However, the dating of finds is imprecise: different sources often give widely varying dates for a particular inscription, and in many cases fail to distinguish between the date of a grave and that of an inscribed item's manufacture, or to state explicitly the type of evidence on which the dating is based. I am therefore inclined to treat the matter with caution and avoid using chronology as a criterion for subdividing the corpus. Except where we have a more secure basis for dating, such as a *terminus post quem* gleaned from coin evidence or dendrochronology, I regard all dates as tentative. I shall, however, test my results against the suggested chronologies. For further discussion of the problems surrounding the dating of the material, see Hills (1991:31-46); Roth (1981a; 1998).

Nedoma (2004a:183-184) lists the following inscriptions as relatively late: 4. Arlon; 8. Bad Krozingen A; 53. Neudingen-Baar I; 55. Niederstotzingen; 62. Pforzen II; 70. Schwangau; and 90. Wurmlingen. All of these have been assigned dates of c.600 or early 7th century. 76. Stetten stands out as being much later (c.680/690 – see catalogue), a date which in Nedoma's view (*ibid.*) argues against the runic character of this item.

Often in the literature, date-ranges are stated as a given, without further comment. Many datings rely on poorly-justified and questionable assumptions about sound changes. For example, Arntz (1937:8) assigns 65. †Rügen to the 5th century on the basis of a supposed link to the bracteate tradition, namely what he sees as a textual parallel between Rügen **giu** and 28. Geltorf II **gwu** (see entries in §4.1). This parallel is at best speculative, and given the questionable authenticity of the Rügen item, the dating rests on very unsteady ground.

Even where we can be more confident of a dating, it is rare for the sources to narrow the date-range down to a period shorter than 50 years. When the entire period of runic activity on the Continent is at most 250-300 years (the earliest finds being c.400; the latest, Stetten c.680-690), and given the disagreements about dating in many cases, it is not possible to establish a clear relative chronology. Nevertheless, beside the list of items normally dated to the 7th century, we can compile a list of those normally dated before c.500. These are 1. Aalen; 3. †Arguel; 49. Liebenau; 78. †Trier; 85-87. †Weser I-III.[3] The corpus also includes a number of bracteates, for which the conventional date-range c.450-c.550 is given: 28. Geltorf II; 34. Heide; 36. Hitsum; 71.

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[3] Here again, we are dealing with datings based on a wide range of criteria. The Weser bones, for instance, have been subjected to amino acid and ^{14}C analysis, but these methods produce divergent results which Pieper (1989) attempts to reconcile using art-historical comparisons. For Arguel, Bizet's dating is entirely dependent on his speculative linguistic interpretation of the text (Bizet 1964).

Sievern; <u>72. Skodborg</u>; <u>73. Skonager III</u>. The remaining inscriptions,

comprising the bulk of the corpus, are mostly assigned dates in the 6th century.

1.1.3 Reconstructing and representing PGmc

It is not my intention to become deeply involved in the problems

surrounding the phonological reconstruction of PGmc. Individual authors use

a variety of conventions in their representation of proto-forms, not least

because the phoneme inventory is in dispute. Except where quoting from

another source, I follow the reconstructions of Orel (2003). I represent the

short vowels as */i e a u/, the long vowels as */ī ē$_1$ ē$_2$ ō ū/ and the diphthongs

as */ai au eu/ (§2.2). Antonsen (1972:118) argues that it is impossible to

determine whether the two subsystems traditionally labelled "short" and

"long" were actually distinguished in terms of quantity, tenseness or a

combination of the two. Although I prefer to adhere to the conventions of IPA

notation in phonemic representations, I follow Antonsen's practice of marking

the long/tense vowels with a macron, rather than commit to the use of the IPA

length marker, which would imply that quantity alone is the distinguishing

feature of this subsystem. In the text, however, I retain the traditional terms

"short" and "long" for the sake of simplicity and in deference to philological

convention. The resulting compromise is less than satisfactory, but in a study

which is primarily concerned with developments in a phonological system,

rather than with phonetic details, its consequences are not significant.

When citing proto-forms for stems or whole words, I use italic script rather

than a phonemic representation, in order to avoid making unwarranted

assertions about the character of the consonants. Where it is necessary to discuss specific phonetic developments, I use IPA notation for individual segments. Inflected forms are based on the reconstructions of Lehmann (2005-2007) and Ringe (2006). When referring to a nom.sg. *n*-stem in discussions of etymology, I use Orel's citation form in -*ōn*. The actual reconstruction of the *n*-stems is a point of disagreement among my sources, and will be discussed in more detail in §7.1.

1.1.4 Orthography and phonology: the relationship of grapheme to phoneme

Although this project focuses on forms attested in the epigraphical data, it is inevitably dependent on the tradition of philological work on the Gmc languages, and especially the work on the Continental dialects. In this tradition it is axiomatic that the phoneme is the fundamental unit of the linguistic system; that sound change is regular across a dialect area; and that orthographic variation is phonologically significant in most cases, allowing for such factors as scribal error, the interference of Latin and/or Gallo-Romance orthographic traditions, and analogy. While I have no intention of discarding these axioms, it is necessary to bear in mind the imperfections of the writing system both in principle and in practice. The notion of a "perfect fit" between the graphemic and phonemic systems might have some validity at the point of creation of the writing system (see, for example, Antonsen's (1972) account of the runic vowel graphemes in relation to the lPGmc vowel system); but as spoken language changes over time and as the same set of graphemes is used

to represent a variety of dialects, the writing system must either be adapted or become less intimately aligned with the sound system. Especially when dealing with vowels, we may well have a system in which two phonemes have allophones which are sufficiently similar to allow varying graphic representations. If, for example, /a/ has a raised front allophone [æ], and /e/ has a relatively open allophone [ɛ], and the only available graphemes for representing these sounds are <a> and <e>, it is to be expected that the data will show some apparently confusing alternations between the two.

The other issue is that of practice: when we are dealing with a tradition in which orthographic conventions are not rigidly enforced, there will inevitably be a certain amount of "noise" in transmission as individual language users make their own decisions about how best to represent a particular sound or group of sounds. Individuals are prone to idiosyncrasy and error, and may be operating in a culture where errors or incidental variations are not given much importance.

I am not at this stage primarily concerned with making statements about general phonological theory, or with testing particular theoretical models. If linguistics is to consider itself in any way scientific, then its theories must stem from the analysis of real data. When we come to deal with runic inscriptions, often we are faced with difficulties in deciding what the data represent, and it is impossible to read a text without making certain assumptions about how the language works. Nonetheless, I do consider some of the models which have been proposed to explain particular sound changes; and I discuss the matter of

what constitutes evidence for or against a hypothesis, and whether such evidence exists in the inscriptions.

1.2 The corpus of runic inscriptions

Although it is well known that the set of runic inscriptions classified as "Continental" or "South Germanic" is concentrated in the region of the upper Rhine and upper Danube, individual authors differ in their view of the extent of that material. As was mentioned in the introduction, we are dealing almost exclusively with inscriptions on portable objects; it follows that the location of a find is not necessarily an indicator of where the object was manufactured, nor where the inscription was produced. Although geographical boundaries have been placed on the corpus (§1.2.1), it must be recognised that these boundaries are porous. I have therefore included some items not normally considered part of the "Continental" or "South Germanic" runic corpus. Conversely, some items included in other corpora of Continental material (compare An; AZ; KJ; L; O) are omitted, in most cases on the grounds of intelligibility. A particular inscription is included in the corpus if it meets all of the following criteria:

1.2.1 Geographical and chronological context

The study incorporates material from a geographical area with no fixed western or southern boundaries. I have set as the northern limit of the area the line of the Danevirke. Although this fortification postdates the "runic" period (the earliest phase of construction is dated dendrochronologically to c.737 (Wilson 1978:3-7)), its placement exploits existing natural boundaries

(Andersen et al. 1976; Andersen 1998; Wilson 1978). Klein (2001:579) identifies the Eider as the boundary between NGmc and WGmc dialect areas.

The eastern boundary of the study area is the Oder, corresponding to the boundary between archaeologically distinct Germanic groups conventionally identified as *Elb-Germanen* (or *Herminones*, after Tacitus) and *Oder-Weichsel-Germanen* or *Ost-Germanen* (Robinson 1992:17; Waterman 1966:43). Whether this river necessarily marks a boundary between WGmc and EGmc dialect areas is open to question.

All runic inscriptions found within the study area are included in the corpus, unless it can reliably be shown that they are written in non-WGmc dialects (e.g., if they attest the PNorse retention of lPGmc inflectional */-z/). Items conventionally identified as linguistically PNorse or EGmc are included if a WGmc interpretation of the inscription cannot be ruled out. For example, although the word *alu* is well-attested as part of the Scandinavian tradition, it is at least conceivable that a WGmc cognate (loanword?) is contained (or at least understood) in the Continental examples.

Conversely, finds from outside the area will be included in the corpus if there are reasonable grounds for believing that an "inland" WGmc dialect may be represented. Where this is unclear, the item is included and discussed in the appropriate parts of the text.

Several finds from the Low Countries and England have been included, which may belong to the "coastal" rather than to the "inland" group of WGmc dialects. In the first instance, finds from this area are excluded only if they fall

outside the time period of the study, or if they contain additional runes which would identify them as Frisian or English (§1.2.2).

An item is included if it is datable within the period c.400-c.700 A.D.. This period covers all of the material conventionally classed as "Continental" or "South Germanic" (see §1.1.2).

1.2.2 Content and graphology

An inscription is included only if it can reliably be identified as runic (objects with isolated rune-like carvings are excluded), and if it contains what might conceivably be an intelligible text (even if no interpretations are available). Uninterpretable inscriptions are excluded, as are the fuþark inscriptions from Breza (AZ 8; KJ 5; L VII.10; O 8) and Trossingen (Theune-Großkopf and Nedoma 2006).

The corpus contains only inscriptions written using the 24-letter Older Fuþark. Those using the innovative English and Frisian runes are excluded, as the addition of these runes reflects sound changes peculiar to the "coastal" dialects (Parsons 1996; Stiles 1995).

I have excluded one item from the corpus on the grounds of interpretability: the Bergakker scabbard mount (L IX.7) has been the subject of lengthy debate (see especially Bammesberger and Waxenberger 1999); however, its transliteration and linguistic interpretation remain so controversial that it cannot readily be evaluated for the purposes of this project. This is, admittedly, an *ad hoc* exception to the criteria stated above, but the inclusion

of this item would necessitate lengthy discussion yielding very little of value to the aims of the project.

1.2.3 Authenticity

Several runic inscriptions have at one time or another fallen under the suspicion of being modern forgeries, and some of these are almost entirely ignored in the runological literature. I feel it appropriate to include in the corpus those items which are suspect but which have not been rigorously shown to be fakes: for example, the serpentine object from Trier (almost universally dismissed, though on unclear grounds) is included, while the Maria Saaler Berg bone inscription (exposed by the admission of the forger and by subsequent chemical analysis) is not (Düwel 1994c:104-105; Nedoma 2004a:389).

The items whose authenticity is in doubt are marked in the text with a superscript dagger [†]. I have chosen to include them for the sake of completeness, bearing in mind that attempts have been made in recent years to rehabilitate some of them (the Weser bones, in particular, are now generally accepted as genuine by the runological community). By including these items I do not mean to endorse them, but merely to allow that they may be worthy of discussion. They must be treated with caution, and it would be imprudent to allow any arguments about the language of the inscriptions to rely heavily on these witnesses. An evaluation of the arguments for and against the authenticity of each suspect item can be found in the catalogue (Appendix 2).

2. Phonology and runic orthography

2.1 Introduction

The main part of the study takes as its point of departure the vocalic system of lPGmc, as far as it can be reconstructed. In the present chapter, this system will be outlined (§2.2), as will the developments which produced the vocalic systems of OHG and OS (§2.3). The subsequent chapters will then examine the runic data in detail to search for and evaluate the evidence for these sound changes.

2.2 The vocalic system of lPGmc

As noted above (§1.1.3), there is no complete consensus on the proper reconstruction and representation of the PGmc vocalics. In this section I shall outline the phonological system from which the later analyses will proceed.

2.2.1 Short vowels

$$*/i/ \qquad */u/ = *[u \sim o]$$

$$*/e/$$

$$*/a/$$

The phonemic status of */i/ and */e/ has been disputed (e.g., by Moulton 1961:6-12); Lehmann (2005-2007 §2.7.1) argues that they are distinct phonemes because, although their distribution is to a large extent complementary, we have near-minimal pairs such as PGmc *etanan* "eat" vs.

witanan "know"; and both of them can occur before */a/ and */u/ in following syllables (*/i/ and */e/ are not simply umlaut variants). The 4-member system of short vowels is also accepted by Antonsen (1972:132-133), van Coetsem (1994:46), and Ringe (2006:214, 220-225).

For the purposes of this study, I assume that */i/ and */e/ are separate phonemes, while recognising that they may not always be distinguishable. When citing proto-forms, I follow Orel's (2003) reconstructions, unless stated otherwise. Orel acknowledges the difficulties in distinguishing between the two phonemes, and admits that some of his own reconstructions are "close to arbitrary" (2003:xii).

Within PGmc, underlying */e/ is raised to */i/ in unstressed positions (except before */r/). This applies only to those cases where a particular syllable may be either stressed or unstressed following the Gmc accent shift, such as the pronouns: PGmc *'*ek* ~ *'*ik* > ON *ek*, OE *ic*, OHG *ih*; PGmc *'*mek* ~ *'*mik* > ON *mik*, OE *mec*, OHG *mih* (Ringe 2006:220). OHG seems to generalise the */i/-forms (*ih, mih, dih*), while OS shows some variation, possibly as a consequence of competing orthographic influences (*ic ~ ec, mî ~ me ~ mik, thic*). On the general development of these phonemes in OHG and OS, see §§2.3.3.1-2.3.3.2.

ePGmc stressed */e/ is also raised to lPGmc *[i] before a syllable-final nasal; and before a syllable containing a high front vocalic (van Coetsem 1994:88-93; Ringe 2006:220, 224). Since this is a purely allophonic process, I have retained the representation *e* when citing proto-forms from Orel (2003),

e.g., *weniz* "friend", *fenþanan* "find" (compare Ringe's (2006) *winiz, *finþaną*).

PGmc */u/ has allophones conditioned by the vowel of the following syllable: */u/ = *[u] before a high vowel, *[o] before a non-high vowel (unless a nasal consonant intervenes).

I have characterised PGmc */a/ as low and central.[4] It is not my intention to endorse any particular theory about the PGmc value of this vowel; we could define it negatively as that vowel which belongs to the short/lax subsystem of the PGmc vowel system and which is distinguishable from the back/round vowel */u/ (→ *[u o]) and the front/spread vowel(s) */i e/ (or */i/ → *[i e]). Antonsen (1972:110; 1975:122-123) posits three umlaut allophones for */a/: *[æ] in a high-front environment; *[ɑ] in a high-back environment; and *[ə] in a combined high-front and high-back environment.

2.2.2 Long vowels

$$*/\bar{\imath}/ \qquad\qquad */\bar{u}/$$

$$*/\bar{e}_2/ \qquad\qquad */\bar{o}/$$

$$*/\bar{e}_1/$$

$$*/\bar{a}/ \; (< */anx/)$$

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[4] According to van Coetsem (1994:82-83), lPGmc */a/ represents a centralised or neutralised reflex of ePGmc */ɔ/. Since the reconstruction of PGmc is not our object here, I do not intend to discuss this proposal further.

The evidence of Latin loanwords on the one hand, and of the umlaut effects triggered by nonroot vowels on the other, indicates that the PGmc reflexes of PIE */ē ō/ were relatively low; consequently, Antonsen represents them as */ǣ/ and */ɔ̄/ (1972) or */ō̞/ (2002), respectively. In my own text, I use the more traditional notation */ē₁ ō/ (compare Lehmann 2005-2007 §2.2, §2.7.3; Orel 2003:xii; Ringe 2006:214).

*/ē₁/ (< PIE */ē/) is to be distinguished (at least in terms of its history) from another long/tense mid front vowel conventionally notated */ē₂/. The origin of */ē₂/ and its place in the history of PGmc is a subject of debate which need not concern us in this study (see Antonsen 1972:131; van Coetsem 1994:98-113, 114-118; Connolly 1979; Vennemann 1994b:208-212).

A process of nasal assimilation with compensatory lengthening affects PGmc */i a u/ before */nx/ in the later stages of the proto-language (Antonsen 2002:28; Ringe 2006:149-150, 215-216): */inx/ > */īx/; */unx/ > */ūx/; */anx/ > */āx/. The last change produces a long low vowel */ā/, which is not normally treated as part of the phoneme inventory of PGmc as it is a late development (though one which can plausibly be ascribed to lPGmc as it

appears in all the dialects, e.g., PGmc *xanxanan* > Go *hāhan,* OE *hōn,* OFris *huā,* OS OHG *hāhan* "hang") and occurs only in this restricted context.[5]

2.2.3 Diphthongs

Conventionally, the lPGmc vowel system contains 3 diphthongs which concern us:

　　　*/eu/　*/ai/　*/au/

A fourth diphthong */ei/ can be reconstructed for earlier stages of PGmc, though since this merges with */ī/ in lPGmc, it is not relevant to the present project (van Coetsem 1994:94-95; Lehmann 2005-2007 §2.7.4).

Lehmann (2005-2007 §2.2, §2.7.3) and Ringe (2006:214) reconstruct a phoneme */eu/ with an umlaut allophone *[iu], while Antonsen (1972) and Moulton (1961) treat them as distinct phonemes, */eu iu/. Antonsen justifies his reconstruction by reference to Scandinavian runic data: Darum V bracteate (An 56; IK 43; KJ 104) **niujil** vs. Opedal (An 21; KJ 76) **le̲ubu** (1972:129-130). Aside from the reading of Opedal **e̲u** vs. **iu**,[6] these forms are not in

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[5] Ringe (2006:214, 258) identifies another */ā/ as an alternant with */ai/ in the pres. stem-formant of class III weak verbs. Since no verbs of this class are attested in the inscriptions, I shall not comment further on this point.

[6] Antonsen's reading here diverges from the more widely-accepted **liubu** (compare, e.g., Krause 1966:175-176; Nielsen 2000:105).

contrastive distribution, and can perfectly well represent allophones of a single diphthong selected by the frontness or backness of the following vowel.[7]

2.2.4 On the distinction "front" vs. "back"

In §§4-6 I group the non-diphthongal vocalics (i.e., the monophthongs and the semivowels) into 3 sets which I label "back" (*/u ū ō w/), "front" (*/i e ī ē$_1$ ē$_2$ j/) and "low" (*/a ā/). In referring to a distinction between "front" and "back", I am employing the terms of traditional philology. Antonsen (1972:132-133) argues that the contrasts of PGmc */i e/ vs. */u/ and */ī ē$_1$ ē$_2$/ vs. */ū ō/ are properly characterised by the opposition "spread" vs. "rounded". The basis of his argument is that all of these phonemes have umlaut allophones which differ from the underlying form in terms of frontness/backness, but which preserve the contrastive feature of roundedness: thus, for example, *[y] appears as a front allophone of */u/; although it is front, it retains the contrastive feature of rounding, and so speakers perceive it as underlying */u/, not */i/. The vowel which I have characterised as "low" (i.e., */a/) is in this view neither spread nor rounded, though it has both rounded and unrounded allophones *[ɒ æ].

For the purposes of the current project, the point is moot, since we are concerned only with the practical contrasts between members of the system, whereas Antonsen is approaching the question with the aim of specifying

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[7] A particular author's decision to reconstruct one diphthong */eu/ or two */iu eu/ is not directly related to that author's reconstruction of one or two short front monophthongs, */i/ or */i e/ (§2.2.1).

features within a generative phonology framework. My groupings "back",
"front" and "low" correspond to the sets of phonemes which, if we were to use
Antonsen's features, would be specified as [-spread +rounded], [+spread -
rounded], and [-spread -rounded].

2.2.5 Consonants

The consonant inventory of PGmc is taken to be the following (I here revert
to italics, rather than phonemic notation): *ƀ đ ȝ p t k f þ x s z m n l r j w (after
Orel 2003:xii; compare van Coetsem 1972).

The reflexes of PIE *b^h d^h g^h are presumed to be voiced fricatives *[β ð ɣ],
at least in ePGmc. I also follow Orel in writing *x where many sources prefer
*h; while I endeavour to avoid debates about the consonants which I consider
to be beyond my remit, in this case we have good grounds for interpreting the
PGmc reflex of PIE */k/ as underlyingly velar */x/, with a debuccalised
allophone *[h] in initial position (Moulton 1972:143; Ringe 2006:215).

2.3 The vocalic systems of OHG and OS

This section outlines the developments of the lPGmc vocalics in the later
Continental dialects. The vocalic system is here subdivided on the basis of the
contrasts diphthong/back/front/low, the same set of categories used in the core
chapters (§§3-6). I have avoided subdivision into long vs. short subsystems at
this point because we are turning our attention from phonological properties to
rune-orthographic evidence, and there is no graphemic distinction between
long and short vowels. Furthermore, the sound changes described in this

section involve changes in vowel height, but the distinction back/front/low in the non-diphthongal vocalics seems to be relatively stable.

2.3.1 Diphthongs

2.3.1.1 PGmc */eu/

PGmc */eu/ undergoes a number of allophonic (and ultimately phonemic) splits, which are not always clearly distinguished from one another in the literature. They can be outlined as follows:

1. Umlaut variations (subject to restrictions outlined in 2.):

  a. Development of an allophone *[iu] before a syllable containing a high front vocalic (*/i ī j/), as part of the general raising of PGmc */e/ in this context (§2.3.3.2) (Ringe 2006:221).

  b. Development of *[iu] before a syllable containing a high back vowel (*/u ū/; consonantal */w/ does not trigger this change). It is not clear whether this process is directly connected with the preceding one, or is an independent development. It is certainly attested in OHG and OS, and possibly also in early PNorse,[8] which suggests that it may be common NWGmc (Klein 2001:583; Krause 1971:74-76; Nielsen 2000:105, 229).

  c. Development of an allophone *[eo] before /a/, and (at least in OHG and OS) before /e/ and /o/ (BR §47; Klein 2001:583; Krause

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[8] The sole witness to this is Opedal **liubu**, the reading of which is disputed (§2.2.3).

1971:74-76; Nielsen 2000:229). Within PGmc, the allophone *[eo]

is parallel to the open allophone of PGmc simplex */u/ → *[o]

(§2.3.2.1).

Van Coetsem (1994:47, 94-98) has a different take on the chronology of

these variations: in his reconstruction, lPGmc */eu/ first develops the *a*-umlaut

allophone *[eo]; the remaining *[eu] is then generalised to *[iu], with *[eu]

preserved before a high back vocalic.

If *[eo] is the product of *a*-umlaut, then it must become phonemic after the

loss of the conditioning environment (i.e., deletion of unstressed */a/ in final

position or before final */z/, common to the background of all the WGmc

dialects).[9]

2. Consonant-conditioned variations in OHG:

    a.   In UG, the variant */eo/ appears only where the following consonant

        is a dental/alveolar, or /h/ < PGmc */x/. Before labial or velar

        consonants (including /h/ < PGmc */k/ via Second Consonant Shift;

        see §2.3.1.3.1), the surface form is always /iu/.

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[9] I leave aside the theoretical question of the motivation for phonologisation. For

discussion and criticism of the dominant model, in which allophones become phonemes as a

consequence of the loss of the conditioning environment, see Liberman (1991). That variants

must be phonemic subsequent to the loss of the conditioning factors is not disputed; the

argument is therefore not of direct relevance to our present object, namely the reconstruction

of a phonemic system at a stage postdating this loss.

b.   In Frk (and in OS), the umlaut-derived variations described above apply regardless of the consonantal environment.

Braune and Reiffenstein follow Vennemann's explanation (1972:879) that because the dental consonants and /h/ involve a relatively low position of the back of the tongue, they are more amenable to lowering of the back off-glide. Whether or not we accept this, the consonants before which /eo/ appears in UG are the same ones which condition the monophthongisation of PGmc */au/ in OHG (including Frk) (§2.3.1.4.1). The consonant-conditioned alternation is conventionally characterised as blocking of the regular *a*-umlaut (*/eu/ > *[eo]) by the labial and velar consonants (Armitage 1911:121 §275; Braune 1877:557; BR §47). We could alternatively explain it as a secondary raising of inherited */eo/ triggered by the labials and velars. This appears to be the model which Penzl (1971:139-140) and Wright (1906 §56) have in mind.

Whatever the theoretical underpinning of the UG consonant-conditioned variation may be, it produces the following surface patterns:

*/eu/ + (labial or velar) + (non-high vowel):   Frk *riochan; fliogan; klioban; liob; thiob.*

UG *riuhhan; fliugan; chliuban; liup; diup.*

*/eu/ + (dental or /h/) + (non-high vowel):   Frk *biotan; siodan; niozan; kiosan; lioht.*

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	UG *biotan; siodan; niozan;*
	kiosan; lioht.
*/eu/ + (labial or velar) + (high vowel):	Frk *liubī.*
	UG *liupī.*
*/eu/ + (dental or /h/) + (high vowel):	Frk 1.sg. *kiusu.*
	UG 1.sg. *chiusu.*

Where the surface form has no following vowel, the presence of /eo/ in Frk is conditioned by underlying inflectional */a/ (*liob, thiob, lioht* < PGmc *leuƀaz, *þeuƀaz, *leuxtan*). In the adjectives, the disappearance of the nom.sg.fem. suffix (/-u/ < PGmc */-ō/; see §2.3.2.3; §7.2) results in an analogical form based on the masc. form, rather than a preserved /-iu-/ form (i.e., PGmc *leuƀō* > pre-Frk *liubu* → Frk *liob-Ø*).

The spelling <eu> does appear alongside <iu> in early (8th c.) OHG mss., and Frk pers.ns. in 6th-7th c. Lat mss. show free variation between <eu> and <eo> (BR §47 Anm. 1). Occasionally, Frk mss. have forms like *liub* alongside regular *liob, liab*. Because they only appear sporadically, these are probably variants influenced by UG orthography, rather than evidence for the spread of UG dialectal forms (BR §47 Anm. 4).

Both variants undergo further developments during the OHG period: early OHG /eo/ > /io/ > /ie/ = [iə] (BR §48; Penzl 1971:137-138), merging with the diphthongal reflex of PGmc */ē$_2$/ (§2.3.3.5). /iu/ is monophthongised > /y/ (BR §49). Since the first of these changes is conventionally dated to the 9th

century and the second not until the 10th, they are unlikely to be relevant to this study, though they should not be ruled out absolutely. We have, for example, occasional <u> spellings in early sources which may indicate monophthongal reflexes of /iu/, e.g., *zūhit* 3.sg.pres. to *ziohan* "to draw, pull" (St. Gallen *Abrogans*, late 8th c. (Gibbs and Johnson 2000:27)).

The system in OS is essentially the same as that in Frk (Gallée 1910 §§102-108; Holthausen 1921 §§101-105). Inherited /eu/ is normally preserved word-finally, or before /w/ followed by a non-high vowel (e.g., *treuwa* "faith"); and the OS sources show some (analogical?) variation in the distribution of variants. Holthausen cites occasional forms with <iu> where we would expect <eo> ~ <io> (e.g., *sniumo ~ sliumo* "quickly" from either the adj. **sliunig* or the verb **sniumjan* (: Go *sniumjan* "hurry"; OHG *sniumen* "to expedite", < PGmc **sneumjanan*)); and (more commonly) the converse (e.g., *liohtean* "to shine", by analogy with *lioht* "light"). As in OHG, the form of nominal and adjectival stems is usually generalised from the nom.sg.(masc.) (e.g., *liof* "dear", dat.pl. *lioƀun*; *thiod* "people", dat.sg. *thiodu*) (Holthausen 1921 §103 Anm. 2-3).

*2.3.1.2 The NWGmc monophthongisation of unstressed */ai/ and */au/*

In OHG and OS, as in all of the NGmc and WGmc dialects, the reflexes of PGmc */ai/ and */au/ are monophthongal in unstressed position (e.g., OS *dag-e*, OHG *tag-e* "day" (dat.sg.) < PGmc **đaʒ-ai*). This monophthongisation may

belong to the common NWGmc stage: lPGmc */-ai/ > */-ǣ/ > NWGmc */-ē/;

lPGmc */-au/ > */-ɔ̄/ > NWGmc */-ō/ (Antonsen 1970:315-316; Syrett

1994:271-276). The problem, as regards the Scandinavian Older Fuþark

material, is that for reflexes of unstressed */ai/, we have variation between

digraphic **-ai** and monographic **-e**. The only witness to a reflex of unstressed

*/au/ is on the Vetteland stone (KJ 60) **magoz** → *magōz* "kinsman" (gen.sg.)

(< PGmc *maȝauz). Both Antonsen and Syrett take the view that

monophthongisation has taken place in the period of the earliest inscriptions,

and that the (relatively few) digraphic spellings are archaisms.

Although the immediate output of the NWGmc monophthongisation is a

long vowel, the quantity of the reflexes in OHG is not entirely clear. Braune

indicates that inherited long vowels remain long in unstressed final position in

OHG at least into the 9th century (BR §§56-58). The cognates in OS are short

(Gallée 1910 §112, §114; Holthausen 1921 §150, §152).

The shortening of unstressed vowels is a tendency attested throughout Gmc,

and believed to result from the Gmc accent shift (Birkmann 1995:167;

Prokosch 1939:133-140); as to the chronology, Prokosch states that "during

the first two or three centuries A.D., … final syllables lost one mora. About

five hundred years later a second mora was lost" (1939:133).[10] Since our runic

inscriptions were produced in the 5th-7th centuries – that is, in the period during

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[10] The validity of the hypothesis that PIE had trimoric vowels is disputed, and I do not

intend to discuss it here: see Antonsen (2002:254-256); Lane (1963); Prokosch (1939:132-

133). That PGmc */-ai/ in unstressed final position regularly produces a short monophthong in

the later dialects is not controversial.

which (according to Prokosch) a general process of mora reduction was underway – the quantity of the monophthongal reflexes of unstressed */-ai/ cannot be evaluated *a priori*. Given that the runic writing system does not have any means of marking vowel-quantity (except perhaps with a digraph, and there is little, if any, evidence that carvers ever employed such a device), it is unlikely that the inscriptions will shed any light on this problem.

2.3.1.3 PGmc */ai/ in OHG and OS

A further monophthongisation process affects stressed */ai/ in both OHG and OS. The resultant monophthong is conventionally represented *ē* or *ë* in the handbooks.

The "coastal" WGmc dialects also show monophthongisation of */ai/: in OE, /ai/ > /ā/ unconditionally (Campbell 1959 §§132, 134). OFris monophthongisation is also unconditioned, but the reflexes show an alternation /ā/ ~ /ē/, which has not been adequately explained (Heuser 1903 §19; Stiles 1995:200-201).

PGmc */au/ in stressed position is also subject to monophthongisation in OHG and OS (§2.3.1.4). The developments of the two *a*-diphthongs are widely regarded as parallel, although any unified theoretical account of these processes must overcome considerable difficulties (§2.3.1.4.1).

2.3.1.3.1 Conditions for monophthongisation

Monophthongisation is not phonologically conditioned in OS, though diphthongs (or digraphic spellings, at any rate: <ai, æi, ei>) are retained before

/j/ and in a few specific words (including many pers.ns., e.g., *Atalheid*) (Gallée 1910 §§89-94; Holthausen 1921 §§97-98).

In OHG the monophthongisation is much more restricted, although it is difficult to identify the phonetic motivation for the conditioning (see Durrell 1977; Harbert 1997; Penzl 1971:124-131; Rauch 1999; Schweikle 1964; Vennemann 1972). Since our concern at present is to outline the surface facts in OHG, rather than to evaluate theoretical explanations of the process, I simply follow Braune (BR §43) and state the conditions for the monophthongisation atomistically:

1. Monophthongisation occurs regularly before /r w h/. Inherited /h/ (< PGmc */x/) triggers monophthongisation, but the consonant-shifted reflex of */k/ does not: compare, e.g., *ēht* "property" (< PGmc *aixtiz*), *eih* "oak" (< PGmc *aikz*).

2. Certain interjections with proto-forms in */-ai/ have a monophthong in OHG (*sē, sē-nu* "behold!" < PGmc *sai*; *wē* "woe, alas!" < *wai*). This is not a general rule in final position (compare *zwei* "two" (neut.); *screi* 1.sg.pret. to *scrīan* "cry, moan"; *ei* "egg");[11]

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[11] Some commentators (Durrell 1977:52; Penzl 1971:125) count open juncture among the conditioning environments for monophthongisation, and Durrell proposes a feature specification for juncture in his attempt to provide a general account of the triggering conditions. I am not convinced that this account matches the data: most instances of word-final PGmc */-ai/ appear in unstressed syllables and so are subject to the NWGmc monophthongisation (§2.3.1.2), while (according to Braune) only some of the relatively uncommon monosyllables with final (stressed) */-ai/ undergo monophthongisation. Penzl

3. A number of anomalous forms appear in other environments, e.g., *wēnag* "miserable, poor, low" (< PGmc **wainaȝaz/*wainaxaz*). The motivation for monophthongisation in these cases is not clear, but it is evidently not phonological (since formally similar words retain a diphthong, e.g., *weinōn* "to cry, wail").

2.3.1.3.2 Chronology

Braune dates the OHG monophthongisation of */ai/ to the 7th century (BR §43). He suggests that the process begins in Frk and is part of a more general shift in the north (reflected in the OS data, albeit at a later date). The earliest (8th c.) OHG sources show some instances of preserved /ai/ before /r/ (e.g., pers.ns. *Gairelaigo, Gairoaldo*), but otherwise monophthongs predominate throughout the OHG period.

Schneider (1980:196) cites a 7th-century Merovingian coin from Gondorf as the earliest witness to the change (it bears a Frk MN *Geroaldo < *Gaira- <* PGmc **ȝaizaz* "spear"; see Felder 1978:42), while Beck (2001:313-314) claims even earlier evidence in the Malberg glosses, citing forms like *fecho* (< PGmc **faixōn >* Go *bi-faih(o)* "exaction", *gafaihōn* "to take advantage of, defraud" (Lehmann 1986)); *chreo* (< PGmc **xraiwa- >* Go *hraiwa-dubo* "turtledove"; OIc *hræ*, OE *hrāw ~ hrǣw* "corpse"; OFris *hrē-raf* "corpse-robbery"; OHG *rēo* "death, grave") (see van Helten 1900:243-244). However, Beck's claim that these examples "belong to those redactions of the Pactus

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(1971:127) ascribes the diphthong of, e.g., *ei* to derivation from a geminate (PGmc **ajjaz*); but this is not the case in *zuuei < *twai,* or *screi < *skrai* (Ringe 2006:265-268, 286).

Legis Salicae which represent the Old Frankish linguistic situation of the 6th century"[12] (2001:314) is misleading: the mss. to which he refers date from the mid-late 8th or early 9th century (Drew 1991:52-53; van Helten 1900:237; Hessels 1880 [2004]:xiv), and there seems no justification for dating the language of the glosses as far back as the 6th (Nedoma 2004a:295; Schmidt-Wiegand 2001:185).

Neither Gallée (1910) nor Holthausen (1921) discusses the chronology of the monophthongisation in OS; since there are only a few traces of the inherited diphthongs, it is probably safe to assume that the process is already advanced in the earliest (9th c.) OS sources.

2.3.1.3.3 Phonetic development

In early OHG sources, the reflex of */ai/ in monophthongisation-triggering environments is frequently written <ae> ~ <ę>. From the 9th century, the usual spelling is <e, (ee, ê)>. From a phonetic point of view, the process occurs in two stages (according to Durrell 1977:59-63): first, the off-glide is lowered to produce a "pre-monophthongal" variant [ae]. The first element is subsequently raised, [ae] > /ē/ (= [ɛ]?) as part of a general process affecting the first elements of complex vowel-segments in the late 8th or early 9th century (see also van Coetsem 1975:11-17).

Penzl (1947:178-179; 1971:127-128) argues that the <ae> spelling is simply an orthographic device for distinguishing the relatively open product of

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[12] "…gehören…denjenigen Redaktionen des Pactus Legis Salicae an, die altfränkischen Sprachstand des 6. Jahrhunderts repräsentieren"

monophthongisation (/ɛ̄/ < */ai/) from the more close /ē/ < PGmc */ē₂/ (which

by the 9ᵗʰ century undergoes diphthongisation > /ia/; see §2.3.3.5). In Penzl's

account, the monophthongisation process is a matter of increasing

palatalisation of the first element, [a] > [æ] > [ɛ], while the second is

(concurrently?) lowered to [e], which assimilates to the preceding (and more

strongly accented) element, [ɛe] > [ɛ]. Sonderegger (1961:271) cautiously

favours the interpretation of <ae> in the 8ᵗʰ-century St. Gallen witnesses as an

intermediate diphthong [aə].

  The later developments of /ɛ̄/ < */ai/ and /ē/ < */ē₂/ show that they are

distinct phonemes in OHG; in OS, however, it is generally assumed that the

two have merged (Gallée 1910 §84; Holthausen 1921 §92; Penzl 1971:128).

In the following text, I notate the product of the OHG conditioned

monophthongisation as /ɛ̄/ and that of the unconditioned change in OS /ē/. For

the products of the NWGmc monophthongisation of the unstressed diphthong,

the notation used is NWGmc */ē/ > OHG OS /e/. We cannot be certain of the

actual quality of this vowel, but I am not aware of any evidence for distinct

open and close mid front phonemes in the unstressed vowel systems of OHG

or OS.

  It is at least theoretically possible that an allophone with a lowered off-glide

*[ae] was already present in lPGmc; this allophone would be a product of *a*-

umlaut and/or consonant-conditioned lowering of */i/ before */x/ and */r/ (but

not */w/) (van Coetsem 1994:48-49, 118-119).

*2.3.1.4 PGmc */au/ in OHG and OS*

Like */ai/, the reflexes of PGmc */au/ undergo monophthongisation in OHG and OS, producing a vowel conventionally represented as $\bar{o}$ in the handbooks.

2.3.1.4.1 Conditions for monophthongisation

In OS, */au/ is monophthongised in all contexts except before /w/; here, as in the case of */ai/, the diphthong is preserved only where supported by a semivowel homorganic with the off-glide.

The OHG monophthongisation is conditioned by following consonants, but the conditions differ from those for the monophthongisation of */ai/. Monophthongisation occurs before /h/ < PGmc */x/ (§2.3.1.3.1), and before all dental/alveolar consonants. Attempts to unify the two monophthongisations in a single theoretical account have run into difficulties, not least in attempting to explain why the dentals affect only */au/. It may well be that we are dealing with two entirely distinct processes. For a detailed treatment of the problem, see Durrell (1977).

The similarity of the conditioning environments for the monophthongisation of */au/ and the UG distribution of reflexes of */eu/ (§2.3.1.1) seems to have attracted no attention in the literature (for further comments, see §8.2.3.1).

2.3.1.4.2 Chronology

According to Braune (BR §45 Anm. 1), the monophthongisation of */au/ in OHG begins in the 8th century (i.e., somewhat later than the monophthongisation of */ai/). However, since it appears here and there in the

earliest OHG sources, we should consider (and empirically evaluate) the possibility that it may appear in the runic inscriptions.

It is possible that the monophthongisations of */ai/ and */au/ are the first stage of a push chain (the "OHG vowel shift"), triggering the diphthongisations of */ō/ and */ē₂/ (§2.3.2.3; §2.3.3.5). This hypothesis has the process beginning in the north (i.e., in LG territory) and spreading southwards with diminishing effects (Szulc 1987:80-81).

2.3.1.4.3 Phonetic development

As with the monophthongisation of */ai/, there is some evidence for an intermediate stage with lowering of the off-glide, i.e., */au/ > [ao] > [ɔ̄]. The spelling <ao> is widespread in Bav. texts of the 8th and early 9th centuries, but is not found in Frk or Alam. (BR §45 Anm. 2). Penzl (1971:127-128) interprets the <ao> digraph as an orthographic device for representing the relatively open monophthong [ɔ̄] (in parallel with his treatment of <ae>; see §2.3.1.3.3).

In contexts where monophthongisation does not occur, the spelling <au> remains the norm until the 9th century, when it gives way to <ou>.

In OS, the reflexes of */au/ are spelled <ô, ao, oa, oo, â> (Gallée 1910 §§95-101; Holthausen 1921 §§99-100). It is possible – though the evidence is not clear – that the digraphs represent intermediate stages in the process.

2.3.2 Back vocalics

*2.3.2.1 PGmc */u/*

The PGmc umlaut allophones *[u o] (§2.2.1) are phonologised to /u o/ in all of the attested Gmc dialects (BR §32).

In OHG, the inherited allophonic distribution produces contrasts such as *got* "god" vs. *gutin* "goddess"; *gibotan* "offered" (past part.) vs. *butun* (pl.pret.). Many such contrasts are levelled out by analogy, however (e.g., *gold*, inst.sg. *goldu* ≠ **guldu*; compare MFrk *guld*). Consistent exceptions to the normal pattern also appear (reflecting the status of /u/ and /o/ as full phonemes), e.g. *sumar* "summer" (< PGmc **sumeraz*); and we find alternation in forms of the same word, e.g., *ubar ~ obar* "over, above" (BR §32).

The inherited distribution of /u/ and /o/ is preserved to a large extent in OS (Gallée 1910 §§69-78; Holthausen 1921 §§86-88). Here too the pattern is disturbed by analogical levelling (e.g., *goldu* inst.sg., following nom.sg. *gold*; *drohtin ~ druhtin* "lord"). OS /o/ is occasionally represented as <uo> (e.g., *Thuomas*) or <a> (e.g., *uuarihtio ~ uurhteo* "worker"). The latter reflects a more open articulation [ɔ] (particularly preceding /r/+C, but also before other consonants) in western dialects (Gallée 1910 §71). In the context /r/+C, the reflex of PGmc **/u/* can also appear as <e>, producing doublets like *hress/hers ~ hross/hors ~ hars* "horse" (Gallée is noncommittal on the directionality of the relationships between these variants, but it is clear that they are all ultimately reflexes of **/u/* in PGmc **xrussan* (Orel 2003)).

In unstressed syllables, OHG shows considerable spelling variation, which reflects the levelling of the unstressed vowels > [ə]. Braune posits a three-member system /i a u/, in which [e o] are allophones of /a/, but also of the high vowels (BR §62). Penzl, on the other hand, assumes that early OHG had the full set of vowel phonemes in unstressed syllables (i.e., that there is no distinction to be drawn between stressed and unstressed subsystems in respect of the inherited monophthongs) (Penzl 1971:141).

OS normally preserves the spellings of /u/ and /o/ as <u> and <o> in unstressed syllables, with some variations: inherited /o/ sometimes appears as <a> or <u> (Gallée 1910 §114; Holthausen 1921 §152). Gallée describes this as a dialectal feature without going into further detail, though it may simply reflect a levelling of the unstressed vowels. Similarly, we sometimes encounter <o> where we would regularly expect <u>.

In both languages, final /-u/ (whether derived from inherited */u/, */ō/, or */w/) is usually deleted after a long syllable (e.g., OS *hand-Ø*, OHG *hant-Ø* nom.sg. < pre-OS pre-OHG *hand-u* < PGmc *xanđuz*), though in some instances it is "restored" analogically (e.g., *uuordu* inst.sg.) (Gallée 1910 §115; Holthausen 1921 §153). Short unstressed medial vowels (of all qualities, not only /u o/) are often syncopated after a long stem, e.g., OS *hēlgoda* (< *hēlagoda* "blessed, sanctified") (Gallée 1910 §138; Holthausen 1921 §§137-140). On syncope in the WGmc dialects in general, see also Birkmann (1995:172-175).

2.3.2.2 PGmc */ū/

This vowel does not undergo any change in stressed syllables, although Notker (late 10th/early 11th c.) often writes <uo> before <h, ch>. This spelling also appears occasionally elsewhere (BR §41). Braune regards it as an orthographic variant with no phonological significance. Penzl (1971:93-95) mentions this variation, but does not comment on it. Variant spellings in OS (also believed to be purely orthographic, as these spellings are neither frequent nor consistent) are <ô, uo, ui>.

In unstressed medial position, the reflexes of */ū/ may be shortened, though the evidence is unclear (see comments in §2.3.1.2).

2.3.2.3 PGmc */ō/

In "standard" OHG,[13] inherited /ō/ is diphthongised to /uo/ in stressed syllables. This change begins in Alam. in the mid-late 8th century and is complete (with a consistent spelling <uo>) in all the OHG dialects by c.900 AD, whereas earlier texts show variation between <o, ua, uo, oa> (BR §§38-39; Szulc 1987:80).

The OS reflex of stressed */ō/ is usually written <ô>, with variants including <oo, uo, ŏ, ů, u, ua, ou> (Gallée 1910 §86; Holthausen 1921 §94). Widespread variation between <ô> and <uo>, even within the same ms., suggests that a diphthongisation parallel to that in OHG might be underway, at

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[13] Braune's description of OHG uses the EFrk dialect of Tatian (9th c.) as an unmarked *Normalalthochdeutsch* variety for reference purposes, while making it clear that no genuine "standard" form of OHG existed (BR §4).

least in some dialects; it could, alternatively, be an artefact of orthographic practices taken from OHG sources.

According to Moulton (1961:19-20), the diphthongisation of /ō/ is part of a push chain in the OHG phonological system, the "push" coming in this case from the monophthongal reflex of PGmc */au/ = /ɔ̄/ (§2.3.1.4.2; see also van Coetsem 1975:4, 31;[14] Szulc 1987:81-82). The phonetic similarity between the two prompts the diphthongisation of /ō/ and the subsequent raising of /ɔ̄/ to occupy the "vacant" position. Moulton proposes a development of [o:] > [oɔ] > [oɑ] > [uo] (1961:20). In effect, the diphthongisation consists of two processes: (i) the development of the second mora into a lowered off-glide ([ɔ] > [ɑ]); (ii) the raising of the entire diphthong, possibly as part of the general raising of the diphthongs in OHG (/ai/ > /ei/; /au/ > /ou/; /eo/ > /io/; /eu/ > /iu/) (Moulton 1961:20).

In medial syllables not bearing primary stress, inherited */ō/ is normally shortened to /o/ in both OHG and OS. Word-finally, PGmc */-ō/ > NWGmc */-ū/ > OHG OS /-u/ (Antonsen 1972:139; Ringe 2006:221).

2.3.2.4 PGmc */w/

OHG mss. normally use digraphs <uu, uv, vu, vv> to represent consonantal /w/, with the letter <w> appearing towards the end of the OHG period. Where /w/ is adjacent to /u/ or is geminated, the orthography varies between <uuu>,

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[14] Note that van Coetsem is concerned with the monophthongisation as a development from lPGmc umlaut allophones of the *a*-diphthongs (*[ae ao]); he does not comment on the consonant-conditioned monophthongisations which I have discussed in §§2.3.1.3-2.3.1.4.

<uu> and <u>. OS also tends to use digraphic <uu>, with a single <u>

common after a consonant or before /u/ (e.g., *tuelifo* "twelve"; *uundrode*

"wondered").

  Phonologically, PGmc */w/ develops in a number of ways, depending on its

position (BR §§106-114):

- Initial /w-/ is generally unchanged. In the clusters /wr- wl-/ it is preserved

  in OS, but in OHG it is deleted at a stage predating the earliest ms. sources

  (e.g., PGmc *wrītanan* > OS *wrītan*, OHG *rīzan* "to carve, write").[15]

    In the context #C+/wu-/, /w/ is sometimes elided (at least

  orthographically) in OHG (e.g., *huosto* "cough" < *hwuosto* < *hwōsto* <

  PGmc *xwōstōn*. Braune gives several more examples, in each of which

  the /-u-/ is a product of the diphthongisation of */ō/ (§2.3.2.3).

    Where a stem with initial /w-/ forms the second element of a compound

  (especially a pers.n.) it is often elided in OHG: e.g., *-old, -olf* (< *-wald,*

  wolf).

- Syllable-final or word-final /w/ following a vowel normally becomes

  syllabic /o/ (or occasionally /u/), e.g., OHG *kneo*, OS *knio* nom.sg. "knee"

  (< PGmc *knewan*); OHG *farota* pret. to *far(a)wen* "to dye, colour".

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[15] Initial /w-/ in these clusters is preserved in MFrk, with occasional appearances in other

dialects, in early mss. (e.g., Alam. *uuerecho* "avenger"). Most of the examples cited by

Braune have an anaptyctic vowel.

- In certain words, medial /w/ following an open syllable is syllabicated to form a diphthong (e.g., OHG *sēula*, OS *seola ~ siola* "soul" < PGmc **saiwalō*).

- Following a long vowel and preceding another vowel, /w/ is often (though not invariably) preserved in OHG (*grāwēr* "grey" (nsm.), *ēwa* "law",[16] *spīwan* "to spit, spew" vs. *grāēr, ēa, spīan*). Where it follows a long vowel and precedes a consonant, it is deleted in OHG (e.g., early OHG *sēula ~ sēla*; *lāta*, 1.sg.pret. to *lāwen* "to betray" (< PGmc **lēwjanan*)).

2.3.3 Front vocalics

2.3.3.1 PGmc */i/

In OS, this phoneme is subject to lowering conditioned by the vowel of the following syllable: */i/ > /i/ before a high vowel or semivowel, /e/ before a mid or low vowel (Gallée 1910 §56; Holthausen 1921 §§84-85). There is, nevertheless, a considerable amount of variation, and we find alternants like *lebdin* vs. regular *libdin* 3.pl.pret. "lived" (< PGmc **liƀēđun*).

The pattern in OHG is less consistent. Under most conditions, reflexes of */i/ appear as <i> (occasionally <ie>), even before a following mid or low vowel (BR §31). <e> (presumably → /e/) appears before a non-high vowel in the following:

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[16] Note that the OS cognate *ēo* does not qualify as a parallel for or counter-example to this phenomenon, as it is a masc. (pre-OS **aiw-Ø* < PGmc **aiwaz*), whereas OHG *ēwa* is a fem. form. The OS reflex of */w/ becomes word-final following the loss of thematic */-a-/, and is therefore syllabicated.

1. some adjectives, e.g., OHG *quec* "alive" (compare the related verb *quicken*);

2. weak verbs of classes 2 and 3, e.g., *klebēn* "to stick";

3. some nouns, e.g., *steg* "footbridge" (< PGmc **stiʒan*); *lebara* "liver" (< **liƀ(a)rō*).

Some authors have attributed this lowering of **/i/* to *a*-umlaut (e.g., Antonsen 1964:181-184; van Coetsem 1994:88). However, as Connolly (1977:174-176) objects, lowering is the exception rather than the rule in OHG, where it is more frequent than in most of the other Gmc dialects. Proponents of the *a*-umlaut hypothesis are forced to assume a great deal of analogical restoration of **/i/*. Connolly argues instead that the lowering may be explained by the presence of a PIE laryngeal. For the purposes of this project, there is no need to debate this point.

More lexical items develop /e/ < /i/ during the OHG period (e.g., *lirnēn ~ lernēn* "to learn"; *skif ~ skef* "ship"). Lowering occasionally occurs before /h/ or /r/ (e.g., *widarbirgi ~ widarbergi* "steep, arduous").

In final unstressed position, /-i/ tends to be lowered to /-e/ in both OHG and OS. This process is identifiable in 9th-century sources (BR §58 Anm. 2; Gallée 1910 §113; Holthausen 1921 §184), although in the earlier OHG material and many of the OS sources the contrast of /-i/ and /-e/ appears to be

preserved. This lowering may be part of the general levelling of the unstressed vowels (BR §§59-60).

After a long or disyllabic stem, final /-i/ is normally deleted (e.g., OHG OS *gast* "guest" < *gasti* < PGmc *ȝastiz*, vs. short-stem *wini* "friend" < *weniz*).

2.3.3.2 PGmc */e/

According to Braune (BR §28 Anm. 1-2), inherited /e/ is realised as [ε] in OHG, with a distinct *i*-umlaut allophone [e] which merges with the *i*-umlaut allophone of /a/ = [e] (§2.3.4.2). This variation results in a phonemic split (/e/ = [ε ~ e] > /ε, e/) from the 9th century.

In the primary sources, both variants are commonly written <e>, though in some mss. the open allophone appears as <ę> or <ae>. Braune marks the open variant as *ë*, the close one as *e* (e.g., *ërda* "earth" vs. *felis* "rock", *herti* "hard" (< *hart*)).

In both OHG and OS, we find evidence of the raising of PGmc */e/ > *[i] (→ <i>) before a syllable containing a high front vocalic, and before a tautosyllabic nasal (§2.2.1; §BR 30; Gallée 1910 §§56-63; Holthausen 1921 §84). Note that the handbooks on the daughter languages state the conditioning factor for this raising as a cluster N+C, rather than as a nasal at the syllable coda.

Additionally, reflexes of PGmc */e/ are raised before a syllable containing /u/ or (usually) before /ww/ (e.g., OHG *miluh*, OS *miluk* "milk" < PGmc *melukz*; OS OHG *triuua* "loyalty, troth" < PGmc *trewwō*). Braune (*loc.cit.*)

implies that this change belongs to the early stages of OHG, noting instances of preserved [ɛ] → <e> in the earliest sources, especially before simple /w/ (e.g., pret.part. *gisëwan* "seen" ≠ **gisiwan*). Raising before a high back vocalic is not consistent; and even before a high front vocalic we commonly find cases where [ɛ] is preserved(?) or (more probably) restored by analogy (e.g., OHG *hërza* "heart" has gen./dat.sg. *hërzin*, not the expected **hirzin*). Conversely, analogical <i> (→ [i]) sometimes appears in place of regular <e> (e.g., *bëta* "request" ~ *bita* < PGmc **ƀeđō*).

   Occasionally in OS, <o> appears where we would expect <e>, e.g., *worold* for *werold* "world" (< PGmc **wira-alđiz*). Before /r/, inherited /e/ is often lowered to /a/ (e.g., *farahe* dat.sg. to (regular) *fer(a)h* "life" (< PGmc **ferxwan*)) (Gallée 1910 §57).

   OS /e/ often becomes /a/ (or a vowel represented <a>) before /r/: e.g., *farahtlîco* vs. regular *ferahtliko* "wisely" (< PGmc **ferxwt-* (Köbler 2000)).

2.3.3.3 PGmc **/ī/*

   PGmc stressed **/ī/* remains unchanged in OHG and OS (and is normally spelled <i> or <î>), although in Notker it is diphthongised to /ie/ before /h/ (e.g., *liehte* vs. the more common *līht* "easy"). <ie>-spellings also occur sporadically in other contexts (BR §37).

   */ī/ is also preserved in unstressed syllables in OHG (to some extent, at least, and more commonly in UG than in Frk) prior to the levelling of unstressed vowels in later OHG (BR §57 Anm. 1). In OS, unstressed **/ī/* is

normally shortened to /i/ and frequently lowered to /e/ (Gallée 1910 §113; Holthausen 1921 §133). On the general shortening of unstressed long vowels, see §2.3.1.2.

2.3.3.4 PGmc */ē₁/

PGmc */ē₁/ unconditionally develops into /ā/ throughout the WGmc dialects, as well as in PNorse and ON. Braune does not assign the change to a common NWGmc stage, however. In Frk (as represented in Latin records of pers.ns.), /ā/-variants do not start to appear before the 6th century, and do not become the norm until the 7th, with /ē/ still appearing in the 8th (e.g., *Theudomērus, Dagorēdus*) (BR §34; Bremer 1886:17-29). Occasional /ē/-forms also appear in OS, e.g., *uuêpan-berand ~ uuâpan-berand* "weapon-bearer" (PGmc *wēpnan*) (Gallée 1910 §§81-83; Holthausen 1921 §§90-91). Felder (1978:26) attributes <E> and <I> spellings on coins to Burgundian or Gothic influence.

2.3.3.5 PGmc */ē₂/

In early OHG sources, the reflex of */ē₂/ is /ē/ (written <e> or <ee>), which later undergoes diphthongisation > /ea, ia/ (9th c.) > /ie/ (10th c.) in stressed syllables (BR §35, §53). This diphthongisation is believed to be part of the "OHG vowel shift" (§2.3.1.4.2; §2.3.2.3). The chronology of forms suggests that the diphthongisation can be subdivided into (i) lowering of the second mora, followed by (ii) raising of the first mora and/or of the whole diphthong (Moulton 1961:20). Note that this subdivision parallels that of the monophthongisations of */ai/ and */au/ (§§2.3.1.3-2.3.1.4).

Braune also notes some spelling variations, including occasional <ei>, <eia> for /ē/ and /ea/. In the later sources where <ie> is normal, a variant <i> occasionally appears.

The OS reflex of */ē₂/ appears as <ê ie>, with a particular ms. favouring one form or the other (Gallee 1910 §84; Holthausen 1921 §92). <ia> and <ie> are also attested. Gallée does not discuss chronology; it may be that this phoneme undergoes diphthongisation in OS as in OHG, or the variation might result from the influence of OHG scribal practices. Holthausen ascribes the digraphic spellings to Frankish influence.

2.3.3.6 PGmc */j/

According to Braune (BR §§115-119), /j/ is always written <i> in OHG mss.; <j> is not used at all. In Notker, consonantal /j/ is indicated by an accent on the following vowel (e.g., *iâr, iúng*, vs. syllabic /i/ in *îo, bîeten, íuuër*). Before a following /i/ or /e/ it is often written <g>, possibly realised as a fricative [j]. A similar situation exists in OS: /j/ is normally written <i>, with <g> appearing before a front vowel (Gallée 1910 §158; Holthausen 1921 §170).

Frequently (though by no means always), reflexes of PGmc */ij/ or */jj/ appear in OHG as <ii> or <iei>, e.g., *fiiant* "enemy" vs. *fiant* (< PGmc *fijēnđz*).

Medial /j/ after a consonant (except /r/) starts to disappear in early OHG, and in 9th-century sources is regularly deleted. Where it does appear, it is usually written <i> before <e u>, <e> before <a o>. <e> here probably

represents a lowered [i̯], resulting from assimilation to the following vowel (see BR §118). This deletion does not normally occur in OS: e.g., PGmc *seƀjō > OS *sibbia*, OHG *sibba* "kinship"; PGmc *skapjanan > OS *skeppian*, OHG *skepfen* "to shape, form, create".

/j/ is preserved in OHG after /r/ (which is not affected by the WGmc consonant gemination), e.g., *nerian ~ nerien* "to nourish, feed, save, redeem, heal" (in sources where postconsonantal /j/ is otherwise absent). In Alam. and Frk dialects, where /r/ undergoes a secondary gemination (unconnected to the WGmc gemination), /j/ is deleted (> *nerren*). Braune argues (BR §118 Anm. 3) that where this /j/ is preserved it is strengthened to [j], often written <g> (like /j/ before a front vowel – see above).

In final syllables, /-ja/ > /-e/ even in the earliest OHG sources: e.g., PGmc *sunđjō > pre-OHG *sundja > OHG nom./acc.sg., nom./acc.pl.. *sunte*, dat.sg. *suntiu*.

Where /j/ becomes word-final by deletion of following material, it becomes syllabic /i/, even where /j/ is otherwise deleted: e.g., OHG OS *kunni* "kin, tribe, people" (< PGmc *kunjan*) vs. gen.sg. OHG *kunnes* (with /j/-deletion), OS *kunnies* (without).

2.3.4 Low vowels

2.3.4.1 PGmc */a/

OHG shows some variation between <a> and <o> for reflexes of */a/. Braune classifies these /o/-variants into 4 types (BR §25):

a. Pairs like *halōn ~ holōn* "to fetch, call, take"; *mahta ~* (Frk) *mohta* "power, might"; *rask ~ rosk* "quick". Some of these cases can be attributed to older ablaut; others to assimilation; Braune mentions labialisation (in *mohta*?), but does not elaborate.

b. Occasionally <o> appears before nasals and /l/: e.g., *wamba ~ womba* "body"; *weralt ~ werold* "world" (< PGmc **wira-alđiz*). These <o>-variants probably reflect assimilation to the following consonants.

c. <o> for inherited /a/ is common in weakly stressed function-words, e.g. *joh* "and"; *oh* "but"; *fan(a) ~ fona* "from".

d. Deuterothemes in pers.ns. often contain <o> for inherited /a/, e.g., *-bald ~ -bold; -walt ~ -(w)olt; -bato ~ -boto*. For this group, as for group c, weak stress appears to be the motivator (although I note that many of the examples cited by Braune have a following /l/, and so may be connected with group b).

OHG medial /a/ is susceptible to assimilation by the vowels of neighbouring syllables (BR §§67-68). The conditioning vowel is usually that of the final syllable (e.g., *heidinisc* "heathen" (adj.) vs. *heidan* "heathen" (subst.); *keiseres* gen.sg. to *keisar* "emperor"), less frequently the preceding stem-vowel (e.g., *hōhona ~ hōhana* "from above"; *gicorone ~ gicorane* pret.part. "chosen").

Where medial /a/ is affected by *i*-umlaut (§2.3.4.2), the product is usually /i/,

not /e/.[17] This /i/ may in turn trigger umlaut in the preceding syllable.

In OS, several other changes to /a/ are observable besides *i*-umlaut (Gallée

1910 §§50-55; Holthausen 1921 §§76-81):

1. Occasionally, /a/ > /e/ before /r/+C (in spite of the tendency of this

    environment to block *i*-umlaut), e.g., *forthuuerd* "forward" ~ regular

    forđuuardas. In some sources, /a/ is also raised and fronted before

    /g k/ and sporadically in other contexts, e.g., in pers.ns.*Gêrdeg,*

    Hillidæg (< *-dag*).

2. /aha/ > /ā/ (→ <â> ~ <aa>): e.g., *gimâlda* < *gimahalda* (pret. to

    gimahlian "to speak").

3. /a/ assimilates a following nasal before /θ f s h/, producing a

    lengthened vowel represented <â> or <ô>: e.g., *ôđar* nom.sg.,

    âthres gen.sg. "other" (< PGmc *anđraz*).

4. /a/ > /o/ in certain consonantal environments (compare group b of

    the OHG /o/-variants above):

    a. before /n/+C (e.g., *hondscôhe* "gloves").

    b. before /l/+dental (e.g., *hagastoldos* pl. "servants" ~ *-stald-*;

        pers.ns. *Grimbold, Athalold* (< *-bald, -wald*)).

    c. between /w/ and /r/ (e.g. *andsuôr* "answer" < PGmc *anđ-*

        swaran).

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[17] On Braune's proposed three-member system of unstressed vowels, see §2.3.2.1.

2.3.4.2 *"Primary"* **i-*umlaut***

The other major phenomenon affecting /a/ in OHG and OS is "primary" *i*-umlaut before a syllable containing /i ī j/, e.g., *heri* "army" (< **xariz/*xarjaz*) (BR §§26-27, §51; Gallée 1910 §§46-49; Holthausen 1921 §115; Schweikle 1964). Enclitic personal pronouns may trigger umlaut of /a/ in the preceding word, e.g., *drenk ih* "I drank".

An inherited /i ī j/ in a third syllable can trigger assimilation of an unstressed vowel in the second and consequent umlaut of the stressed vowel in the first: e.g. *apful* "apple" → nom./acc.pl. *epfili*. This is not consistent – e.g., *zahar* "tear" invariably has pl. forms *zahari, zahiri*, without umlaut.

Unmutated forms are found in the earliest OHG glosses, although umlaut is frequent even here (BR §27; Szulc 1987:84). Before /ht hs/ and C+/w/, umlaut is not evident until the 12th century (e.g., OHG nom.pl. *mahti* (> MHG *mähte*) to *maht* "power, might"; *nahti* gen./dat.sg. (> MHG *nähte*) to *naht* "night"). In UG dialects, /l/+C, /r/+C, /x/ (< PGmc **/k/) and /h/ (< PGmc **/x/) also block umlaut (BR §27; Paul et al. 2007 §§L16, L30).

We often see unmutated forms in deadjectival abstract nouns (e.g. *starchī* ~ *sterchī* "strength" < *stark* "strong"), nouns in *-ida* (e.g., *bigangida* ~ *bigengida* "care"), and adjectives in *-īn* (e.g. *tannīn* ~ *tennīn* "made of pine"). The gen. and dat.sg. of masc. *n*-stem nouns are often unmutated (e.g., *hanin* alongside regular *henin*, to *hano* "cock"), by analogy with the other case-forms; and certain derivational suffixes with /i ī/ appear not to trigger umlaut: *-nissi, -nissa, -līh* (e.g., *irstantnissi* "resurrection"; *langlīh* "long").

The mutated vowel is normally written <e> in OHG and OS mss., with variants <ae ei> also attested. This vowel is conventionally regarded as being phonologically distinct from /ɛ/ < PGmc */e/ prior to the loss of the conditioning environment (9th c.?), but its actual development and phonetic realisation are controversial (BR §14 Anm. 2; Gütter 2003; Liberman 1991:126; Penzl 1971:115-124; Schmidt 1894:19-20; Szulc 1987:82-86).

As we have seen with some of the other sound changes, the expected patterns are disturbed by analogical or otherwise irregular forms in OS. We find <a> in, e.g., *aldiro* comp. "older" (alongside mutated *eldir*); *elilandige* "foreign" (vs. *elilendige*). Conversely, analogical <e> appears where we would expect <a>: e.g., *gestseli* vs. regular *gastseli* "guest-hall".

In OS, umlaut is often (though not always) blocked before /r/+C, and before the clusters /hl, hn, ht, hs/ (e.g., *huuargin ~ hwergin* "somewhere"; *mahtig* "powerful"; *trahni* pl. "tears"). Mutated forms do appear occasionally (e.g., *alamehtig*). Before /n/+C, there seems to be considerable variation between mutated and unmutated forms (e.g., *bandi ~ bendi* pl. "bonds").

2.3.4.3 lPGmc */āx/ < PGmc */anx/

This phoneme merges at an early stage with /ā/ < PGmc */ē$_1$/ (§2.3.3.4), and remains /ā/ in OHG and OS: e.g., *hāhan* "to hang" < PGmc *xanxanan*; *fāhan* "to catch" < PGmc *fanxanan* (BR §33). OS shows some indications that this

vowel is subject to *i*-umlaut (e.g., *êhtin* ~ unmutated *âhtin* pl/pret. to *âhtian* "to ban, proscribe").[18]

2.3.5 Anaptyxis

Anaptyxis in OHG and OS falls into the following types (for more detailed data and analysis, see Reutercrona 1920):

1. Common to all the WGmc dialects is vowel-anaptyxis between a consonant and a resonant (/r l m n/).[19] In both OHG and OS, the epenthetic vowel is normally /a/ (sometimes /e/); before /m/, /u/ is usual (with /o/ appearing less frequently) (BR §65; Gallée 1910 §133; Holthausen 1921 §§141-142). Examples: PGmc **fuʒlaz* > OHG *fogal*, OS *fugal* (: Go *fugls*, ON *fugl*) "bird"; PGmc **þunraz* > OHG *donar*, OS *thunar* (: ON *þórr*) "thunder".

2. Anaptyctic vowels appear (inconsistently) in OHG and OS in the following contexts:

    a. between liquids (/l r/) and /h/;

    b. between liquids and /w/ (occasionally between /s/ and /w/ in OHG, /t d/+/w/ in OS).

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[18] The umlaut of /ā/ in OHG presents a problem of interpretation: the mutated vowel is not marked orthographically, even where the conditioning environment has already been lost. See Schweikle (1964).

[19] OE shows considerable variation in the appearance of these anaptyctic vowels, in the surface forms at least: compare, e.g., *fugol, þunor* vs. *þegn* (~ *þegen* (BT)) (Campbell 1959 §574.3).

In this case the anaptyctic vowel is usually /a/, or /o/ before /w/; but it is frequently identical with the vowel in an adjacent syllable (more often the final syllable than the stem). Examples: OHG *fëlhan ~ fëlahan* "to save"; OS *naru ~ narawo* "narrow" (< PGmc **narwaz*) (BR §69a; Holthausen 1921 §144).

3. In UG and OS, epenthetic vowels appear between /r/ and a velar or labial consonant (/k x g b p f m/); and occasionally between /r/ and /l/. Here, as in type 2, the new vowel is often harmonious with an adjacent vowel. Examples: UG *wurum* "worm"; OS *aram* "arm" (BR §69a; Holthausen 1921 §144; Howell 1991).

Additionally, epenthesis may occur in OS between /n/ and /s/ (e.g., *finistri* "darkness"); in initial syllables (e.g., *kanagit* 3.sg.pres. "gnaws"; *Heribarant*); and in clusters of consonant+/r/ (e.g., *Aferīkus*) (Gallée 1910 §134).

2.3.6 Summary

The major sound changes of which we need to be aware are the following:

- Umlaut or umlaut-like changes in height in the diphthong */eu/ (> [iu eo] > /iu eo/) and the short high and mid monophthongs */i e u/, conditioned by the height of the following vowel (§2.3.1.1; §2.3.2.1; §2.3.3.1; §2.3.3.2). The invocation of *a*-umlaut in the lowering of */i/ is problematic, as /e/ < /i/ is relatively rare in OHG (though more widespread in OS).

- Consonant-conditioned alternation between /iu/ and /eo/ < */eu/ in UG (§2.3.1.1).

- Monophthongisation of */ai au/ in unstressed syllables (§2.3.1.2).

- Shortening of unstressed final vowels (§2.3.1.2).

- Monophthongisation of */ai au/ in stressed syllables (§§2.3.1.3-2.3.1.4):

  o Unconditioned monophthongisation in OS.

  o Consonant-conditioned monophthongisation in OHG.

- Deletion of unstressed final */-i -u/ after a long syllable (§2.3.2.1; §2.3.3.1).

- Raising of final */-ō/ > /-ū/ (§2.3.2.3).

- Diphthongisation of */ō/ and */ē$_2$/ (§2.3.2.3; §2.3.3.5). It is doubtful whether diphthongisation takes place in OS.

- Raising of */e/ before a syllable-final nasal and/or N+C cluster (§2.3.3.2).

- Irregular(??) alternations between */i/ and */e/ (§2.3.3.1; §2.3.3.2).

- Lowering of final */-i/ > /-e/ (§2.3.3.1).

- */ē$_1$/ > /ā/ (§2.3.3.4).

- */a/ > /o/ conditioned by certain consonant clusters, and in some contexts where the motivation is unclear (§2.3.4.1).

- Total assimilation of medial */a/ to the vowels of neighbouring syllables (§2.3.4.1).

- */a/ > /e/ conditioned by certain consonants(?) in OS (§2.3.4.1).

- PGmc */axa/ > OS /ā/ (§2.3.4.1).

- "Primary" *i*-umlaut of */a/ (§2.3.4.2).

- PGmc */anx/ > /āh/ (§2.3.4.3).

- Anaptyxis in various consonant clusters (§2.3.5).

Sound changes affecting the non-syllabic vocalics */j w/ (§2.3.2.4; §2.3.3.6) are:

- Deletion of initial */w/ in the clusters */wr- wl-/ in OHG only (except MFrk).

- Syllabication of syllable- or word-final */j w/ > /i u/. Final */-ja/ > /-e/.

- Deletion of medial */w/ between a long vowel and a consonant, or after consonants other than the liquids */l r/.

- Deletion of */j/ after consonants (except */r/) in OHG, but not OS.

Note that these lists do not represent an attempt at a relative chronology for the sound changes. Since our objective is to investigate sound change in the epigraphical data, it is appropriate to list the processes atomistically and to avoid making assertions about their relative chronology prior to our examination of the data. Where appropriate, comments on the chronologies proposed in the literature will be made in the later discussions.

2.4 Developments in the consonant system

Pertinent to the relationship between the dialects of the inscriptions and those of the mss. are two processes that mark OHG out from OS, and indeed from the other WGmc dialects: the Second Consonant Shift and *Spirantenschwächung* (the despirantisation of /θ/ > /d/) (BR §§165-167; Penzl

1971:165-173). Although their direct impact on the vowel system is limited, they are invoked in some interpretations of runic inscriptions, interpretations which some commentators reject on the grounds that these processes do not take place until the OHG period. While a detailed description and discussion of the consonantal system would not be appropriate here (see, *inter alios*, BR §§83-90; Penzl 1971:147-165), it is necessary to summarise the arguments relating to the Consonant Shift and/or *Spirantenschwächung* in the runic inscriptions.

2.4.1 The Second Consonant Shift

The only generally accepted example of the Second Consonant Shift in the Continental runic inscriptions is 90. Wurmlingen **dorih** → *Dōr-rīh* (§4.1; §5.1), conventionally cited (e.g., by BR §87 Anm. 5) as the earliest witness to the shift of /k/ > /x/. Some authors have, however, invoked the Consonant Shift in interpreting other inscriptions:

/d/ > /t/: 20. Eichstetten **munị** → *munt*; 39. Hüfingen II **ota** → *ōtag* (Schwab only − §4.1).

/g/ > /k/: 9. Balingen **amịlu?** → *Amilu(n)k*; 76. Stetten **ạmelkuḍ** → *Amelku(n)d*.

/k/ > /x/: 31. Hailfingen I **alịṣrh** (Arntz' reading) → *Alisrīh*; 57. Nordendorf II **el?** → *elh* (Looijenga only − §5.1); 60. Osthofen **d?ḥ** → *dih*.

More detailed comments are to be found in §§3-6. For the time being, I would point out that every one of these except Hüfingen **ota** is based on a speculative reading.

Schwerdt (2000:220-221), following Höfler (1957:295-313), ascribes the putative examples of /k/ > /x/ to "pseudo-Consonant Shift", an independent process affecting reflexes of PGmc */k/ (especially following /i/) in syllables not bearing primary stress, and particularly in small function-words such as personal pronouns and the conjugation OE *ac ~ ah* "but"; and in the suffix OS *-līk ~ -līh ~ -līhc*, OHG *-līc~ -līch ~ -līh* "like". This process is (according to Höfler) attested in Go, Vand, OE, OS, OWN and OEN. Schwerdt concedes that Stetten **-kuḍ**, being datable to the late 7th century, may be allowable as a witness to the shift of the *mediae* (in this case /g/ > /k/); but she concludes that the Consonant Shift had not begun in the period when most of the inscriptions were produced (2000:238).

Nedoma (2004a:286-287) rejects "pseudo-Consonant Shift" as an explanation for Wurmlingen **-rih**; but his objections centre on criticism of Höfler's use of Gk <χ>, Lat <ch> in EGmc MNs with the deuterotheme *-rīk-* as evidence of the pseudo-shift. Schützeichel (1976:278-279), also citing Höfler, notes that forms in <-ch> of *sich, ich, och* and the suffix *-lich* appear in German dialects in a large area north of the *maken/machen* isogloss,[20] and

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[20] This isogloss (the Benrath line) runs, roughly speaking, east-west between Düsseldorf-Benrath on the Rhine (Nordrhein-Westfalen) and Frankfurt a.d. Oder (Brandenburg). See Schützeichel (1976:184).

infers that the Wurmlingen inscription could indeed be a product of the same process. Nedoma does not address this point.

For the time being at least, I withhold judgement on the evaluation of /x/ < /k/ as evidence for the Consonant Shift proper as against a more widespread "pseudo-shift". I also refrain from comment on Vennemann's alternate theory that the Consonant Shift actually occurred at a much earlier stage than is conventionally thought (Vennemann 1984; 1994a. For criticism of the theory, see Moulton 1986; Penzl 1986).

2.4.2 *Spirantenschwächung*

This sound change is invoked by Krause, Opitz and others in interpreting a number of inscriptions. The label *Spirantenschwächung* is often used in the runological literature, and I follow suit. Strictly speaking, however, this label refers to the general voicing of the inherited voiceless fricatives /f θ s x/ in intervocalic position. The subsequent despirantisation of /θ/ > /d/ – presumably via generalisation of the voiced allophone [ð] – is unconditioned (BR §102a). The process is thought to have begun in UG and spread northwards (BR §166).

Schwerdt (2000) accepts the following as examples: 7. Bad Ems **badą** → *bada*; 15. Bülach **fridiḷ** → *Frĭdil*; 44. Kirchheim/Teck I **bąda** → *bada*; 60.

Osthofen **d?ḥ** → *dih*; (possibly) 75. Steindorf **-bald** → *-bald*;[21] 76. Stetten **-kuḍ** → *-ku(n)d*.

Nedoma (2004a:18, 145) rejects the assignment of *Spirantenschwächung* to the "runic" period on chronological grounds: <d> spellings for reflexes of PGmc */θ/ are not found until the late 8th century in Alam.; after 900 in RFrk; and even later in MFrk. Braune is less emphatic, tentatively dating the beginnings of the process to the mid-8th century (which still implies that it is not active in the period of the runic inscriptions).

While I find Nedoma's arguments persuasive, I hesitate to rule out the possibility that the inscriptions might contain reflexes of PGmc */θ/ represented as **d** rather than the expected **þ**. Any interpretation which depends on *Spirantenschwächung* must be treated with caution, however. In all of the examples adduced by Schwerdt, we have good reasons to doubt the reading and/or the derivation from a pre- or proto-form in */θ/. We have, moreover, to keep in mind a necessary point of relative chronology, at least in respect of certain dialects: *Spirantenschwächung* must postdate the Consonant Shift devoicing of /d/ > /t/; otherwise, /d/ < /θ/ would merge with the existing /d/ and be devoiced, leaving OHG with no /d/ (e.g., the 2.sg. personal pronoun would be *tu rather than *du* < PGmc *þū). This argument only applies to those dialects in which /d/ participates in the Consonant Shift (EFrk, UG).

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[21] Schwerdt is here accepting a proto-form **ƀalþa-*; the cognates OS *bald*, OE *beald*, however, seem to point to an underlying **ƀalđa-*. For more on the etymology of this element, see entry in §4.1.

2.5 Runic orthography

2.5.1 Graphemic representation of the high vowels and the corresponding semivowels

Given that the consonants /j w/ cannot be distinguished from the vowels /i u/ in articulatory terms, it would hardly be surprising if rune-carvers (or, for that matter, anyone transcribing a language that contains these phonemes) did not attempt to distinguish them orthographically. The distinction is not a phonetic one, but one of syllable position (core vs. periphery, or syllabic vs. non-syllabic). The absence of syllabic discrimination in the use of Roman <i> ~ < j> for the high front and <u> ~ <v> for the high back vocalics in medieval manuscripts is sufficiently well known as to require no further comment. On the other hand, the fact that the fuþark contains distinct runes **i/j** and **u/w** suggests that to speakers of early Gmc dialects (or at least, to the creators of the fuþark) the distinction was perceived as significant.

With respect to the Continental runic inscriptions and the phonological system(s) which they represent, we have two types of question to resolve. The first is phonological: what happens to the PGmc high vowels and the corresponding semivowels in the dialects recorded in the inscriptions? The second concerns mappings between grapheme and phoneme: to what extent (if any) are the runes **j w** reserved for non-syllabic /j w/ and **i u** for syllabic /ĭ ŭ/? Is there any evidence that grapheme-phoneme mappings are affected by factors other than the consonant/vowel distinction (e.g., vowel quantity)?

2.5.2 Orthographic rules proposed in the runological literature

In the runological literature, several orthographic "rules" have been proposed whereby particular phones are not represented. These are believed to be regular, nontrivial orthographic rules, rather than mere errors or idiosyncratic omissions.

The first of these "rules" governs the "non-representation" of a nasal: Nedoma formulates it $C_0VNT \rightarrow C_0\tilde{V}T$ ($<C_0VT>$) (Nedoma 2004a:15). This formulation implies a phonetic component to the omission (nasalisation of the vowel); /n/ is regularly assimilated in this environment in the "coastal" dialects and OS but not in OHG (compare OE OFris *gōs*, OS *gôs* ~ *gâs* (see also §2.3.4.1), vs. OHG *gans* "goose" < PGmc *ʒansz*).

This phenomenon has been invoked in at least some interpretations of the following: 7. Bad Ems **ubadą** → *u(m)(ba)bada*; 9. Balingen **amịlu?** → *Amilu(n)k*; 16. Charnay **uþfnþai** → *u(n)þf(i)nþai*; 27. Gammertingen **ado** → *A(n)do*; 29. Gomadingen **iglu^g/$_n$** → *I(n)glu(n)g/I(n)glŭ̈n*; 54. Neudingen-Baar II **bliþguþ** → *Blīþgu(n)þ*; 62. Pforzen II **aodliþ** → *Aodli(n)þ*; 67. Schretzheim I **alaguþ** → *Alagu(n)þ*; 68. Schretzheim II **siþwagadin** → *si(n)þ wag(j?)a(n)dĭn*; 72. Skodborg **alawid** → *Alawi(n)d*; 76. Stetten **ạmẹlkuḍ** → *Amelku(n)d*; 83. Weingarten I **a^{li}/$_e$rguþ** → *Alirgu(n)þ/Aergu(n)þ*.

The corpus contains a few examples where the nasal in a N+C cluster is represented: 16. Charnay **uþfnþai** → *u(n)þf(i)nþai*; possibly 20. Eichstetten **munị** → *munt*; 61. Pforzen I **andi**; 80. Weimar II **awimund** → *Awimund*.

These cases (especially Charnay, where we appear to have the cluster /nθ/ represented both with and without the nasal in the same word) indicate that this is not a hard-and-fast rule; but the number of cases where the nasal is omitted – especially in the name-element *-gunþ*, which is attested three times in the form **guþ** – suggests that they are not simple errors. These interpretations do not seem restricted to N+T clusters, however: in many of the alleged witnesses (including Arlon **rasuɣaṃụd** and Gammertingen **ado**, the only examples which Nedoma cites explicitly in his discussion), the following consonant is voiced.

The non-representation of a nasal before a homorganic obstruent is the norm in Scandinavian runic inscriptions, and is also common in Mediterranean epigraphical tradition (Antonsen 1975:12).

A similar phenomenon is the non-representation of /l/ before /d/ (Krause 1966:309; 1971:34-35). The only example of this in the Continental corpus is 11. Bezenye I **godahid** → *Gŏdahi(l)d* (§4.1; §5.1); but Krause cites parallels in OHG *Adalhid, Albhid*; and in the Scandinavian runic tradition, Kjølevik stone (KJ 75) **hagustadaz** vs. Valsfjord rock carving (KJ 55) **hagustaldaz** (Krause 1966:309; 1971:34). Krause suggests that the omission might be motivated by the articulatory similarity between the two consonants, but he does not go so far as to posit a regular process of assimilation.

The second process of letter-omission is "Grønvik's law". As stated by Nedoma (2004a:15), a high vowel may be omitted before a R+C cluster:

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$C_0VRC \rightarrow C_0\mathring{R}C$ (<C_0RC>). Grønvik (1985:187) does not in fact specify that the vowel must be high; and one of the examples he invokes is the Etelhem fibula (KJ 14) **wrta** → *w(o)r(h)ta*, where a mid vowel is involved. I discuss the possible epigraphical evidence for unrepresented vowels (both those which meet the conditions for "Grønvik's law" and those which do not) in more detail in §5.2.1.1.

3. The diphthongs

The sound changes with which we are concerned in this chapter are the allophonic, and ultimately phonemic, split(s) affecting PGmc */eu/ (§2.3.1.1); the NWGmc monophthongisation of unstressed */ai/ and */au/ (§2.3.1.2); and the monophthongisations of stressed */ai/ and */au/ (§2.3.1.3; §2.3.1.4).

3.1 PGmc */eu/

Since */eu/ remains without exception a front-back diphthong throughout Gmc, we would expect it to be represented in our inscriptions by digraphs consisting of a front and a back vowel grapheme (i.e., **iu eu io eo**). For the sake of completeness, we should also consider the possible involvement of the "yew-rune" **ï** (which probably represents a front vowel – see §5.2.4) and the semivowel graphemes. These give us 12 possible digraphs: **iu iw io eu ew eo ïu ïw ïo ju jw jo**.

In this section we will test the hypothesis that these digraphs are distributed in a way consistent with the umlaut process and/or the UG consonant-conditioned change described in §2.3.1.1: as evidence for umlaut variation, we might expect to see **iu** (or **iw ïu ïw ju jw**) before a high vowel or glide and **eo** (or **io ïo jo**) before a non-high vowel, with **eu** (or **ew**) possibly appearing in any position as an "archaic" spelling, or at any rate a representation of an underlying /eu/ which disregards the distinction /iu/ vs. /eo/. If the UG consonantal blocking of */eu/ > /eo/ is active in the dialects of the inscriptions,

then **iu** may appear before a non-high vowel if a labial or velar consonant intervenes.

Although it is not our principal purpose in this study to propose a theoretical account of the variations, it is worth pointing out that, as mentioned in §2.3.1.1, the umlaut variants must be phonemic after the deletion of unstressed final */a/. If the UG consonant conditioning is to be explained as blocking of *a*-umlaut by the labials and velars, then the consonant conditioning must predate the loss of the umlaut-triggering environment and the phonologisation of /eo/. In this case, given that the majority of our inscriptions are associated with Alamannia and Bavaria (later UG dialect territory), we might expect to see the UG pattern, with **iu** spellings predominating, and **eo** appearing only before dental or /h/ + non-high vowel.

The digraphs (**io ïo jo**) would be anomalous within this system, if they are understood to represent a phonetic form *[io]; but we should not rule them out *a priori*.

3.1.1 Data

This section includes all inscriptions containing one of the digraphs listed above as possible spellings for a reflex of */eu/. Of particular interest are the reflexes of PGmc *leuƀaz* "dear, lovely" (see entry for 8. Bad Krozingen A), which accounts for most of our evidence for the development of this diphthong. The results of this survey of the data are discussed in the following section (§3.1.2).

3. †Arguel pebble

[I] **arbitag** [II] **wodan** [III] **luïgo^w/_þhaŋ** [IV] **zej** [V] **kim**.

The only available interpretation of this inscription is that of Bizet (1964). He interprets the first part of complex III as Go *liuhaþ* "light" (< PGmc *leuxađan* (compare *leuxtan* > OE *lēoht*, OFris *liacht*, OS OHG *lioht*)). Metathetic <ui> for the reflex of PGmc */eu/ before a non-high vowel appears in the name of a 6th-century bishop *Luidhard* (although it should be noted that this is a WGmc name, and Bizet believes the dialect of the Arguel inscription to be Burgundian, i.e., EGmc); and metathesis is commonly invoked in interpreting runic inscriptions (e.g., 10. Beuchte **buirso** → *Bŭriso*). Bizet transcribes **g** as *h* on the grounds that in Lat. sources, <g> and <h> are both used for Burgundian reflexes of PGmc */x/ (1964:44). The spelling **o** for /a/ is also curious (see §6.1).

While the interpretation *liuhaþ* is not beyond the realm of possibility, it does require the invocation of three peculiar spellings (Bizet does not mention the use of the rare "yew-rune", on which see §5.2.4). Taken together with the doubtful authenticity of the item and the fanciful nature of Bizet's treatment of the text as a whole, this is at best a questionable witness to the development of PGmc */eu/ in the inscriptions. Furthermore, if Bizet is correct then the dialect is not WGmc and the inscription is of limited use to us.

7. Bad Ems fibula

[I] **]ṃadaḷi?** [II] **ubadạ[**

This inscription is only a candidate if we allow Marstrander's interpretation of the text as *Mada liub Ada* "Mada (is) dear to Ada" (Marstrander 1939:297). This interpretation ignores the small cross-like symbol transliterated **?**, which is generally treated as a word-divider or other paratextual mark. Whatever its function may be, it makes a reading of **liub** as a single word (< PGmc *leuƀaz* "dear"; see <u>8. Bad Krozingen A</u>, below) most unlikely.

8. Bad Krozingen A fibula

boba:leub agirike

leub is identified throughout the literature as a reflex of PGmc *leuƀaz* (> Go *liufs* "beloved"; ON *ljúfr* "dear, beloved"; OE *lēof* "desirable, pleasant, beloved"; OFris *liāf,* OS *liof,* OHG *liob* "beloved"). Düwel (2002b:15) identifies its function as either an adjective modifying *Boba* (in which case the text means "Boba (is) dear to Agirik"), or as an acc.sg.neut. substantive denoting either the object or a blessing on the part of Boba ("Boba (wishes) something dear/lovely/nice for Agirik"). All commentaries on the object are based on one or both of these interpretations, with no others having been suggested (Fingerlin 1998; Fingerlin et al. 2004; Nedoma 2004a:151-158, 244).

10. Beuchte fibula

[I] **fuþarʒj** [II] **buirso**

Complex II is normally interpreted as a metathetic form of a pers.n. *Bŭriso* (see §4.1), with **i** and **r** transposed. An alternative metathesis (not mentioned in the literature) is at least hypothetically possible: **buirso → biurso**, perhaps a pers.n. or epithet with a stem **biur-* < PGmc **ƀeuran* (> ON *bjórr*, OE *bēor*, OFris *biār*, OHG *bior* "beer"). If this were a hypocoristic form in /-is-o/, as *Bŭriso* is believed to be (Nedoma 2004a:264-265), we would have to assume that the medial /-i-/ (which would support a diphthong with the form /iu/, as opposed to /eo/) had been elided (compare the interpretations of Grønvik and Krause, in §4.1). I know of no evidence for the use of the "beer"-word as a name-element; but there might be a semantic parallel in the productive element *Alu-*, if the latter is the "ale"-word (PGmc **aluþ*) (see 34. Heide in §4.1). On balance, the interpretation of **ui** as /iu/ here is unlikely, though not impossible.

20. Eichstetten sheath fitting

?a?i [chi-rho/**nƀ**/**nw**] **munịwiwo?(??)**

wiwo?(??) is interpreted as either (i) *wī wo(l)* "how good/well"; or (ii) a pers.n. with an element *Wī-* (see §4.1). There is no suggestion in the literature that **iw** here might represent a reflex of */eu/, and I am not aware of any possible etymon in **weu-*.

21. Engers fibula

leub

The major interpretations of this inscription are: (i) a strongly-inflected nom. pers.n. (m. or f.) *Leub* < PGmc **leuƀaz* (fem. **leuƀō*) "dear" (for the etymology, see 8. Bad Krozingen A) (Arntz and Zeiss 1939:205; Krause 1966:283; Nedoma 2004a:355-357); (ii) a nom.sg. substantivised form (any gender) of the adjective ("something lovely/nice"), either denoting the object itself or expressing a wish on the part of the donor (again, see Bad Krozingen) (Arntz and Zeiss 1939:205-206; Krause 1966:283; Nedoma 2004a:354-355).

Looijenga's treatment of **leub** as a noun "love" is possible, but less promising: I suspect that she has in mind the *īn*-stem (PGmc **leuƀīn* > OHG *liubī* > modG *Liebe*); but since we have no termination ***-i** or ***-in**, this does not seem likely. Braune notes that in OHG some members of this class are transferred to the *ō*-declension (BR §231 Anm. 2). There is an OHG *lioba* (*ō*-stem), listed by Wells (1990) as a gloss for Lat *gratia* "favour, esteem, liking", *cor* "heart, mind, feeling", which could be a transferred variant of the *īn*-stem. An interpretation of **leub** as **leubī* → **leub-Ø* "love" (nom.sg. *ō*-stem – see §7.2) is not impossible, but it involves the assumption that **leub** is an *īn*-stem carried over into the *ō*-declension, and that this type of transfer is in progress during the "runic" period. This strikes me as an unnecessarily complicated explanation, and one which cannot be verified in the absence of co-text to support a particular semantic interpretation. OHG *lioba* occurs only twice (in the OHG Isidor (8th c.), and in a 10th-century gloss) (Köbler 1993; 2006).

Nedoma (2004a:355) argues that the case for a pers.n. is strengthened by the fact that **leub** is isolated. We have in the Continental corpus a substantial number of inscriptions consisting solely of pers.ns. (or at least, sequences that

are generally believed to be pers.ns.), but there are no known examples of a Continental text consisting just of a "formula-word". The only possible exceptions are the **alu** and **ota** inscriptions, which are probably either imports from Scandinavia or imitations of Scandinavian inscriptions (see 34. Heide; 38-39. Hüfingen I-II in §4.1).

23. Ferwerd comb case

me̲u̲ra/me̲u̲ræ (Looijenga 2003a:303).

This is an unlikely case: firstly, the reading **e** (as part of a bind-rune **me**) is questionable; and secondly, in Looijenga's interpretation, **e** and **u** belong to separate words: **me̲u̲ræ** → *mē Ura* (or *Uræ*, if ᚨ is here given its fronted "Anglo-Frisian" value).

46. †Kleines Schulerloch cave wall inscription

birg : leub : selbrade

Throughout the literature, **leub** is connected to the adjective < PGmc *leuƀaz* "dear" (see 8. Bad Krozingen A), or a noun derived from it. Interpretations include: (i) a strong nom.sg.fem. adjective modifying a FN *Birg*; (ii) an acc.sg.neut. adjective "something lovely/nice"; (iii) a strongly inflected nom. (or voc.?) sg.masc. substantive denoting the addressee, in Krause's interpretation of **birg** as an imp. verb-form "help, protect" (Krause 1966:291) (see §5.1); (iv) a nom. pers.n. *Leub* (see 21. Engers).

50. Mertingen fibula

ieoķ aun

Düwel (2000a:14; Babucke and Düwel 2001:169-170) offers an (admittedly

speculative) interpretation connecting **ieoķ** with PGmc **jeukēnan* (> Go *jiukan*

"to fight, conquer", *ga-jiukan* "to overcome"; MHG *jouchen* "to chase, drive"),

which is itself derived from PGmc **jeukan* (> Go *juk*, ON *ok*, OE *geoc*, OS

juk, OHG *juh ~ joh* "yoke") (Orel 2003; Pokorny 1959-1969). He proposes

that **ieoķ** + **a** (as a haplograph) represents **jeuka*, either a 1.sg.pres.ind. verb-

form "I fight" (: Go *jiuka*, OHG **jeochēm*), or a related noun "fight" (Go *jiuka*

f. "quarrel" < PGmc **jeukō*). The verbal interpretation provides a suffix

consistent with Gothic (/-a/ < PGmc */-ō/), but not with OHG (/-ē-m/, the

ulterior etymology of which is not certain (BR §305)).

54. Neudingen-Baar II wooden stave

lbi·imuba:hamale:bliþguþ:uraitruna

The sequence which concerns us here is **lbi**, which most commentators

interpret as the *īn*-stem noun *l(iu)bī* "affection, love" (< PGmc **leuƀīn*)

(Düwel 2002c:27; Looijenga 2003a:249; Nedoma 2004a:241; 2006a:145;

Opitz 1982:488; Scardigli 1986:353). Nedoma (2004a:241) doubts that the

sequence represents a pers.n. *L(iu)bi*, as this would imply an interpretation

"Liubi (and) Im^uba [give this] to Hamal"[22], making Hamal (a man) the owner of an object found in a woman's grave.

The expansion of **lbi** → *liubī* is speculative: any other vowel could be inserted. If, in spite of this reservation, we accept the majority view, the reflex of */eu/ is not represented and so **lbi** gives us no information useful to the present investigation.

Schwab (1998a:416) proposes that the sequence **imuba** contains two erroneous spellings (**i** for **l**; **m** for **e**) and that the carver intended to write not ᛁᛗᚢᛒᚠ but the formally similar ᛚᛗᚢᛒᚠ, **leuba** being a magical "formula-word" derived from PGmc **leuƀ-* (see **lbi**, above). Nedoma (2004a:346) responds that there is no reason to believe that this is the case.

55. Niederstotzingen strap end

[I] **bi̯gẉs(:)?liub**   [II] **ụẹ??d?^{igu}/_{du/ud}?**

liub might be a strong nom.sg.masc./fem./neut. or acc.sg.neut. form of the adjective < **leuƀaz*, either modifying some noun or functioning as a substantive (compare 8. Bad Krozingen A). Since it is the only part of the inscription which can be interpreted with any confidence, we have no co-text to assist us in discriminating between these alternatives. Other possibilities are that it is a pers.n. (Opitz 1987:32) or a noun "love" (Looijenga 2003a:249 – I

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[22] "Liubi (und) Im^uba [schenken dies] dem Hamal"

find this unlikely here for the same reasons as her interpretation of 21. Engers

leub; see above).

56. Nordendorf I fibula

[A] [I] **logaþore** [II] **wodan** [III] **wig^i/_uþonar** [B]

ạw̥ạḷeubwini?

The most popular interpretation of **ḷeubwini** (*inter alios,* Düwel 2002d:276;

Krause 1966:293-294; Looijenga 2003a:250; Nedoma 2004a:362; Opitz

1987:33) is that it is a dithematic MN, with a prototheme *Leub-* < **leuƀaz* (see

8. Bad Krozingen A), or perhaps a compound *leubwini* carrying the literal

meaning "dear friend".

Another possibility is that inscription B contains a formula similar to that of

Bad Krozingen: **ạw̥ạḷeubwini** → *Awa leub Wini*. The last word could be a

MN *Wini* or the common noun *wini* "friend" (< PGmc **weniz*; see further

§3.2.2; §5.1). If this is the correct interpretation, then *leub* is either a

nom.sg.fem. adjective with *Awa* as its referent, or an acc.sg.neut. substantive

"something lovely/nice", as for Bad Krozingen.

57. Nordendorf II fibula

ḅirl?ioel?

The few tentative interpretations that exist for this inscription are based on a

left to right reading; the sequence **io**, however, is nowhere interpreted as a

diphthong. Arntz incorporates it into a metathetic MN, reading **birtlio** →

Bir(h)tilo (Arntz and Zeiss 1939:305), while Looijenga interprets **io** as *jo(h)*

"and" (§4.1).

60. Osthofen fibula

go?:furad?ḥdẹọfịle?

In Krause's interpretation of this inscription (1966:285), **dẹọfịle** → *deofile*

"Devil". If this is correct, then we appear to be dealing with a vocalic

sequence /eo/, but this is an adaptation of a Latin form (CLat *diabolus* and/or

LLat **diuvalus* (Kluge 2002)), not a Gmc word. The loan is well-attested in

forms like OHG *diufil*, OS *diuƀul*.[23] I note, however, that no <-eo-> forms are

attested, even in cases like *diufal* where the following vowel is low and where

PGmc */eu/ would regularly give OHG (Frk) OS /eo/ (§2.3.1.1; see further

§3.1.2.1). It is in any case questionable whether we are deaing with a

diphthong at all here, rather than two monophthongs separated by a syllable

boundary (CLat. *diabolus* → /di.a-/; OHG *diufil* → /di.u-/? /diu.-/?).

Krause's interpretation remains the dominant one (compare, e.g., Looijenga

2003a:253; Martin 2004:194; Opitz 1987:36). Nevertheless, it remains

problematic, not least because the terminal **-e** is difficult to account for (see

§5.1).

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[23] The "devil"-word appears in many variant forms in OHG (see Schützeichel 2006 for a

comprehensive list, and see discussion in §3.1.2.1).

65. †Rügen stone piece

fgiu

The only interpretation available in the literature is that of Arntz, who treats **giu** as an abbreviated verb-form *gibu* "I give" (Arntz 1937:7-8). If this is correct (which I do not believe to be the case – see entry on 28. Geltorf II in §4.1), **iu** does not represent the diphthong */eu/.

67. Schretzheim I capsule

[I] **alaguþ:leuba:dẹḍun**   [II] **arogịsd**

Krause (1966:300) treats **leuba** as a weakly inflected nom. FN *Leuba*, or perhaps a by-name literally meaning "dear one" (< PGmc *leuƀ-* – see 8. Bad Krozingen A, above), syntactically parallel to *Alagu(n)þ* (see §4.1; §6.1). The two named women are understood as subjects of the verb *dĕdun* "made" (§4.1), the implicit object of which is taken to be "the blessing" or "the inscription", rather than the capsule (Krause 1966:300; Looijenga 2003a:255).

leuba may alternatively be interpreted as an acc.sg. *ō*-stem noun or adjective, perhaps referring to the owner of the object ("Alagunþ (and) Arogīs made (the owner) a happy person"), or to the object itself ("Alagunþ (and) Arogīs made something which brings luck") (Arntz and Zeiss 1939:343; Schwab 1998a:417). Schwab (*ibid.*) also suggests that it could be a nom.sg.fem. adjective modifying *Alagunþ*.

68. Schretzheim II fibula

[I] **siþwagadin**   [II] **leubo**

The generally accepted interpretation of complex II is as a weakly inflected nom.sg. MN *Leubo*, again with the stem *leub* < PGmc **leuƀ-* (8. Bad Krozingen A; and compare 67. Schretzheim I **leuba**). It could alternatively be a masc. *n*-stem noun with the literal meaning "dear one" (compare OHG *liobo* "beloved, friend, disciple"); Looijenga also suggests that **leubo** might represent a nom. form (any gender) of the adjective *leub* "dear, lovely", but does not analyse it further (2003a:256).

70. Schwangau fibula

leọḅ (Meli, cited by Düwel 1994b:277; Schwab 1998a:412).

This transliteration has been rejected by the runological community in favour of Looijenga's (2003a:257) **aeḅị** (§3.2.1). If, in spite of this, **leọḅ** is correct, then it represents a parallel to 21. Engers **leub**, a reflex of PGmc **leuƀaz* "dear, lovely" (pers.n.?). On the etymology of **leuƀaz*, see 8. Bad Krozingen A.

73. Skonager III-C bracteate

[I] **niuwila** [II] **lḅụ**

That complex I contains a weakly inflected MN (or by-name) with a stem derived from PGmc **neujaz* (> Go *niujis*, ON *nýr*, OE *nīwe*, OFris *nī, nīe*, OS

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OHG *niuwi* "new") is not controversial. If the inscription is PNorse, as the majority view holds, the spelling is curious – we would expect ***niujila** (compare Darum V-C (IK 43; KJ 104) **niujil**). Krause explains the **iuw** spelling as either a simple error for **iuj** (1966:254-255), or representing an incidental glide in the later PNorse **Niuila* (**Niuwila*) < *Niujila* (1971:163).

Antonsen (1975:76) identifies the text as WGmc, on the grounds that **uw** represents a geminate, PGmc **niu.j-* > WGmc **niww.j-* > **niuw.j-* (for further discussion of gemination, see §3.3.1.1). If the surface form is simply erroneous, or can be explained without invoking the WGmc consonant gemination, then we have little reason to include it in this study. Some support for a non-PNorse identity might come from the suffix: Müller (in Düwel et al. 1975:161-162) comments that the dim. suffix /-il-/ is very common in EGmc and WGmc names, but extremely rare in ON (including the rich stock of pers.ns. recorded in Viking-Age runic inscriptions); he does not, however, infer that the Skonager inscription is WGmc.

79. Weimar I fibula

[I] **haribrig** [II] **hiba:**   [III] **liub(į):**   [IV] **leob·**

Complex III **liub(į)** is treated in the literature as either a nom. MN *Liubi*, or possibly the nom.sg. *īn*-stem *liubī* "love" (see §5.1. Compare also 54. Neudingen-Baar II **lbi**). The reading of a final **į** is doubtful: Arntz uses it to argue that the variation between **eo** and **iu** in complexes III-IV is phonetically motivated, but he makes this argument *a priori* and relies on it to support his reading of an **i**-rune (Arntz and Zeiss 1939:365, 367).

Complex IV **leob** is usually interpreted as an acc.sg.neut. substantive "something lovely/nice", referring either to the fibula or an abstract wish (see 8. Bad Krozingen A, above) (Arntz and Zeiss 1939:366-368; Krause 1966:288; Nedoma 2004a:365-366).

Looijenga (2003a:260) notes that **leob** is now indistinct, and does not accept Arntz' reading of **i̧** in complex III. She interprets **liub** as an *a*-stem noun "love" (= OHG *liob* n. "love, luck, salvation" < PGmc *leuƀan* (Köbler 1993)), or a nom.sg. adj. (any gender); and **leob** as a nom. MN (comparable to 21. Engers **leub**).

An obvious problem when attempting to read the text as a whole is that the complexes are located on several distinct parts of the fibula and so are physically isolated from one another. As we cannot be certain that the inscription is to be read as a single text, the assignment of grammatical roles to the various parts is speculative at best. Nedoma indicates (2004a:258) that the inscriptions on the footplate and the knobs of the paired fibula (80. Weimar II) are the work of at least two different carvers. It is entirely possible that the same applies to Weimar I – if the inscriptions were made by two or more individuals, they probably constitute two or more distinct texts.

81. Weimar III buckle

[I] **ida:bi̧gina:hahwar**   [II] **:awimund:isd:lȩoƀ**   [III] **idunⁱ/**.

The reading of **lȩoƀ** in complex II is tentative, this part of the inscription being obscured by corrosion. Looijenga is adamant that "there is no **leob** as

Arntz/Zeiss read, because the traces of at least five or six runes can be seen."
(2003a:262).

There are two major interpretations of complexes II-III in the literature,
which assign different functions to **leob**:

1. *Awimund ist leob Idūn* "Awimund is dear to Ida" (Arntz and Zeiss
    1939:374-375; Düwel 1994b:290; Nedoma 2004a:228).

2. *Awimund Īsd(ag) leob Idūn* "Awimund (and) Īsdag (wish) something
    dear/lovely for Ida" (Klingenberg 1976c:371; Krause 1966:290).

Both of these treat the text as a formula comparable to NN_[nom.] *leub* NN_[dat.],
if this is to be interpreted as "NN (is) dear to NN" (see 8. Bad Krozingen A;
46. †Kleines Schulerloch; and 56. Nordendorf I, inscription B).

82. Weimar IV bead

þ/_wiuþ/_w:ida:?e????a:hahwar:

The evaluation of **iu** here depends on how we read the runes immediately
before and after it. The following readings and analyses are presented in the
literature:

1. **þiuw** → *þiuw* "servant" < PGmc **þeʒwaz* (> Go *þius* "boy, house-
    servant"; ON -*þér, þý* n. "serf, bondsman"; OE *þēow* "servant, slave";
    OS *theo*-; OHG *teo* adj. "unfree") (Looijenga 2003a:262). If this is
    correct, then **iu** does not represent a reflex of PGmc */eu/.

2. **wiuþ** → **wīhjuþ* 3.du.pres. "they (two) consecrate" (Arntz and Zeiss
    1939:377). This is not plausible (see §4.1), and even if it were, it
    would not be relevant to the development of */eu/.

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3. **þiuþ** represents some reflex of PGmc *þeuþ- (Krause 1966:290;
    Nedoma 2004a:314), presumably as a Verner's Law alternant of
    *þeuđ- (cf *þeuđjaz > Go þiuþ, OE geþýde "good"; ON þýðr "meek,
    kind, admirable"; OS githiudo adv. "seemly" (Orel 2003)). If this is
    the correct reading and interpretation, then we are dealing with a root
    vowel */eu/.

Weimar IV, therefore, is an uncertain case for inclusion, only allowable if
we accept reading 3. Readings 1-2 both involve a syncopated consonant.

Arntz reads the doubtful part of this inscription as **leob : ida** → *leob, Ida*
"something dear/lovely, Ida!" (Arntz and Zeiss 1939:377; see also Krause
1966:290; Opitz 1987:191). He is quite confident about the reading **leob**, but
his advocacy of it seems to rely on its appearance on the other Weimar finds,
of which only Weimar I is a reliable witness. I therefore treat it as a marginal
case.

88. Wijnaldum B pendant

hiwi

The word **hiwi** may also be present on the first-century Meldorf fibula
(excluded from the present study for chronological reasons), if the Meldorf
inscription is runic (Düwel 1981; Düwel and Gebühr 1981). Düwel's proposed
interpretation of Meldorf **hiwi** is as a FN with a stem < PGmc *xīwan n. (> Go
heiwa-frauja "master of the house"; ON *hjón ~ hjún* pl. "man and wife"; OE
hīwan pl., OFris *hīuna* pl. "members of a household"; OS *hīwa*, OHG *hīwun*

pl. (to *hīwa) "spouse, family member"): Lat cīvis "citizen". This appears as a name-element on the Årstad stone (KJ 58) **hiwigaz** (Krause 1966:130), and in several other pers.ns.: OHG *Hiuo* (in PNs *Hiuenheim, Hivenchusen*); *Hiuperht; Hiuorin* (recte *Hiuorih*?) (Förstemann 1900:846). On the suffix, see §5.1.

An alternative, not advanced anywhere in the literature, is that **hiwi** could represent a reflex of PGmc *xewjan* > Go *hiwi* "form, appearance"; ON *hý* "down"; OE *hīw* "shape, form, appearance; colour; beauty". This is not attested in OHG or OS, but it would regularly yield *hiuwi* (compare OS OHG *niuwi* "new" < PGmc *neujaz*). While this is unlikely to be the etymon for OHG *Hiu-perht* etc. (we would expect a form *Hiui-*), it is phonologically possible to interpret **hiwi** as a pers.n. or byname *Hiu(w)i* "beauty" → "beautiful/shapely"(?). Semantically, however, it does not seem terribly promising: although colour terms and physical descriptors are common in pers.ns., I know of no parallels for the use of a general term with a meaning like "shape, form, appearance", except perhaps ON *Ullr* < PGmc *wulþuz* (> Go *wulþus* "splendour") : Lat *vultus* "facial expression, appearance". If the sense "beauty" is allowable, then this is a semantic field known in name-elements such as OHG *fladi* "cleanness, beauty", which appears as both a prototheme and a deuterotheme in FNs (Bach 1952/53:I,1:227; Förstemann 1900:508-509). Given that the connection with *xīwan* is equally plausible and better attested, I am inclined to reject the *xewjan* hypothesis.

3.1.2 Summary and discussion

Of the 12 possible digraphs consisting of a front and a back vowel grapheme listed in the introduction to §3.1), only 3 are attested in reflexes of */eu/: **eu iu eo**. One of the **iu** examples (Skonager) belongs to the trigraph **iuw**. The question of whether or not **uw** represents a geminate (< WGmc */-ww-/) is not directly related to that of how the diphthong itself is represented. The following handlist groups the spellings together with the following text (which may have an effect on the realisation of the diphthong):

eu

8. Bad Krozingen A	**leub:agirike**
21. Engers	**leub**
56. Nordendorf I	**leubwini?**
67. Schretzheim I	**leuba:dẹḍun**
68. Schretzheim II	**leubo**

eo

50. Mertingen	**ieoḳ aun**
79. Weimar I [IV]	**leob**

iu

55. Niederstotzingen	**?liub**
73. Skonager III	**niuwila**
79. Weimar I [III]	**liub(i̩):**

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We have 9 inscriptions containing 10 probable reflexes of */eu/. In all but two (Mertingen; Skonager), the diphthong belongs to the root *leuƀ-. Four additional inscriptions are worthy of consideration, although they must be regarded as questionable cases (Kleines Schulerloch is suspect; Osthofen has a dubious interpretation of the sequence as part of a Latin loanword; and the readings of the others are too uncertain for us to have any confidence that */eu/ is represented):

46. [†]Kleines Schulerloch   **leub:selbrade**

60. Osthofen   **dẹọf̣ile?**

81. Weimar III   **lẹoƀ**

82. Weimar IV   **ᵇ/̣ᵥiuᵇ/̣ᵥ:ida**

If we assume that **eo** → /eo/ and **iu** → /iu/, then we can attempt to interpret them in terms of the two types of sound change outlined in §2.3.1.1 – umlaut and UG consonant-conditioned variation.

3.1.2.1 Umlaut

The only witness which is straightforwardly attributable to umlaut is Skonager **niuwila**; and even this is problematic in that its identification as WGmc is uncertain. The reading of Weimar I **liub(ị)** is questionable, and indeed the claim that a final **ị** is present is partly motivated by the need to account for the spelling **iu**.

Niederstotzingen **liub** is the end of complex I; if complex II is intended to follow on directly, its initial **ụ** might be allowable as a conditioning environment for /iu/. Given that complex II is unintelligible and is physically distant from complex I, we have no grounds on which to argue for the continuity of the text. If, on the other hand, **liub** represents a zero-suffixed adjective (whether substantive or not), then we would regularly expect an umlaut-form */leob/ < */leub-a-/ (§2.3.1.1); **liub** can, however, be explained in terms of UG consonant conditioning (§3.1.2.2, below).

If Weimar IV ᵇ/_wiuᵇ/_w is allowable as a witness to /iu/ < */eu/, the initial **i-** of the following sequence **ida** (interpreted as the FN *Ida* – see §5.1) could provide a conditioning environment, provided the umlaut conditioning does not respect word boundaries. The general assumption in the literature is that only following syllables within the same word trigger umlaut (or to put it another way, juncture is assumed to be a barrier to umlaut).

Turning to the **eo** examples, we have a plausible case for umlaut-conditioning of /eo/ in Mertingen **ieoḳ a-** , where (in Düwel's interpretation) **a** is treated as a haplogram → *jeoka aun*. Weimar I **leob** and Weimar IV **ḷẹoḅ** are isolated on fibula knobs, their relationship to the co-text being unclear. If these represent zero-suffixed reflexes of *leuƀaz*, the regular Frk form would be *leob-Ø*. The forms **liub(ị)** and **leob** on Weimar I can be reconciled if we accept Arntz' reading of an **i**-rune and if we assign the inscription to a dialect in which UG consonant conditioning is not operative.

If we introduce Osthofen into the discussion, **dẹọf̣ịle** → *deofile* "devil" presents us with a problem. The loanword "devil" has many variants in literary sources. OHG forms with <iu> are common, with various vowels in the second syllable (e.g., *tiuval, tiuvel, tiubil*) and attributable to UG consonant conditioning. However, forms with <ie> → /iə/ < /eo/ consistently have a non-high vowel (*tieval, tievel, tiefal, dieval, dievel, diefel*), as we would expect. A spelling **deofile** as opposed to ***deofale** would be irregular at any stage of the processes affecting */eu/ and its reflexes. Seen in this light, the already contentious association of this sequence with the "devil"-word seems even less likely.

The most frequent spelling is **eu**, which demands further explanation. It is conceivable that **eu** represents a preserved /eu/; but if we are correct in identifying a phonemic split at a very early stage (after the deletion of unstressed final */a/), then we are left with an apparent discrepancy between phonological and written forms. It may be that **eu** is an archaic "reverse spelling" (compare the possible use of **ai** for the monophthongal reflexes of unstressed */ai/ – see §2.3.1.2, and the entry for 16. Charnay in §3.2.1); that it consistently represents one of the alternants /iu/ or /eo/; or that it is a free orthographic variant for both of them (perhaps reflecting an awareness on the part of carvers that /iu/ and /eo/ are in some underlying sense the same, even though they are – from a modern phonological perspective – distinct phonemes (§2.3.1.1)).

With the exception of Nordendorf **ḷeubwini?**, every instance of **eu** occurs before an overt or underlying non-high vowel, where the umlaut process would regularly produce /eo/. On the other hand, all of them appear in the root **leuƀ-*, with a labial consonant which would regularly yield UG /iu/ (§3.1.2.2). On the face of it, we could hypothesise that **eu** is either a free variant with **eo** for /eo/, if the consonant conditioning does not apply; or that it is a free variant with **iu** for /iu/, if this conditioning does apply. A third possiblity is that **eu** represents an intermediate stage in UG consonant conditioning (see below).

Although the reflex of **/eu/* in **ḷeubwini?** has /i/ (< PGmc **/e/?* – see entry in §5.1) in the following syllable, this syllable begins with a vocalic /w/, which does not trigger umlaut (§2.3.1.1). The dithematic MN *Leubwini* is attested in OHG mss. as *Leuboin, Leobwini, Leobwin, Liubwin, Lioboin, Liopwin, Liefwine* (Förstemann 1900:1029); /eo/ predominates, with the /iu/ form probably to be explained as a product of UG consonant conditioning, rather than of umlaut.

3.1.2.2 UG consonant-conditioned variation

As mentioned in §3.1.2.1, the **eu** spelling is attested only in **leub-**, with a labial consonant and in a vocalic environment where we would expect Frk *leoƀ* vs. UG *liub*. As regards the context of the finds, it is worth noting that almost all of the inscriptions containing reflexes of **/eu/* come from sites well within UG dialect territory (the exceptions being Engers, Skonager and Weimar). If all of the **eu** inscriptions can be identified as dialectally UG, and if we accept the hypothesis that the UG consonant conditioning has taken place (as it must,

if this conditioning is to be interpreted in terms of blocking *a*-umlaut, rather than as a later development of /eo/), then **eu** may simply be a variant spelling of **iu** → /iu/; although if this is the case, we might reasonably ask why **eu** is more frequent.

Conversely, if the **eu** sequences can be assigned to a regional dialect or to a chronological stage in which the UG assimilation to the following consonant has not taken place, then **eu** might be an orthographic variant of **eo** → /eo/, which leaves us with the same question about frequency.

A simple solution to this is to hypothesise that **eu** is simply an archaism, as discussed in the previous section. Alternatively, we could postulate that the UG consonant conditioning is underway, but that in the dialects of the inscriptions it has reached an intermediate stage, with only the off-glide assimilated by the following consonant. This is not plausible in the "blocking" model of the change (which assumes that /iu/ before a labial or velar is simply an inherited */iu/ unaffected by *a*-umlaut); but if UG /iu/ before a labial or velar consonant with a following non-high vowel is a secondary development (i.e., PGmc *leuƀ-a-* > pre-OHG *leob-a-* > pre-UG *leob-Ø* > *leub-Ø* > UG *liub-Ø*), then it is conceivable that the off-glide */o/ is raised under the influence of the following /b/. In Vennemann's account (1972), the dentals and /h/ are transparent to *a*-umlaut because the back of the tongue is relatively low during their articulation. This implies that the labials and velars involve a relatively high tongue posture which attracts the off-glide (*/o/ > */u/). The raised off-glide might in turn exert an assimilatory raising of the on-glide /e/. If this is correct, a development of this sort is plausible from a phonetic point

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of view. It does, however, require us to explain the **iu** spellings as either
umlaut forms or "advanced" forms of the UG consonant conditioning.

As we saw in the previous section, Skonager **niuwila** has **iu** readily
explicable as a product of conditioning by the following **i**. There is in any case
no suggestion that the dialect of this inscription is UG. A case can be made for
umlaut in Weimar IV ^þ/_w**iu**^þ/_w, and perhaps Weimar I **liub(i)**. This leaves us
with Niederstotzingen **liub**, for which we have no conditioning vowel. The
find-site is well within UG dialect territory – as has been mentioned – and
would seem to be best explained as UG-type /liub/. This might pose a problem
for the hypothesis that **eu** represents an intermediate stage in the raising of pre-
UG */eo/. On the other hand, I note that the Niederstotzingen find is dated
relatively late in the "runic" period (early 7th c.), while the datings for the other
*/eu/ inscriptions are all in the 6th century.[24] The dating of inscriptions is an
imprecise business in most cases (§1.1.2), but we could argue tentatively that
Niederstotzingen belongs to a relatively late phase in which the hypothetical
raising of */eo/ > */eu/ > */iu/ before labials and velars has been fully carried
through.

More problematic for this hypothesis is the Engers witness. This is not late
in date, the find-site is in Frankish dialect territory and there is no evidence
that it originated further south (though the possibility cannot be ruled out). We
have here a form **leub** in an area where the normal 8th-century form would be

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[24] Datings for Nordendorf I vary widely, but the current consensus is that it belongs to the
mid-6th century (see catalogue entry).

leob. The **eu** spelling in this instance is probably best accounted for as an archaism.

Mertingen appears to be anomalous in any model of UG consonant conditioning. Here we have an **eo** spelling with plausible umlaut-conditioning, but with a velar consonant, found well within UG territory (Mertingen is only 8 km from Nordendorf). The fibula is an imitation of the "Nordic" type, which (according to Martin 2004:179 n.45) was probably manufactured in mid- or southern Germany. We can, then, cautiously suggest that the Mertingen inscription may originate in an area in which UG consonant conditioning is not operative, and came south as an import.

The doublet of Weimar I **leob, liub(i)** is at odds with UG consonant conditioning (regardless of what model we use), unless we claim that the two examples belong to different dialects and are the work of different carvers. This is certainly possible: Nedoma's comment that Weimar I and Weimar II are the work of multiple carvers and therefore contain multiple texts has already been noted (see Weimar I entry in §3.1.1), although he does not claim that different dialects are involved. The most straightforward explanation for the forms of Weimar I is as umlaut alternants in a non-UG dialect. The Weimar inscriptions belong to two individuals in adjacent graves, and it is generally assumed that these individuals were related. Given Weimar's relative isolation from the main areas of rune-production (the upper Danube and the middle and upper Rhine), it may well be that the two women migrated from one of these areas.

The only */eu/ inscription in which UG consonant conditioning must be operative, then, is Niederstotzingen. Most, but not all, of the **eu** forms could be co-opted into a model in which **eu** represents either UG /iu/ or an intermediate */eu/ < */eo/. If we are to claim that the UG distribution of /iu/ and /eo/ is present in the "runic" period, then we have also to find some other way of accounting for Mertingen **eo** (if we are prepared to accept Düwel's speculative interpretation). Some hypotheses which would account for the data are:

1. The **eu** spellings represent an intermediate */eu/ < */eo/ (and UG consonant conditioning is a matter of raising triggered by labials and velars, rather than blocking of *a*-umlaut). Mertingen is an import, or an indicator that the raising process affects labials before it affects velars, or does not in fact contain a reflex of */eu/. Niederstotzingen is a later witness, with a fully-developed UG /iu/. Engers is an isolated archaism, or an import from the UG area.

2. The **eu** spellings are archaisms in free variation with **iu** → UG /iu/ : **eo** → Frk /eo/, and UG consonant conditioning on either the "umlaut-blocking" or the "raising" model is operative. Mertingen is an import, or is inadmissible (see 1.).

3. UG consonant conditioning is a later development (and must therefore be explained by the "raising" model rather than the "umlaut-blocking" model), attested only in the relatively late Niederstotzingen example. **eu** is an archaic spelling which can stand for any reflex of PGmc */eu/.

3.1.3 Conclusion: reflexes of */eu/ in the corpus

For each of the sound changes affecting reflexes of */eu/, we have only one clear-cut piece of evidence (Skonager **niuwila** for umlaut; Niederstotzingen **liub** for UG consonant conditioning). The Weimar doublet is best explained as an umlaut pairing, **leob** → /leob/ < */leob-a-/, **liub(i̯)** → /liubĭ/, and the Mertingen and Weimar IV witnesses can credibly be explained as products of the same process.

The most frequent form, however, is **eu**, which must be explained either as an innovative consonant-conditioned form (as in the first of the three hypotheses proposed in §3.1.2.2), or as an "archaic" or "traditional" spelling. All of our **eu** spellings are found in the root *leuƀ-*; if this root belongs to the realm of formulaic language (see, for example, Schwab 1998a), it may well be resistant to phonetically motivated re-spelling.

Given that most of our inscriptions come from areas in which UG dialects of OHG are spoken, we might expect to see more evidence for the UG distribution of /iu/ vs. /eo/. If the "umlaut-blocking" model of this distribution is correct, it must already be operative before the deletion of the conditioning */a/.

The runic data are consistent with a model in which the UG consonant conditioning is a matter of secondary raising rather than of umlaut-blocking, with **eu** perhaps representing an intermediate and Niederstotzingen **iu** a fully-developed form (hypothesis 1, above). If this model is correct, we would expect to see early forms in **eo** or early (6th c.) Latin witnesses in <eo> giving way to **eu** / <eu> forms in the UG dialect region. Förstemann's earliest

witnesses to the name-element *leub-* are two 5th-century(?) FNs, *Erelieva* and *Sedeleuba* (Förstemann 1900:454, 1018, 1315). The latter has <eu>, the former a peculiar <ie>. If the source is reliably datable to the 5th century, this spelling cannot be equivalent to OHG /ie/, which does not develop from /io/ < /eo/ until end of the 9th century (§2.3.1.1). Förstemann notes a set of names in *Lib-*, which are not distinguishable from *Leub-* names; and parallels *Lid-, Did-* are common Lat spellings for name-elements derived from PGmc **leuđiz* "people" and **þeuđō* "people, nation", respectively. The <ie> spelling in *Erelieva* may be related to this practice of using <i> to represent some reflex of */eu/ (/iu/?). Reichert (1987) cites <eu> forms in earlier Latin sources, e.g., *Leub* (a.158); *Leubasnius* (3rd c.); *Leubius* (1st c.); *Leubo* (150/250). If <eu> is the unmarked form in early Latin witnesses, this would seem to support the hypothesis that **eu** is the unmarked (archaic) form in the runic inscriptions, and should not be adduced as evidence for the "raising" model of UG consonant conditioning. On the other hand, this still leaves us with the question of why, if the UG distribution of /iu/ vs. /eo/ is in place in the period of the inscriptions, it is not reflected more satisfactorily in the data.

3.2 PGmc */ai/

As has been noted (§2.3.1.3), the evidence of the later dialects indicates that by the 8th century, reflexes of PGmc stressed */ai/ and */au/ are generally monophthongal in the north, with consonant-conditioned monophthongisation in the south. In the runic inscriptions we would expect to find **ai** (or **ae, aï**(?), possibly representing an intermediate stage of development) predominating; if monophthongisation has been carried through, we would expect **e** (or perhaps **i, ï, ei, eï**, if we allow our runographers some phonetic and orthographic leeway). In the following sections, I deal first with digraphs interpretable as reflexes of */ai/ (§3.2.1), then with monographs believed (at least by some authors) to represent the product of monophthongisation (§3.2.2).

In unstressed syllables, we would expect monographic spellings (**i, e, ï**?) for the product(s) of the NWGmc monophthongisation (§2.3.1.2); or possibly archaic digraphs (**ai, ae, aï**?).

3.2.1 Data: digraphs

2. Aquincum fibula

[I] **fuþarkgw**   [II] **?lain:kŋia**

The reading and interpretation of **?lain** are unclear: Opitz (1987:7) regards complex II as uninterpretable, while Krause (1966:24) suggests that it may be a string of "purely magical" runes, i.e., a sequence with no overt linguistic meaning. Nevertheless, several interpretations are available in the literature,

all of which treat **ai** as a reflex of PGmc */ai/ (on the interpretation of **kŋia**, see §4.1; §5.1):

1. **ain:kŋia** → *ain-kunningia* "only (i.e., intimate) friend" (PGmc **ainaz* > Go *ains*, ON *einn*, OE *ān*, OFris *ān ~ ēn*, OS *ēn*, OHG *ein* "one; single") (Krause 1966:24-25; Opitz 1987:182).

2. **?lain:kŋia** → *klain kingia* "[This is] a pretty fibula" (PGmc **klainiz* > OE *clǣne* "clean, pure"; OFris *klēne*, OS *klēni* "narrow, thin", OHG *klein(i)* "delicate, fine, small" (1985:179). Grønvik posits the additional sense "pretty" without further comment. It is not among the numerous meanings given for OHG *kleini* by Köbler (1993) or Schützeichel (2006), although Köbler does cite it as a meaning for MHG *kleine* (Müller and Zarncke (1854-1861), however, do not).

3. **ain:kŋia** is an error for **aig:kŋia** = *aig kinga* "owns the brooch" (the preceding **?l** is taken to be the ending of a pers.n.). Here *aig* is 3.sg.pres. to **aigan* pret.pres. (PGmc **aixa* > Go *áihan*, ON *á*, OE *āgan,* OFris *aga, hāga*, OS *ēgan*, OHG *eigan* "to have, own") (Looijenga 2003a:227).

None of these interpretations is free of difficulties, and – as noted above – we cannot be certain that the complex contains any linguistic sense at all. For this reason Aquincum must remain a doubtful case.

16. Charnay fibula

[I] **fuþarkgwhnijïpzstbẹṃ(?)**   [II] **:uþfṇþai:id**   [III] **dan:ḷiano**

[IV] **ïia**   [V] **ḳ r**

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Arntz (Arntz and Zeiss 1939:174-175) and Krause (1966:22-23) regard this inscription as linguistically EGmc, chiefly on the basis of the interpretation of **uþfṇþai** as a 3.sg.pres.opt. verb-form *u(n)þ-f(i)nþai* "may … discover" (PGmc *-fenþai*; see further §4.1; §5.1), with the terminal **-ai** understood to be diphthongal. However, it is far from certain that unstressed */ai/ remains a diphthong in EGmc. In Wulfila's Gothic orthography, the digraphs <ai au> are used to represent reflexes of PGmc */ai au/, but also of monophthongal */ē₁ ō/. In the view of Wright (1954 §90), where these digraphs represent an inherited diphthong, they are probably also diphthongal in Gothic. Durrell, on the other hand, states that "[i]t is commonly assumed… that the Gothic digraphs *ai* and *au* represent monophthongs even where they derive from Gmc. diphthongs" (1977:72; also Grønvik 1987:116). If this latter view is correct, then the spelling **-ai** would have to be either an archaism (see below), or a runic parallel to Wulfila's spelling, which is itself based on contemporary Greek orthography. If **-ai** here represents a monophthong, then it could plausibly be an archaism in a WGmc text (as in Antonsen's interpretation, below). We can find some additional support for EGmc identity in the form of the pers.n. **iddan** (§7.1.2.3), though the presence of an EGmc name does not necessarily imply that the dialect of the whole text is EGmc (§7.1).

All of the attested WGmc dialects regularly have <-e> (→ /-e/?) in inflectional suffixes derived from PGmc */-ai/ (§2.3.1.2). Accordingly, we have in the corpus several sequences readily interpretable as dat.sg. MNs with **-e** representing a monophthongal reflex of PGmc */-ai/: 8. Bad Krozingen A

agirike; 46. [†]Kleines Schulerloch **selbrade**; 54. Neudingen-Baar II **hamale** (see §3.2.2). There is nothing else in the corpus reliably interpretable as a 1./3.sg.pres.opt. verb-form (although this interpretation has been proposed for 20. Eichstetten **munį**; see entry in §3.2.2).

An alternative interpretation of complex II is that of Antonsen (1975:77), who reads **uþfaþai** → *u(n)þ faþē* "to (my) husband"; *faþē* is dat.sg. to a reflex of PGmc **fađiz* (> Go *faþs, fadis* "master"). No other Gmc cognates are attested (a regular OHG reflex of **fađiz* would have the form **fati*). In Antonsen's view the dialect is WGmc, with **-ai** an archaic spelling of a reflex of NWGmc **-ǣ/ < PGmc **-ai/.

If this proposed decoupling of orthography and pronunciation is allowable, it may seriously undermine our attempt to reconstruct a phonological system from the epigraphical data (see §8.3.1). It is without parallel in the Continental corpus; Antonsen cites 5 more examples of the spelling **-ai**, but all are Scandinavian.

It seems probable, therefore, that either (i) the majority view expressed in the literature is correct and the dialect of this text is EGmc (in which case it is of marginal relevance to the present study); (ii) it contains a WGmc ending /-ĕ/ with an archaic spelling **-ai**; or (iii) the interpretations proposed in the literature are all incorrect and a more satisfactory one has yet to be found. For the time being, I leave Charnay to one side as a questionable case for a CRun reflex of PGmc */ai/.

Also worth mentioning here are two marginal interpretations of **ḷiano** in complex III. While other commentators take it to be a pers.n. (albeit one of unknown etymology) (Antonsen 1975:77; Arntz and Zeiss 1939:191; Düwel 1981a:374; Krause 1966:22), Gutenbrunner (cited without full reference by Arntz and Zeiss 1939:191) sees here a metathetic form of 3.pl.pres.opt. *lai(h)nǒ* (OHG *lēhanōn* "to grant, lend", 3.pl.pres.opt. *lēhanōn* < PGmc *laixwnōn*). This interpretation of **ḷiano** assumes not only metathesis **ia → ai**, but also the orthographic omission of medial /-h-/ and of terminal /-n/. None of these is impossible in itself, but as a whole, the interpretation involves a great deal of conjecture.

Opitz (1987:115-116) interprets complex III **dan:ḷiano** as *Danila* (a "Germanised" form of the name of the prophet Daniel) – *laion* (= Go *laion* nom./acc. "lion"; note that no word for "lion" is attested in Gothic (Feist 1939; Lehmann 1986; Wulfila Project)).[25]

24. Freilaubersheim fibula

[I] **boso:wraetruna:**   [II] **þk·ḍaᚦïna:goḷïda**

Complex I is uncontroversially interpreted as *Bōso wrait rūnǎ* "Bōso wrote/carved runes". There are difficulties with the etymology of *Bōso* (§3.3.2; §4.1) and the assignment of number to **runa** (acc.sg. *rūna* < PGmc

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[25] Although the word "lion" appears several times in the New Testament (2 Tim 4:17; 1Ptr 5:8; Apc 4:7, 5:5, 10:3, 13:2), none of these passages is present in any of the surviving Gothic Bible mss. (see Wulfila Project website).

rūnōn, or acc.pl. *rūnā* < **rūnōz*; see further §4.1). What concerns us here, however, is *wrait*, 3.sg.pret. (< PGmc **wrait*, to **wrītanan*), which contains an unambiguous reflex of PGmc */ai/. If the spelling **ae** represents a "pre-monophthongal" [ae] with a lowered off-glide, it might be evidence of regional variation (compare 54. Neudingen-Baar II and 62. Pforzen II **urait**). A following alveolar consonant is not a context that triggers monophthongisation in OHG.

42. †Kärlich fibula

wodaṇị : hailag

hailag can plausibly be interpreted as the adjective *hailag* (PGmc **xailaȝaz* > ON *heilagr*, OE *hālig*, OFris *hēlich*, OS *hēlag*, OHG *heilag* "holy, invulnerable"), nom.sg.(neut.?), with the fibula as an implied referent: "(This fibula is) holy to Wōdan" (Arntz and Zeiss 1939:273; see also Opitz 1987:53). This would be a straightforward witness, were it not for the high likelihood that the inscription is a forgery (see catalogue, Appendix 2).

44. Kirchheim/Teck I fibula

bạda(?)ḥ?aḷị

Looijenga (2003a:245) reads the latter part of the inscription as **gihiali**, which she takes to be a metathetic form of *gihaili*, either 2.sg.imp. to a verb cognate with OHG *giheilen* "to heal, save", 2.sg.imp. *giheili* (< PGmc **xailjanan*); or a noun meaning "salvation" in the Christian sense (OHG *heilĭ*

f. (Köbler 1993; Schützeichel 2006) < PGmc *xailīn). Neither of these interpretations is objectionable in itself, but Looijenga's reading is questionable (see catalogue entry).

54. Neudingen-Baar II wooden stave

lbi·imuba:hamale:bliþguþ:uraitruna

The final part of this inscription is interpreted by all commentators as *Blīþgu(n)þ wrait rūnă* " Blīþgunþ wrote/carved runes (or a rune/counsel/mystery)", a parallel to 24. Freilaubersheim *Bōso wrait rūnă* (see above).

61. Pforzen I buckle

[I] **aigil·andi·aï/₁lrun?**   [II] **ḷṭahu·gasokun?**

This text contains two pers.ns. which may have initial reflexes of */ai/: *Aigil* (masc.) and (if the reading **aï** is correct) *Ailrūn* (fem.). The most likely etymon for *Aigil* is PGmc *aixa* "own" (see Looijenga's interpretation of 2. Aquincum **ain**, above); the name is to be distinguished from OHG *Egil* < *Agil* and ON *Egill* (which are probably derived from PGmc *aʒez* "fear" or *aʒjō* "edge" – see §5.1) (Marold 2004:219-220; Nedoma 2004a:165; Wagner 1999b:117).

The first element of *Ailrūn* has been analysed in two ways: (i) as a reflex of PGmc *ailan* n. (> OE *āl* "fire"; no other known reflexes, but PGmc *ail-iđaz* > OE *æled*, OS *ēld*, ON *eldr* "fire" may be related) (Nedoma 1999b:100-101;

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2004a:168-169; 2004b:345-346; Wagner 1995:106; 1999a:93-94); (ii) as a

derivative of *Agil-* via a process of palatal assimilation, **agil- > *aɣil- > *ail-*

(Düwel 1994b:290; 1997c:283-284; 1999b:45). Düwel analyses *Aigil* in a

similar way, with /-g-/ restored by a secondary epenthesis. Nedoma raises

well-founded phonological objections to Düwel's explanation, and to the

notion that *Aigil* and *Ailrūn* are etymologically identical with ON *Egill* and

Qlrún (*Ql-* < PNorse *alu-*; see §4.1), though they may be variant forms of

names for the same mythological characters (2004a:163, 168; 2004b:355).

What, if anything, the spelling **aï** (vs. **ai**) signifies is not clear. It is

generally ignored in the literature. For interpretations based on the alternative

reading **al-**, see §4.1; §6.1. For further discussion of the "yew-rune", see

§5.2.4.

62. Pforzen II ivory ring

[I] **?lu̧?u̧lgisali[**   [II] **]?ȩ:aodliþ:urait:runa**

In complex II it seems clear that we have another parallel to the *NN wrait*

rūnǎ sections of 24. Freilaubersheim and 54. Neudingen-Baar II. The spelling

of the verb as **urait** is identical to that of Neudingen-Baar II (qv).

70. Schwangau fibula

aeþi

This sequence may represent a MN *Aebi* < PGmc **aiƀijaz*, a *ja*-stem

derivative of **aiƀō* f. (> Langob *aib* "district") (Looijenga 2003a:257).

Nedoma expresses doubt about this etymology (2004a:147), and mentions (but does not discuss in detail) alternative proto-forms *aiwa- (see Kabell's interpretation of 56. Nordendorf I a̯ẉa̯ in §3.2.2), or *eb- (a secondary development from *aiw-/*aib-) for the similar Langob. *Aibone* abl. (a.650; compare MHG *Eibo*) (Francovich Onesti 1999:174, 190).

78. †Trier serpentine object

[I]**wilsa**   [II] **wairwai**

The only available interpretation is that of Schneider (1980), who divides complex II into two words, *wair wai*. The second of these he considers to be the interjection "woe!" (PGmc *wai* > Go *wai*, ON *vei*, OE *wā*, OS OHG *wē*). For *wair* he posits a PGmc etymon *waiza- > ON *veis*, OE *wīse* f. "stalk", which he interprets as a metaphor for the penis (the whole text being in Schneider's view an erotic charm).

Leaving aside this dubious semantic extension, there is, from a phonological point of view, no reason why **wair** cannot be an *a*-stem noun *wair* < PGmc *waiza- < PIE *u̯oiso-. The problem is a lack of positive evidence: the only attested Gmc word which might have this etymology is OE *wār* n. "seaweed" (BT) (> modE (dial.) *ware*; also NFris Du *wier* "seaweed, pond-weed" (OED)). We cannot rule out the possibility that the present **wair** is a Continental cognate of this (*wair* > OHG OS *wēr*), though it is hard to see what it might signify (certainly not "male member", as Schneider would have us believe).

Although the authenticity of the object remains an open question (catalogue, Appendix 2), Schneider's sexual interpretation is, to say the least, tenuous and unreliable. His etymology is questionable (there is insufficient space here to discuss it in detail), and the semantic shift "stalk" → "penis" is unjustified. Schneider also invokes dubious Begriffsrune and numerological interpretations.

83. Weingarten I fibula

[I] **a^{li}/_erguþ:?(?)**   [II] **feha: writ?...ⁱ/_ıa**

Looijenga (2003a:262) reads complex I as **aerguþ** → *Aergu(n)þ,* a dithematic FN with a prototheme derived from PGmc **aizō* (> OE *ār*, OFris *ēre*, OS *ēr, ēra*, OHG *ēra* "honour"). The reading is disputed, the majority opinion favouring **alirguþ** → *Alirgu(n)þ* (see §5.1). From my own inspection of the original and of photographs from Waldispühl's 2008 autopsy, I am unable to decide between the two alternatives (ᛗ vs. ᚾ). I shall therefore cautiously allow this inscription to stand as a possible, though uncertain, instance of PGmc */ai/.

*3.2.1.1 Summary: digraphs representing PGmc */ai/*

The only unproblematic examples of a digraph representing a reflex of PGmc */ai/ are the three *wrait rūnǎ* inscriptions (Freilaubersheim **wraet**; Neudingen-Baar II **urait**; Pforzen II **urait**) and one of the pers.ns. on Pforzen I (**aigil**). In all of these, the digraph occurs in a context where we would expect a diphthong in OHG. Freilaubersheim obviously stands out from the other

examples geographically, being much further north (in the Rheinland-Pfalz, and to the west of the Rhein). On this extremely scanty evidence we might tentatively postulate a variation between local orthographic traditions and/or dialects. The evidence of OHG suggests that <ae> may reflect an intermediate stage in the monophthongisation process (§2.3.1.3.3). If this applies to the runic inscriptions, then we would expect **ae** spellings to occur in contexts where later dialects develop monophthongs – i.e., before an "open continuant" in the more southerly dialects and unconditionally in the north.

We have two further possible **ae**-spellings: Schwangau **aeþi** (if Looijenga's etymology is correct) and Weingarten I **aȩrguþ** (if we prefer this reading to **al̦irguþ**). Both are located deep in UG dialect territory, and in fact are among the most southerly finds in the corpus. However, since neither of these sequences can be considered a reliable case, they do not give us satisfactory grounds to discard the hypothesis of a regional division between **ai** and **ae**-spellings.

These two witnesses give us little help in deciding what **ae** represents. **aȩrguþ** does have the digraph in a context where OHG develops a monophthong, so this form could represent an intermediate diphthong [ae] or a monophthong [ɛ]. We cannot explain **aeþi** in this way, however: if the reading and the etymology are correct, then the form is anomalous and points to free variation between **ae** and **ai**, rather than to the monophthongisation process.

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Pforzen I **aïlrun** (if this reading is correct) gives us a third spelling, although its significance is unclear: it is unique in the Continental corpus, although there is a parallel on the Caistor-by-Norwich bone **raïhan** → (pre-OE?) *raihan* gen.sg. to **raiha* (OE *rāha*) "roe-deer" (< PGmc **raixan*) (Page 1999:179-180; Parsons 1999:48). The phonetic value of the "yew-rune" is, moreover, a subject of debate (§5.2.4).

Given that /l/ does not trigger monophthongisation in OHG, it seems unlikely that the **aï** vs. **ai** spellings represent a phonetic distinction (or at least, not one belonging to the process which produces OHG [ae] > [ɛ]). We might postulate that /l/, like /r/, triggers some subphonemic change in the off-glide of the diphthong. If this were the case, we would have to devise some explanation of why /l/ does not participate in the further development of /ai/ (i.e., why /ail-/ does not produce *[ael-] > *[ɛl-]).

The only other example of a phonemic sequence /ail/ in the corpus is †Kärlich **hailag**, with the "regular" **ai** spelling. Given the doubts about its authenticity, however, this witness must be treated with caution.

3.2.2 Data: monographs

8. Bad Krozingen A fibula

    [I] **boba:leub**   [II] **agirike**

In all the available interpretations, complex II is a dat. MN *Agirike* (see §5.1; §6.1), with the dat.sg. suffix (consonant-stem or a-stem) /-ĕ/ < PGmc **-ai/. This is a regular product of the NWGmc monophthongisation (§2.3.1.2).

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13. Bopfingen fibula

mauo

Three main interpretations have been suggested for this sequence:

1. a MN *Mau(w)o* < PGmc **maʒuz* (> Go *magus*, OE *magu*, ON *mǫgr* "boy, youth"; OHG *magu-zogo* "educator, mentor") (Förstemann 1900:1067-1070; Haubrichs 2004:89; Kaufmann 1968:243; Opitz 1979:367). Nedoma objects that the vocalisation of **/ɣ/* here is unmotivated: **maʒuz* would regularly give us (pre-)OHG **magu*.

2. dat.sg. *mawō* "to/for the girl", to nom. **mawi* < PGmc **maʒwjō* (> Go *mawi*, ON *mǽr* "girl"), itself a derivative of **maʒuz* (Looijenga 2003a:231). Nedoma again objects to this on phonological grounds. This time his objection is to the termination /-ō/, which would in his view be abnormal for (pre-)OHG (Nedoma 2004a:387-388). OHG *jō*-stems have dat.sg. /-iu/ > /-u/, transferred from the inst. (BR §209). Looijenga here appears to be referring to the dat.sg. suffix /-o/ of "pure" *ō*-stems, which is a later secondary development (BR §207).

3. Possibly a name or by-name based on an onomatopoeic word like MHG *mou(w)en, māwen* "to miaow" (< PGmc **maiwjanan*); the modG reflex *mauen* also has transferred meanings "to whine, grumble, gripe" (Nedoma 2004a:388-389). The "seagull"-word, PGmc **maiwaz* (> ON *már ~ mór*, OE *mǣw ~ māw* (< **maiwiz*), Fris *meau ~ mieu*, MLG *mēve*), is derived from this verb (Orel

2003), and is attested as a name-element in Scandinavia and
England, though apparently not on the Continent (Müller 1970:83-
84).

If the third etymology (the only one involving PGmc */ai/) is valid, we have
here a reflex of */ai/ represented as **a** → /ā/. The following consonant /w/ is a
suitable conditioning environment for OHG monophthongisation (§2.3.1.3.1);
but in both OHG and OS, the monophthongal reflex of */ai/ is /ē/, not /ā/ (as
MLG *mēve* shows. Compare also, e.g., OHG OS *ēwa* f."law" < PGmc *aiwō*
← *aiwaz/*aiwiz* m.). On the other hand, if *maiwjanan* ought to give us
OHG OS *mēwen*, then MHG *māwen* – which is not attested until the 14th
century (Kluge 2002; Müller and Zarncke 1854-1861) – requires some further
explanation.

In OE, the monophthongisation of */ai/ > /ā/ predates our earliest
manuscript material (Campbell 1959 §132, §134; Prokosch 1939:106), which
implies that it also predates the OHG and OS monophthongisations.[26] OFris
varies between /ā/ and /ē/ (§2.3.1.3), but before /w/, the usual form is /ā/. This
means that the PGmc root *maiw-* should regularly develop into OE *māw-*,
OFris *mǣw- > *māw-(~ *mēw-?). We might speculate that MHG *māwen* is
borrowed from a "coastal" dialect (as opposed to an "inland" one), in which

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[26] Caistor-by-Norwich **raïhan** does appear to show a preserved PGmc */ai/ in the 5th
century (§3.2.1.1).

the reflex of */aiw/ is /āw/.[27] If the meaning "seagull" and/or "to mew [like a seagull, as opposed to a cat]" is primary, the maritime semantic field might provide us with an explanation for such a borrowing into inland dialects.[28]

   In the absence of more substantial material evidence, I do not propose to speculate that the named individual (if the text is a pers.n.) was a Frisian immigrant or a Frisian craftsman – though neither of these explanations is impossible. Nonetheless, from a phonological perspective, MHG *māwen* cannot be a regular reflex of *maiwjanan, if the conventional analyses of OHG and OS phonology are accurate. An alternative (and more radical) hypothesis would be that there might be some CRun dialect in which */ai/ > */ā/ (at least before /w/). There is no supporting evidence for this within the runic corpus, and it sits uneasily with the evidence of OHG and OS. We do, however, have roughly contemporary inscriptions from the Frisian area which appear to contain /ā/ < */ai/ (Amay(?) comb (AZ 43; L IX.1) **eda**; Harlingen solidus (AZ 21; L IX.6) **hada**) and indicate that this monophthongisation had taken place in the period of the Continental inscriptions.

   Nedoma (2004a:88) does not comment on the monophthongisation in */aiw/ > */āw/, which he appears to assume has taken place in this text, but which is alien to the dialects of the region as we know them.

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[27] It is not my intention here to support or defend the hypothesis of an "Anglo-Frisian" dialect group (see §1.1.1). I mention OE and OFris here simply because both happen to have /āw/ < PGmc */aiw/, whereas OHG and OS regularly have /ēw/.

[28] I note, however, that the only recorded use of MHG *māwen* refers to a cat (or rather, a lion(!)), not a seagull (Müller and Zarncke 1854-1861).

20. Eichstetten sheath fitting

?a?i [chi-rho/**nþ**/**nw**] **munịwiwo?(??)**

Looijenga (2003a:238) and Fischer (2007:133) regard **munị** as 3.sg.pres.opt *muni* "may X remember" (on the stem, see §4.1). If this analysis is correct, then **ị** must represent a reflex of PGmc 3.sg.pres.opt. */-ai/ (> NWGmc */-ē/ > OHG OS OE /-e/; ON /-i/).[29]

42. †Kärlich fibula

wodanị : hailag

The first part of the inscription is supposed to be a dat. form of the theonym *Wōdan* (< PGmc *wōđanaz* (see 3. †Arguel entry in §4.1)), with **-i** representing a monophthongal reflex of the dat.sg. suffix < */-ai/ (§2.3.1.2) (Arntz and Zeiss 1939:273). This is regularly /-e/ in OHG and OS. For further discussion, see §3.2.2.1.

46. †Kleines Schulerloch cave wall inscription

birg : leub : selbrade

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[29] In the Scandinavian runic corpus, the only evidence for this verbal ending in PNorse comes from three forms on the Strøm whetstone (KJ 50): **wate; skaþi; ligi**. The identification of these as 3.sg.opt. forms is uncertain, and the variation between **-i** and **-e** is difficult to account for (Syrett 1994:241). See further §3.2.2.1.1.

selbrade is interpretable as a dat. MN in /-ĕ/ < PGmc */-ai/ (see <u>8. Bad Krozingen A</u>, above). On the etymology of the name, see §5.1.

47. Lauchheim I fibula

aoṇofada

In the most popular interpretation, this inscription represents a dithematic FN with the deuterotheme *-fada* < PGmc **faþō* (> OE *faðu* "aunt") (Bammesberger 1999c:203; Düwel 1997b:19; Haubrichs 2004:78). The prototheme *Aono-* will be discussed in §3.3.1.

Nedoma (2004a:194) disputes this interpretation on the grounds that it involves *Spirantenschwächung* (§2.4.2) and the analogical transfer of acc.sg. /-a/ to the nom.sg. (replacing regular /-u/ < */ō/) in the *ō*-stems (§7.2); both of these changes, in his view, occur during the OHG period. He interprets **aoṇo** as a weakly inflected MN (§3.3.1), and mentions (but does not commit to) Schwab's suggestion (1998a:420) that **fada** is an abbreviation for *fa(ihi)da* 3.sg.pret. "made, painted, decorated" (PGmc **faixjanan* > ON *fá* "to draw, paint"; OHG *fēhen* "to decorate"). The proposal here is that the surface text is an orthographic abbreviation, not that **a** represents a monophthongal /ā/ < */ai/.

53. Neudingen-Baar I fibula

[I] **(?)udịṃ** [II] **midu**   [III] **ḳlefị??**

In complex III, **ḳlef** is interpreted as a 3.sg.pret. verb-form *klaif*, derived from PGmc **klīƀanan* (> ON *klífa* "to climb"; OE *clīfan* "to cleave, to

adhere"; OFris *klīva* "to hang"; OS *bi-klīƀan* "to take root"; OHG *klīban* "to

adhere, stick to, be fixed to") (Düwel 1990:8; Fingerlin and Düwel 2002:110;

Looijenga 2003a:247; Nedoma 2004a:244). If this is correct, then **e** here

represents a monophthongal reflex of stressed */ai/.

54. Neudingen-Baar II wooden stave

 lbi·imuba:hamale:bliþguþ:uraitruna

 hamale is generally interpreted as a dat. MN in /-ĕ/ < PGmc */-ai/, although

the etymology is uncertain (§6.1). As noted in respect of 8. Bad Krozingen A,

this reflects the NWGmc monophthongisation of unstressed */ai/ (§2.3.1.2).

56. Nordendorf I fibula

 [A] [I] **logaþore**   [II] **wodan**   [III] **wig^{i}/$_{u}$þonar**   [B]

aẉạḷeubwini?

 Four candidates are to be found in this inscription. The first is the

problematic termination of **logaþore**, interpreted by Düwel (1982:81-84;

1991:278; 1992a:356-359; 2002d:276) as an archaic nom.pl. suffix to an *a-*

stem noun "deceivers". This suffix is attested in early OHG alongside regular

/-a/ < PGmc */-ōz/, though the form has not been satisfactorily explained (BR

§193 Anm. 4; Düwel 1992a:357-358; Grønvik 1987:116). Grønvik (*loc.cit.*)

proposes instead that the final /-e/ is a nom.pl.masc. adjectival ending < PGmc

*/-ai/ (Lehmann 2005-2007 §2.7.4, §3.5.1; Ringe 2006:281). Like the dat.sg.

MNs appearing in 8. Bad Krozingen A; 46. †Kleines Schulerloch; and 54.

<u>Neudingen-Baar II</u>, this is a product of the NWGmc monophthongisation of unstressed */ai/ (§2.3.1.2). Wagner (1995:111-112) interprets **logaþore** as another dat.sg. MN (to a nom. *Logaþor*). For further discussion of **logaþor-**, see §4.1.

In inscription B, **l̦eubwini?** is interpretable in several ways. If **wini** is a reflex of PGmc *weniz* (commonly interpreted as the second element of a dithematic MN or other compound), it could be nom. (< PGmc *weniz*), acc. (< *wenin*) or dat. (< *wenai*) (see also §5.1). In most interpretations it is assumed to be nominative. A case for a dat. form is made by Henning (1889, cited without full reference by Arntz and Zeiss 1939:288), who reads the sign after **wini** as **ï** and interprets **-ï** as an archaic */-iji/. Not only is there no supporting evidence for any such archaic spelling, it is doubtful whether this form existed even in PGmc: Lehmann (2005-2007 §3.3.5) reconstructs */-ai/ for the dat.sg. of *i*-stems; Ringe (2006:272-273) favours */-ī/, but notes that this may be historically inst., replacing a dat. */-ai/ < PIE */-jej/ (2006:41-50). There is no need to appeal to Henning's peculiar form in defence of a dat. interpretation, however. Although a dat.sg. /-e/ is regular for short-syllable *i*-stems in OHG, forms in /-i/ (or forms spelled <-i>, at any rate) are not infrequent in OS (Gallée 1910 §314; Holthausen 1921 §289), and in OHG the *Abrogans* consistently has <-i> (apparently an analogous adaptation of the nom./acc.sg. forms) (BR §217 Anm. 4).

I earlier (§3.1.1) referred to the interpretation of inscription B as *Awa leub Wini*, a structural parallel to Bad Krozingen *Bōba leub Agirike* and Kleines

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Schulerloch *Birg leub Selbrāde*. The parallels provide some (admittedly weak)

support for this interpretation, which, if correct, may contain a reflex of */-ai/

(unless we accept the hypothesis that this has been replaced by inst. */-ī/).

However, it must be remembered that the *opinio communis* favours the

interpretation of **leubwini** as a nom. dithematic MN *Leubwini* (see Nedoma

2004a:362).

   The third and fourth candidates for monophthongal reflexes of */ai/ are the

two **a**-runes in **ạw̯ạ** as interpreted by Kabell (1970:14-15). Kabell claims that

a here represents an open [æ], and that the sequence **ạw̯ạ** is to be transcribed

œwœ < PGmc **aiwai* "always" (an adverbial dative to **aiwaz/*aiwiz* m. > Go

aiws "age, eternity"; OE *ǣw ~ ā*, OFris *a-*, OS *ēo*, OHG (f.) *ēwa* "law").

Nedoma (2004a:227) rejects Kabell's interpretation emphatically, but does not

elaborate on his reasons. My own objection is that Kabell's argument relies on

parallels from Scandinavian inscriptions, in which **a** is believed to represent

PNorse /æ/ < */ai/ in unstressed position – a hypothesis which is itself not at all

certain (Syrett 1994:257-261). There is no evidence to support the inference

that a similar sound change has occurred in the Continental dialects.

64. †**Rubring stone piece**

   [I] **ʔïndọ?**   [II] **(?)ɹ̣iŋ[(…)**   [III] **w(?)**

   The only available interpretation of this inscription is that of Steinhauser

(1968a) (accepted by, *inter alios*, Klingenberg (1976c:373; 1976d:186) and

Opitz (1987:36-37, 179)), which can at best be described as fanciful. According to the more reliable work on the inscription (Haas 1958; Nedoma 2003), even if it is genuine it is in such poor condition that an interpretation seems impossible.

At the end of complex I, Steinhauser reads **doï** → *dōē* 3.sg.opt. (to PGmc *ðōnan* "do"; see §4.1) "may (it) do, make". He regards this as a parallel to Latin inscriptions containing *faciat*. Steinhauser goes on to assign the value /ē/ to the "yew-rune" (see §5.1); in this case, it is supposed to represent a reflex of unstressed PGmc */-ai/. It should be noted, however, that the transliteration of the inscription is extremely doubtful (see Nedoma 2003:485); and that Steinhauser's addition of **ï** is pure invention, not based on any reading of the surviving parts of the inscription.

83. Weingarten I fibula

[I] **a**^{li}/_e**rguþ:?(?)**   [II] **feha: writ?...**ⁱ/₁**a**

The sequence **feha** in complex II is analysed by a number of authors as a word containing /ɛ̄/ < PGmc */ai/: Arntz and Jänichen (1957:128; also Beck 2001:311-314; Krause 1966:306; Meli 1988:159; Opitz 1987:200) suggest a weakly inflected FN with a stem derived either from PGmc *faixaz* I[30] (> Go *filu-faihs* "multicoloured, manifold"; ON *blá-fár* "in blue speckles"; OE *fāh* ~ *fāg*, OS OHG *fēh* "coloured, decorated"), or from PGmc *faixaz* II (> OE *fāh*, OFris *fāch* "guilty, criminal, inimical"; OHG *gi-fēh* "hostile"). Schwab

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[30] The designations *faixaz* I, *faixaz* II are taken from Orel (2003).

favours the former, interpreting **feha** not as a pers.n. but as an acc.sg.fem.

substantivised adjective (< PGmc *faixōn*) "colourful thing, i.e., rune"

(complex II as a whole is therefore interpreted as *fēha wrīt[u] al[u]* "I carve

the colourful *alu*") (Schwab 1998a:418-419; 1999a:13-14). Beck (2001:316)

accepts Schwab's expansion of **writ?...ⁱ/_ta**, but interprets **feha** as a pers.n. and

translates "I, Feha, carve protection" (see further §4.1).

Nedoma (2004a:293-294) rejects all of these interpretations, but his only

stated objection to them is that the monophthongisation of */ai/ has not taken

place in the "runic" period. Since this is precisely the question we are trying to

evaluate here, this argument cannot be admitted to the present discussion.

Alternative interpretations with a vowel not derived from PGmc */ai/ are

the following:

1. *feha* "joy; jewellery(?)", acc.sg.neut. *n*-stem (< PGmc *fexōn*),

   related to OHG *gi-fehan* "to rejoice" (< *fexanan*), *gi-feho* m. (*n*-

   stem) "joy", and/or *fehen* "to make colourful, decorate" (Haubrichs

   1987:1356 Anm. 17). Düwel (1989a:44-45) has syntactic and

   semantic reservations about this hypothesis, but he does not reject it

   outright. Nedoma (2004a:296) is more sceptical, pointing out that

   the neuter *n*-stems are a small class mostly restricted to parts of the

   body (the only attested examples in OHG being *herza* "heart", *ouga*

   "eye", *ōra* "ear", *wanga* "cheek" (BR §214)).

2. *feha,* acc.sg. *ō*-stem (or acc.pl. *fehā*), perhaps related to WFrk. *fecho*

   "robbery" (Nedoma 2004a:296). This word appears in the Malberg

   glosses; its etymology is uncertain, though it may be related to Go

bi-faih(o) "exaction" (see §2.3.1.3.2). This interpretation would give us an apparently nonsensical text *feha wrīt(u)* "I carve robbery(/-ies)" or *Alirgu(n)þ/Aergu(n)þ feha wrīt(iþ)* "Alirgunþ/Aergunþ carves robbery(/-ies)". On the interpretation of **writ…**, see §4.1.

3. Some part of a weak verb *fehōn* "to consume, eat/drink" (< PGmc **fexōjanan*) (Nedoma 2004a:297). Nedoma does not elaborate, or offer any suggestions as to what part of the verb *feha* might be (the OHG weak verbs have no forms in /-a/).

4. Looijenga (2003a:263) suggests a connection with another weak verb (PGmc **faʒanōjanan/*faʒenōjanan* > Go *faginon* "to feel happy, rejoice"; ON *fagna*, OE *fægenian*, OS *faganōn*, OHG *feginōn* "to rejoice"). She appears to be deriving *feh-* from an underlying **fah-* via "primary" *i*-umlaut (§2.3.4.2; §6.1). Looijenga does not comment on the alternation **fah-* ~ **fag-*.

None of the interpretations with a monophthongal /e/ is satisfactory, although in each case the problems arise from the assignment of inflectional categories (or the failure to assign any). Another possibility, briefly mentioned by Nedoma (2004a:295) is that **feha** might be a weakly inflected nom. FN as suggested by Arntz, Krause and various others (see above), but one based on a root with PGmc */e/ or */ē₂/ rather than */ai/. If a name is present, its place in the text could be as the subject of *wrīt-*; for that matter, the verb could easily be 3.pl.pres. **wrīt(and)*, with *Alirgu(n)þ/Aergu(n)þ* and *Feha* as its subjects

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(compare the interpretation of 67. Schretzheim I **alaguþ:leuba:dẹḍun** as a clause with a similar structure and possibly a similar meaning "Alagunþ (and) Leuba made (the inscription??)" (§3.1.1).

From the foregoing discussion, it does not seem appropriate to dismiss the possibility that the sequence **feha** contains a monophthongised reflex of PGmc */ai/. For the time being, it will be admitted as a questionable but possible case.

85. †Weser I bone

Synthetic reading: [I] **latam(ŋ)hari**   [II] **kunni(ŋ)?e**   [III] **hagal**

The favoured interpretation of **latam** is as 1.pl.pres.opt. (perhaps in jussive function) to a reflex of PGmc *lētanan* (> Go *letan*, ON *láta*, OE *lǣtan*, OFris *lēta*, OS *lātan*, OHG *lāzan* "to let") (Holthausen 1931:304; Pieper 1987:234-235; 1991:355, with references to earlier literature). Nedoma (2004a:326) disputes this on the grounds that the ending is anomalous: the PGmc 1.pl.opt. suffix is */-aim(a)/ (Lehmann 2005-2007 §3.8; Ringe 2006:237) > pre-OS */-ēm/ > OS /-en/ ~ /-an/; OHG /-ēm/ > /-ēn/ (BR §304; Gallée 1910 §§375-376; Holthausen 1921 §408)). Instead, Nedoma analyses the verb as 1.pl.pres.ind. "we let" (/-am/ < PGmc. */-am(az)/), although he adds that the precise meaning of the verb here is unknown: possible senses include "leave", "allow", "decree", "abandon", "cede".

hari is connected throughout the literature with the "army"-word, PGmc *xariz/*xarjaz* (see 79. Weimar I in §5.1). While it is generally assigned nom. or acc. case, it is conceivable that the termination **-i** is dat., possibly representing a reflex of unstressed */-ai/ (§2.3.1.2; and compare 56. Nordendorf I **-wini**, above). For further discussion, see §5.1.

Pieper (1987; 1989; 1991) reads the sequence **?e** as **we**, and interprets it as part of a pers.n. (or theonym?) *Ingwe*. The sign marked **?** resembles a Roman Y; its transliteration as **w** is questionable (see §4.1). Another interpretation of **?e** → **we** is proposed by Seebold (1991:502): in his view it represents a reflex of the enclitic particle "and" (< PGmc *xwe*). This will be discussed further in §4.1.

In some of the literature on the Weser bones this sequence is treated as a word *wē*, either the interjection *wē* "woe!" < PGmc *wai* (see 78. †Trier in §3.2.1, above) (Schneider 1969), or the derived noun (PGmc *waiwō(n)* > ON *vá*, OE *wēa*, OS *wē*, OHG *wēwa* "woe, misery") (Holthausen 1931:304; Pieper 1987:235-236). In the same vein, Antonsen (1993:14; 2002:327) interprets **we hagal** as a compound *wē-hagal* "woe-hail" → "battle".

The date ascribed to the bones (5th c., or possibly even earlier) would make them a very early witness to the OHG/OS monophthongisation of */ai/. While it would be inappropriate to rule out the possibility *a priori*, the interpretation **?e** → **we** → *wē* < *wai* depends on a doubtful reading of a unique sign. This sequence cannot be considered reliable evidence.

87. †Weser III bone

ulu:hari dede

This inscription, like 85. †Weser I, contains a sequence **hari** which may be interpretable as a dat.sg. *i*-stem with **-i** representing a reflex of PGmc unstressed */-ai/.

88. Wijnaldum B pendant

hiwi

If Düwel's suggestion that **hiwi** represents a dat. *i*-stem FN *Hīwi* is correct (§3.1.1; §5.1), then the terminal **-i** represents an inflectional suffix < PGmc */-ai/ (Lehmann 2005-2007 §3.3.5) or */-ī/ (Ringe 2006:272). This suffix is discussed in the commentary on 56. Nordendorf I **leubwini?**, above.

*3.2.2.1 Summary: monographs representing PGmc */ai/*

3.2.2.1.1 Unstressed syllables: the NWGmc monophthongisation

In most of the examples above where a reflex of */ai/ may be written by a single rune, we are dealing with a final **-e** or **-i** representing an unstressed vowel: 8. Bad Krozingen A **agirike**; 20. Eichstetten **munį**; 42. †Kärlich **wodanį**; 46. †Kleines Schulerloch **selbrade**; 54. Neudingen-Baar II **hamale**; 56. Nordendorf I **logaþore, wini**; 88. Wijnaldum B **hiwi**; possibly 85. †Weser I, 87. †Weser III **hari**. None of the instances of **-i** is entirely reliable: in Eichstetten **munį** and †Kärlich **wodanį**, the reading **-i** is questionable (though in the former case, I personally favour it over the alternative **-t**). There are also

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strong grounds for suspecting that the Kärlich inscription is a modern forgery (see catalogue, Appendix 2). While Nordendorf **wini**, Wijnaldum **hiwi** and †Weser I, III **hari** do not suffer from these problems, all are interpretable as *i*-stem nouns or pers.ns., for which **-i** could represent nom. /-i/ < PGmc */-iz/ or acc. /-i/ < */-in/, rather than dat. /-ĭ/ < */-ai/ (or */-ī/); **hari** may alternatively be a *ja*-stem (§5.2.1.2). The reconstruction of the PGmc dat.sg. *i*-stem suffix is in any case problematic, and if the proto-form */-ī/ (analogically derived from inst.sg.?) can be regarded as normal, and/or as having replaced regular */-ai/ in lPGmc, then the suffixes attested in the Gmc dialects are derived from this and do not belong to the present discussion (see §5.2.2.4).

Another hypothetical possibility is that both **-i** and **-e** represent regular reflexes of unstressed */ai/, but are allomorphs selected by some other conditioning factor. All of the examples are word-final, and we have both **-e** and **-i** in text-final position, where there is no following material to trigger an anticipatory change (**hiwi** and perhaps **wini** vs. **agirike, selbrade**). There does appear to be a correlation between the height of the final vowel and that of the preceding vowel, though it is not a perfect match: in three of the four **-e** examples (**selbrade, hamale, logaþore**), **-e** follows a non-high vowel; while in three of the four **-i** examples (**munį, wini, hiwi**), **-i** follows a high vowel. The exceptions are **wodanį** (non-high + **-i**) and **agirike** (high + **-e**). Given the doubts about the authenticity of the Kärlich inscription and about the reliability of the reading **-į**, we can perhaps discard it; but this still leaves us with **agirike**. If the variation results from assimilation to the preceding vowel, then this exception requires some other explanation. In OHG, final unstressed /-i/ is

commonly lowered to /-e/, but this tendency is not well established until the 9th century; earlier sources preserve the distinction (BR §58 Anm. 2). In any case, if a process of this sort were at work in the dialects of the inscriptions, it might help us to explain **agirike**, but it would leave us with the question of why we have **-i** elsewhere.

A similar variation may be present in the Scandinavian inscriptions, from the very limited evidence available. Krause (1971) identifies the following sequences as monophthongal reflexes of final unstressed PGmc */-ai/: Strøm whetstone (An 45; KJ 50; SUR 94) **wate, skaþi, ligi** (see note to entry on Eichstetten, above); Tjurkö I bracteate (An 109; IK 184; KJ 134; SUR 136) **-kurne**; Tune stone (An 27; KJ 72; SUR 105) **woduride**. If Krause's interpretations are correct, we have a variation **-e** ~ **-i** not only within the epigraphical record as a whole, but even within a single inscription; and in these examples the height of the final vowel does not correlate with that of the preceding vowel.

Syrett (1994:241-242) suggests that the variants may relate to the length of the stem syllable (although he is attempting to account specifically for the 3.sg.pres.opt. verbal suffix): **-e** follows a short stem and represents an ending */-ijē/, while **-i** follows a long stem, with the ending developing from */-ijē/ > */-jē/ > */-(j)ī/. However, Syrett adds that the syntactic and hence the morphological analysis of the Strøm inscription is highly uncertain, and that his model is speculative.

Antonsen (1975) accepts Tjurkö I **-kurne** and Tune **-ride** as reflexes of */ai/ in final syllables, and adds the following: Årstad stone (An 12) **winai** (→

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winē); 16. Charnay fibula **faþai** (→ *faþē*); Möjbro stone (An 11) **hahai** (→ *ha(n)hē*);[31] Opedal stone (An 21) **wage**; Thorsberg chape (An 2) **waje**; Tune stone (An 27) **arjostez**. While Antonsen's interpretations, like Krause's, may be disputed, he does not identify any sequences in **-i** as witnesses to the development of PGmc */-ai/.

3.2.2.1.2 Stressed syllables: the OHG/OS monophthongisation

We have three possible examples of a monograph representing a reflex of */ai/ in a stressed syllable: 13. Bopfingen **mauo**; 53. Neudingen-Baar I **ḳlef**; 83. Weingarten I **feha**. All of these present problems, and **ḳlef** is the only one for which no alternative interpretations are available in the literature.

It is uncertain whether or not **feha** contains a reflex of */ai/ with monophthongisation triggered by the following /h/. The only stated objection to this interpretation is that the monophthongisation does not take place until the 7th century. For the purposes of the present discussion, this is begging the question. Given the range of suggested datings for the Weingarten fibula (estimates range throughout the 6th and 7th centuries), it is conceivable that **feha** is a late 6th or early 7th-century form with an advanced monophthongal realisation. Some weak support for this might be available if we regard the **ae** spellings as "pre-monophthongal" variants, pointing to a process which may be more advanced in the Weingarten example. The apparent discrepancy between the monograph in **feha** and the digraph in **aẹrguþ** will be discussed in §3.2.3.2.

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[31] On the hypothesis that **-ai** in these examples represents an archaic spelling for a monophthong, see §2.3.1.2; and the Charnay entry in §3.2.1.

If ḳlef represents a form derived from an earlier *klaib/*klaif (: OHG kleib),
it shows monophthongisation in a position where it would not be expected in
OHG. It might be that this inscription reflects a more northerly dialect in
which monophthongisation of */ai/ is more widespread than in the dialects
from which OHG arises. The representation of /b/ as **f** (representing a fricative
allophone [β] ~ [v]) is more characteristic of OS and MFrk than UG (BR
§134). The fibula is variously identified as Frankish or Langobardic, which
together with the location of the find in the southerly part of the region would
seem to argue against the presence of a northern dialect.

Bopfingen **mauo** may contain a stressed /ā/ < */ai/ in a context where we
would expect monophthongisation in OHG. The **a**-rune would seem to
represent either a variant monophthongisation with no parallels in OHG or OS;
or else a form from a dialect in which */ai/ > /ā/ is normal.

If **mauo** → *Mā(u)wo*, a historically "coastal" form, then presumably it
would be a loanword. The possibility that this item and Nordendorf I ạ̄wạ̄
might contain an open monophthong represented as **a** has been discussed in the
Bopfingen entry. Since we have no corroborating evidence that */ai/ in the
"inland" WGmc dialects develops into a monophthong which may be
represented as **a** rather than **e**, and since alternative interpretations are available
for both **mauo** and ạ̄wạ̄, we do not have an adequate basis for this proposition
(in the latter case, I regard Kabell's interpretation with scepticism). If it can be
shown that other sequences **aw** (or **au**), **ar**, **ah** may represent monophthongs <
*/ai/, then the hypothesis may have some merit. While this is a worthwhile

avenue for further investigation, we have insufficient space to explore it at present. Having surveyed the material, I have found no suitable candidates. For the time being, it seems more reasonable to explain **mauo** as either a loan-form or a word etymologically unconnected with PGmc *maiw-*.

3.2.3 Conclusion: reflexes of */ai/ in the corpus

3.2.3.1 Unstressed syllables: the NWGmc monophthongisation

In unstressed syllables where PGmc */ai/ should regularly produce a monophthong /ĕ̆/, it is consistently written as a single rune, with apparent variation between **e** and **i** (though none of the instances of **i** is certain), for which we have no satisfactory explanation. The corpus contains one possible example of a digraph **ai** representing a monophthong (Charnay, which is believed by everyone except Antonsen to be EGmc). As discussed in §2.3.1.2, we do not have a direct means of determining whether **e** and **i** in unstressed positions represent a long or a short vowel. If the shortening of final vowels belongs to a general process of mora-reduction, as Prokosch suggests, and if this process applies more-or-less contemporaneously across all unstressed final vowels, then we might be able to draw some inference from those instances where a final long vowel in PGmc yields a zero-suffixed form in the dialects of the inscriptions. One possible example of this phenomenon is in the *ō*-stem nouns with long stem-syllables, which regularly have zero-suffixed nom.sg. forms in (pre-)OHG. Examples such as Pforzen **aï/ᵢrun** → *Ailrūn-Ø/Allrūn-Ø* (< PGmc *-rūnō*; see further §7.2.2) might provide us with some weak and indirect support for supposing that the monophthongal reflexes of final *-ai*

are short /-e/ ~ /-i/. Then again, if /-u/ is retained after short stem-syllables (as appears to be the case in early OHG – see §7.2), its apocope after long stems would appear to be a process independent of general mora-reduction.

3.2.3.2 Stressed syllables: the OHG and OS monophthongisations

From our survey of the data it appears that in stressed syllables, where *\/ai/ remains a diphthong in NWGmc, it is usually represented in the corpus by a digraph: we have four reliable witnesses, three of **ai** and one of **ae**. To these we can add another six cases which are less reliable: three examples of **ai** (Aquincum **ain** (or **?lain → klain**); †Kärlich **hailag**; †Trier **wair, wai**); two of **ae** (Schwangau **aeþi**; Weingarten **a^{li}/$_e$rguþ**); and one of **aï** (Pforzen **a^ï/$_l$run**).

As noted in §3.2.1.1, it is unclear whether **ae** represents an intermediate diphthong, a monophthongal [ɛ], or simply a free orthographic variant of **ai**. The only clear example of **ae** (Freilaubersheim **wraet**) is geographically separate from the parallel instances of **ai**, and Weingarten may have **ae** in a context which triggers monophthongisation in OHG (before /r/). In both cases, we can plausibly hypothesise that the variation between **ai** and **ae** is phonetically real. On the other hand, Schwangau **aeþi** cannot be explained by either of these hypotheses. It is clear that Pforzen **aï** (if this reading is correct) does not reflect a general regional variation, since an **ai** spelling is found on the same object; and **aï** does not appear in a context suitable for OHG monophthongisation. This form cannot readily be explained as a "pre-monophthongal" variant.

Our two putative cases of **e** representing a reflex of stressed */ai/ (presumably a monophthongal */ɛ̄/) are Neudingen-Baar I **ḳlef** and Weingarten **feha**. The latter belongs to an inscription which may also have a digraph **aę** for */ai/ before /r/, a circumstance which at first glance calls into question the interpretation of **feha** as a word containing a monophthongal reflex of */ai/ (or at least, which suggests that the stem-vowels of **aęr-** and **feha** are not identical). We could, though, posit a differential progress of the monophthongisation before /r/ as against /h/; this would be consistent with Braune's remark that diphthongal forms persist before /r/ (but not before /h/ or /w/) in the earliest OHG mss. (BR §43 Anm. 1).

Bopfingen **mauo** contains a monograph **a** which can credibly be interpreted as a reflex of */ai/ in a stressed syllable. Another candidate is Kabell's (dubious) interpretation of Nordendorf **ạẉạ** as *æwæ* "always, forever", which can probably be rejected with some confidence. While I hesitate to reject **mauo** out of hand, it is open to other interpretations.

In summary, two of the occurrences of the digraph **ae** and the three credible (though doubtful) cases of monographic **e/a** representing a monophthongal reflex of */ai/ suggest that the monophthongisations which become regular in OHG and OS may be underway in the period of the inscriptions; although the evidence for intermediate diphthongs and for monophthongal /ɛ̄/ or /ā/ (*[ǣ]?) is slight. None of the monographs is entirely reliable: **ḳlef** is phonologically

problematic (§3.2.2.1), and plausible alternative interpretations for the others are available in the literature.

Faced with so little evidence, it is impossible to draw any firm conclusions or to demonstrate the existence of a regular pattern. The only case where we can be entirely confident that we have a reflex of stressed */ai/ represented as something other than **ai** is Freilaubersheim **wraet**, possibly explicable as evidence of a more northerly dialect in which unconditioned monophthongisation is underway. **aȩguþ** looks promising as a case of consonant-conditioned monophthongisation, but – as has been discussed – if we want to claim that the **ae** digraph represents a monophthong or some intermediate diphthong, we cannot simply ignore Schwangau **aeþi**: our three **ae**-spellings all require different explanations. If the alternative reading of the Weingarten example as **alirguþ** is correct, then we have only two witnesses which could as well be free variants as anything of real linguistic significance.

The remaining candidates for monophthongisation of the OHG type are **wair, wai, feha** and **mauo**. In the Trier examples, there is nothing in the orthography to indicate that monophthongisation is in progress (regardless of how we evaluate the object's authenticity and Schneider's interpretation). This leaves us with two ambiguous monographs which are difficult to reconcile with one another, let alone with the digraph in **aȩguþ**.

It would be hasty to insist that the reflexes of PGmc */ai/ remain diphthongal in stressed syllables throughout the corpus; yet in the search for indicators of monophthongisation (at any stage of the process), what we find is a handful of questionable forms which – even if they all genuinely reflect some

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stage of phonetic change – cannot be united or neatly fitted into any model of the monophthongisation. Leaving aside the dubious witnesses of Trier, our three sequences **ae̜rguþ, feha, mauo** all purport to show some development, and we have no other examples of a reflex of */ai/ before a consonant which conditions monophthongisation. In each of these three cases, both the conditioning consonant and the representation of the (putative) reflex of */ai/ differ.

3.3 PGmc */au/

If Braune is correct in dating the monophthongisation of stressed */au/ to the 8th century (§2.3.1.4.2), then we would expect to see in the runic corpus only digraphic spellings representing the diphthong: **au, aw, ao** (the latter possibly representing a "pre-monophthongal" form with lowered off-glide). If monophthongisation has taken place, the product [ɔ] would most likely appear as **o**. In unstressed syllables, we would expect the product of the NWGmc monophthongisation to be spelled **o**, or possibly **u**.

Here, as in §3.2, I have subdivided the relevant data into digraphic and monographic spellings (respectively §3.3.1; §3.3.2).

3.3.1 Data: digraphs

13. Bopfingen fibula

mauo

Several etymologies have been proposed for this sequence, none of which is entirely satisfactory (§3.2.2). In none of these interpretations does **au** represent a reflex of PGmc */au/.

32. Hailfingen II fibula

[I] **(a)????(?)**   [II] **(?)daa̧n?**

Alternative reading: **ada̲u̲na** (Jänichen 1962:156).

Jänichen's reading of a bind-rune **au** is not accepted elsewhere in the literature, and from my examination of the available images I am satisfied that **an** is correct. If we were to allow Jänichen's reading, **auna** might be a FN in *Aun-*, parallel to 47. Lauchheim I **aono**. For his own part, however, Jänichen prefers to interpret the text *ada auna* as two "formula-words" of unknown meaning (1962:156-157).

35. Heilbronn-Böckingen I belt fitting

(?)?arwi

Alternative reading: **ik̠auwi** (Arntz and Jänichen 1957:124).

Arntz suggests that **auwi** here might be a formula-word equivalent to PNorse *auja* (see 41. Igling-Unterigling **aun-**; 56. Nordendorf I **a̠ẉa̠**). The reading **r** is generally preferred, however; the **u**-reading seems to be unique to Arntz, and on inspection of Krause's photograph (Krause 1966 Taf. 65) I am confident that it is incorrect.

41. Igling-Unterigling fibula

[I] **aunr̠?ḍ** [II] **d**

In spite of the uncertain readings of the latter part, the consensus is that complex I represents a dithematic pers.n. in *Aun-*, a name-element of uncertain etymology, which is perhaps connected with PGmc **aunaz/*aunuz* (> OE *ge-*

ēan "pregnant").[32] This proto-form may be an adjectival derivative of **aujan*

(> PNorse *auja* "luck") (Arntz and Zeiss 1939:299; Krause 1966:241-242).

The inferred meaning of **aunaz/*aunuz* is "good, prosperous".

An alternative explanation of the element *Aun-* is that it is a semantically

obscure (or possibly meaningless) "rhythmic variant" of the name-element

derived from **aujan* (*Awja-, Awi-la-, Awi-n-*; see 56. Nordendorf I **a̧w̧a̧**)

(Förstemann 1900:207). Nedoma (Nedoma 2004a:196) regards this

proposition with scepticism, noting that there are no known parallels for the

syncopation **awin- > *aun-*.

Aun- appears to be quite widespread, especially as OE *Ēan-* (Nedoma

2004a:195; Searle 1897:208-211); and we have three more possible examples

in the runic corpus (32. Hailfingen II **auna** (doubtful reading); 47. Lauchheim

I, **ao̧no̧**; 50. Mertingen **aun**). That it is present here certainly seems plausible,

though given the doubtful etymology and the lack of clear co-text, it would be

imprudent to accept this interpretation unreservedly.

47. Lauchheim I fibula

ao̧nofada

The sequence **ao̧no-** is identified throughout the literature as a name-

element equivalent to 41. Igling-Unterigling **aun-** (< **aujan* "luck", or the

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[32] BT, Clark-Hall (1960) and the DOE all gloss *ge-ēan* as "yeaning", implying a specific

sense relating to animals (the DOE specifies ewes). The only witness appears to be *Genesis*

33:13, where *geēane ēawe* translates Vulg. *ovēs fētās*.

derived adj. *aunaz/*aunuz "prosperous"). **aoṇo** is either the prototheme of a dithematic name *Aonofada* (§3.2.2), or a weakly inflected MN *Aono* (Nedoma 2004a:194-196). On the interpretation of **-o-** as a compositional vowel, see §4.1.

50. Mertingen fibula

ieoḵ aun

Düwel (2000a:14; Babucke and Düwel 2001:170) interprets **aun** here as an "endingless" nom.sg. form of the adjective derived from *aunaz/*aunuz "prosperous" (see 41. Igling-Unterigling, above). As noted earlier, the reconstruction of this adjective is uncertain, and Düwel freely admits that his own interpretation is speculative.

Another possibility to consider is that the sequence might be the beginning of, or an abbreviated form of, a pers.n. in *Aun-*. Nedoma (2004a:225) rejects this notion out of hand, presumably because there is no weak suffix or deuterotheme (but compare 21. Engers **leub**, which Nedoma does interpret as a pers.n. (§3.1.1)). It remains a doubtful case for inclusion in this part of the study.

56. Nordendorf I fibula

[A] [I] **logaþore**   [II] **wodan**   [III] **wig^i/ᵤþonar**   [B] **ạwạḻeubwini?**

The beginning of inscription B, **a̧ẉa̧**, is generally accepted as a weakly inflected FN *Awa*, apparently a short form of a dithematic name in **Awi-* < **Awja-* (< PGmc **aujan*?) (Arntz and Zeiss 1939:299; Krause 1966:241; Haubrichs 2004:78; Nedoma 2004a:226-227). See also 81. Weimar III **awimund**.

On the alternative suggestion that **a̧ẉa̧** is connected with PGmc **awōn* "grandfather(?)/grandmother(?)", see §4.1.

Schwerdt's suggestion (2000:218) that **a̧ẉa̧** could be related by "grammatical alternation" (i.e., Verner's Law) to the name-element *Aba-* is dismissed by Nedoma (2004a:227): the relevant alternation is actually between PGmc */β/ and */f/, not */β/ and */w/ (see my comments on 28. Geltorf II in §4.1).

59. Oettingen fibula

??i̧jabrg

The beginning of the inscription is read **a̧u̧ija** by Betz (1979:242) and Looijenga (2003a:267). Betz regards this as a word derived from PGmc **aujan*, either as a fem. by-name *Awija* "divine [female] helper", or else representing the PNorse "formula-word" *auja* "luck" as it appears on bracteates (compare 72. Skodborg **auja**). Looijenga (2003a:267) interprets the whole text as a dithematic FN *Auijab(i)rg* with the prototheme derived from **aujan*.

Nedoma (2004a:138) objects that **a̧u̧ija** → *Awija/Auija* is not phonologically plausible. PGmc **aujan* would regularly yield a neut. *ja*-stem

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(pre-)OHG *awi/*auwi (compare OHG kunni < PGmc *kunjan); alternatively, if we take as our point of departure a derived fem. jōn-stem (PGmc *aujōn), this would yield (pre-)OHG *auwja. Betz' interpretation might still be redeemable, if **u** is allowed to stand as a haplogram for /-uw-/, i.e., **a̱u̱ija** → au(w)ija (see further §3.3.1.1). For the time being, Oettingen will be included as a possible (though uncertain) witness to */au/.

62. Pforzen II ivory ring

[I] **ʔlu̱ʔu̱lgisali[**   [II] **]ʔȩ:aodliþ:urait:runa**

In complex II, **aodliþ** is generally accepted as a dithematic FN *Aodli(n)þ*, with an unrepresented nasal in the second element (§2.5.2). Nedoma (2004a:191-192) derives the prototheme from PGmc *auđaz/*auđan m./n. (> ON *auðr* f. "fate, destiny", m. "wealth"; OE *ēad* n. "wealth, prosperity, happiness"; OS *ōd* n. "happiness").

Nedoma accounts for the spelling **ao** as a dialectal (or sociolectal, or simply idiosyncratic) variant, representing a diphthongal reflex of PGmc */au/. He is certain that it does not stand for a monophthong. Schwab (1999a:20), on the other hand, is confident that **ao** represents a transitional stage in the OHG monophthongisation process, whether a "pre-monophthongal" diphthong or an open monophthong.

69. Schretzheim III spatha

(g)aba^{u}/$_{r}$

The interpretation of the "rune-cross" on this item is extremely doubtful; there is no indication of where one should begin reading or in which direction one should proceed, and it is a matter of dispute whether or not the cross itself should be read as a **g**-rune. If the unclear **ᵘ/ᵣ** is **u**, then the sequence **au** may be the diphthong */au/. Klingenberg (Klingenberg and Koch 1974:129; see also Opitz 1987:40) proposes a reading **gabau** → *gab au(ja)* "I/he/she gave luck" (compare Sjælland II-C bracteate (IK 98; KJ 127) **gibuauja**). Other interpretations will be discussed in §4.1; §6.1.

72. Skodborg-B bracteate

   aujaalawinaujaalawinaujaalawinjalawid

That the repeated sequence **auja** is the "formula-word" *auja* (see 41. Igling-Unterigling) is, as far as I am aware, undisputed. This inscription, however, is treated as PNorse by all interpreters except Antonsen (1975:76-77), who identifies it as WGmc on the grounds that it contains zero-suffixed nom. pers.ns. *Alawin, Alawid* (§4.1).

81. Weimar III buckle

   [I] **ida:bịgina:hahwar**   [II] **:awimund:isd:ḷẹoḅ**   [III] **idunⁱ/**ː

Complex II **awimund** is generally believed to be a dithematic MN with a prototheme *Awi-* < **aujan* "luck(?)" (compare 56. Nordendorf I **ạẉạ**; and (possibly) 59. Oettingen **??ịjabrg**).

*3.3.1.1 Summary: digraphs representing PGmc */au/*

The corpus contains 9 possible examples of a digraph representing a reflex of */au/ (I have included Oettingen and Schretzheim III in the list despite uncertainty about the readings, and despite the reservations mentioned above). Of these, all but two (Mertingen **aun**; Skodborg **auja**) are generally believed to be name-elements. All but one of the words containing */au/ (the exception being 62. Pforzen II **aodliþ**) are thought to be connected etymologically with PGmc *aujan*, either directly (56. Nordendorf I **ąw̨ą**; 59. Oettingen **ąu̯i̯jabrg**; 69. Schretzheim III **a**ᵘ**/ᵣ**(?); 72. Skodborg **auja**; 81. Weimar III **awimund**; or via the derived adjective *aunaz/*aunuz* (41. Igling-Unterigling **aunṛ?ḍ**; 47. Lauchheim I **aoṇo**; 50. Mertingen **aun**).

In this dataset we have two instances of a spelling **ao** (Lauchheim I; Pforzen II). In both cases, the spelling occurs in a context appropriate for OHG monophthongisation (respectively before /n/ and /d/), so it is conceivable that the **ao**-spelling reflects some stage of the monophthongisation process ([ao]? [ɔ]?). On the other hand, we have **au** spellings before /n/ in Igling-Unterigling and Mertingen.

The variation between **au** and **ao** has received little attention in the literature. As mentioned earlier, Nedoma regards Pforzen II **ao** as either an idiosyncratic spelling or a dialectal/sociolectal variant, rather than an intermediate stage in the OHG monophthongisation. He makes no comment on the Lauchheim example. The distribution of the forms (Map 2) shows no obvious pattern that might reflect dialectal variation: Pforzen is further south

than the main cluster of find-sites (consisting of Igling-Unterigling, Lauchheim, Mertingen, Nordendorf and Oettingen), but the other **ao** spelling is at Lauchheim, which is within this cluster and north of the Danube.

To test the hypothesis that the variation has a sociolectal basis, we might look to the material record – are the graves containing inscriptions with **ao** spellings in some significant and tangible way different from those with **au** spellings? I have not attempted any such detailed examination of the grave contexts, but no difference of this sort is explicitly adduced by Nedoma.

The available information about dating is too imprecise for us to account for the variation chronologically. Pforzen II appears to belong to the later part of the "runic" period, but the date-range for Lauchheim I does not stand out chronologically from the **au** spellings (except Skodborg).

If there is no clear, positive evidence for a regional, social or chronological distinction between the spellings, we are left with the possibilities that (i) **ao** represents an intermediate diphthong [ao] or a monophthong [ɔ̄], and **au** in the same contexts is an archaic or conservative spelling; or (ii) that the variation has no linguistic significance – **au** and **ao** are simply free orthographic variants.

The second issue to be addressed is that of the two **aw** spellings (Nordendorf I ạw̰ạ; Weimar III **awimund**). [33] Both are believed to represent

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[33] I address the general matter of the mappings between the runes **u w, i j** and the phonemes /u w/, /i j/ in §§4-5.

the name-element *Aw(i)-* < NWGmc **auja* (= PNorse *auja*) < PGmc **aujan*. The off-glide of */au/, like that of */eu/, behaves like consonantal */w/ in that it is amenable to WGmc gemination before */j/ (compare <u>73. Skonager III</u> **niuwila** → *Niuwi-(i)la* : OHG OS *niuwi* < PGmc **neujaz* (§3.1.1)). It is not strictly accurate to say that **aw** represents the diphthong /au/: deletion of the thematic vowel /a/ motivates syllabication of */j/, with the geminate divided between the off-glide of the diphthong as a coda and non-syllabic /w/ as the onset of the following syllable (NWGmc **au.ja* > WGmc **auw.j-* > **au.wi*). If this reconstruction is correct, the digraph **aw** is not simply an alternate spelling of /au/, but a contraction of the phonemic sequence /auw/.

There is a parallel in one of the earliest (c.200 AD?) Scandinavian runic inscriptions, **auwija** (Vimose buckle, An 99; KJ 24), which Antonsen (1975:75; 1986:341) identifies as WGmc on the assumption that the trigraph **auw** represents a geminate /aww/.[34] This would appear to support Nedoma's phonological attack on Betz' postulated **ạu̯ija** for Oettingen. I note, however, that the Vimose text contains digraphs **uw** and **ij**, one of which is supposed to represent a significant phonological process and the other an incidental analogical spelling; and that the same inscription contains two peculiar **aa** sequences (the first of which Antonsen interprets as representing /an/, and the second as a long /ā/, without commenting on the unusual orthography). Since the **uw** and **ij** digraphs consist of a vowel-rune followed by the homorganic

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[34] Note that Krause (1966:60; 1971:174) interprets the sequence **asauwija** quite differently, as *a(n)sau wī(h)ia* "I consecrate to the Ase [sc. Wōdan]".

semivowel, I wonder whether they might not both be idiosyncratic spellings rather than being phonologically significant. The Skodborg bracteate is also classified as WGmc by Antonsen, but has the spelling **auja** with no signs of gemination. If this is a WGmc text and PGmc *aujan* is subject to WGmc gemination, then **auja** ought to represent *auwja*. We must then explain why the geminate */ww/ is not represented orthographically. It might be the case that the Skodborg bracteate utilises a form borrowed from or imitative of contemporary non-WGmc *auja* (**auja**) inscriptions, although in fact the only known parallel is Sjælland II-C (IK 98, mentioned above in the entry on Schretzheim III).

If we accept that Skodborg **auja** is WGmc and that gemination has taken place, the **au** spelling might reflect a decision on the part of the carver to represent the off-glide of the diphthong and the following consonantal /w/ with a single rune, in line with the orthographic convention for geminate consonants in general. The **aw** spellings can be explained in the same way, as can Oettingen **a̯u̯ija**.

3.3.2 Data: monographs

24. Freilaubersheim fibula

[I] **boso:wraetruna:**   [II] **þk·d̯aᚦïna:go̯l̯ida**

boso is interpreted throughout the literature as a MN *Bōso* (compare OHG *Buoso*), but there are disagreements about the etymology. Förstemann (1900:329) posits a connection with OHG *bōsi* "worthless, senseless, weak,

evil" < PGmc *ƀausaz (transferred to the *ja*-declension). However, the stem-vowel /uo/ in OHG results from the diphthongisation of /ō/, which does not merge with the monophthongal reflex of */au/ (OHG /ō/) (§2.3.1.4; §2.3.2.3). This implies that OHG *Buoso* must have a stem-vowel derived from PGmc */ō/, not */au/ (Nedoma 2004a:253-254). For a more plausible etymology, see §4.1.

39. Hüfingen II *Kleinbrakteat*

(??? ?) ota

Although the sequence **ota** is attested on Scandinavian bracteates and may be a formulaic (PNorse) word (see §4.1), Schwab (1999a:18-19) suggests that the Hüfingen example represents *ōta(g)*, a reflex of PGmc *auđaȝaz/*auđiȝaz (> Go *audags* "blessed, fortunate"; ON *auđigr*, OS *ōdag*, OHG *ōtag* "rich, opulent"; OE *ēadig* "happy, blessed, prosperous"). In so doing, she is proposing that **ota** is a product of both monophthongisation and the Second Consonant Shift (*ōta(g)* < *ōdag* < *audag* < *auđaȝ*-). The absence of final /-g/ in this supposed reinterpretation is not explained. Given that Scandinavian bracteates provide a model from which the maker of the Hüfingen *Kleinbrakteaten* appears to have worked, and from which s/he did not deviate, there is no need to invoke an additional etymology. Schwab's hypothesis can only be an untestable speculation.

48. Lauchheim II comb

?dag

Alternative reading: **odag** (Schwab 1999a:20)

Schwab's reading of the first sign as **o** is doubtful; it is read elsewhere as **g** (Düwel 1998:16; Looijenga 2003a:265), or as a paratextual mark (Nedoma 2004a:272). Schwab interprets **odag** as *ōdag* < PGmc *auđaʒaz/*auđiʒaz (see 39. Hüfingen II, above). Nedoma rejects this, but the only stated reason for doing so is that the monophthongisation cannot have taken place in the "runic" period. Since this is the question currently under examination, we cannot employ this criticism at present. If Schwab's reading is correct, then we may have here a genuine case of monophthongised */au/. However, the reading of this peculiar sign as **o** is not at all convincing: it resembles a Roman V with the strokes crossing just above the base. The top of the sign is crossed by a mark which both Nedoma (*loc.cit.*) dismisses as an unintentional scratch.

For a more straightforward interpretation of **dag**, see §6.1.

49. Liebenau bronze disc

ra…

Alternative reading: **raʔẓ̣ẉi** (Düwel 1972:138).

Düwel reads **raʔẓ̣ẉi** → *Ra(u)zwī*, a dithematic name with the first element a reflex of PGmc *rausan/*rauzan (> ON *reyr* "reed"), for which he posits an extended meaning "spear, sword" (on the deuterotheme, see §4.1). This is treated with caution elsewhere: Nedoma (2004a:398-399) declines to commit to any interpretation except to say that the text is likely to contain a pers.n.

beginning *Rǎ-*. The reading of the inscription is so uncertain that it can be accepted and used in the present study only with caution.

81. Weimar III buckle

[I] **ida:bi̯gina:hahwar**   [II] **:awimund:isd:l̯e̯ob̯**   [III] **idun**[i]/:

That **hahwar** represents a dithematic MN *Hǎhwǎr* is uncontroversial. The first element is usually identified with PGmc **xanxaz* "horse" (see §6.1). An alternative etymon, apparently attested in OS names like *Haward* (9th c.), is PGmc **xauxaz* (> Go *hauhs*, ON *hár*, OE *hēah*, OFris *hāch*, OS OHG *hōh* "high"); OS "*ō₂*" [ɔ̄] can be spelled <a> or <o> (§2.3.1.4.3), and it is possible that the same applies in this inscription (Nedoma 2004a:314-315). To claim that **hah** represents *hāh- < *xaux-* rather than *hāh < *xanx-* would be at odds with the majority view, but it is a possibility that cannot at this stage be excluded.

82. Weimar IV bead

ᵇ/ᵥiuᵇ/ᵥ:ida:?e????a:hahwar:

The sequence **hahwar** here presumably represents the same name as in Weimar III (above); given that both inscriptions are from the same grave, it is possible that they refer to the same individual.

*3.3.2.1 Summary: monographs representing PGmc */au/*

The only monographs which can credibly stand for monophthongal reflexes of */au/ are in speculative etymologies of 24. Freilaubersheim **boso** and 81-82.

Weimar III-IV **hahwar**, as well as <u>48. Lauchheim II</u> **?dag**, if we accept

Schwab's questionable reading **odag**. Since these cases have other, more

plausible explanations, we have no convincing evidence that the reflex(es) of

stressed */au/ can be represented by a single rune. We also have no witnesses

to the NWGmc monophthongisation of unstressed */au/, although we can

probably infer from the parallel evidence for the monophthongisation of

unstressed */ai/ (§3.2.2.1; §3.2.3) that it has taken place.

3.3.3 Conclusion: reflexes of */au/ in the corpus

Wherever we have a reflex of */au/ in the inscriptions, it is represented as a

digraph **au, ao** or **aw** (the latter only appearing where the off-glide has

produced a geminate – §3.3.1.1). The contexts of the two **ao** spellings are

consistent with the hypothesis that they represent some stage of the

monophthongisation process. With only two witnesses, we must be cautious in

this conclusion, but the case looks promising. We are not faced with the

ambiguities encountered in the reflexes of */ai/, although this may simply

reflect the lack of data.

4. The back vocalics

Bearing in mind the developments of the back vocalics in the later Continental dialects (outlined in §2.3.2), we might expect to see the following behaviour in the data:

The reflexes of PGmc short */u/ will be written **u, w** or **o**. The distribution of **u/w** vs. **o** will tend to conform to that of the PGmc allophones *[u o]; so we would expect to see spellings like ***sunu, *wolf**. The presence of contrary spellings (e.g., ***sonu, *suno, *sono; *wulf**) may result from analogy, and may reflect real phonetic variation or simply variant orthography. In unstressed syllables, other variants may appear (e.g., **a** for inherited /o/) (§2.3.2.1).

PGmc */ū/ ought regularly to appear as **u**, although variants such as **w, o, uo** (or perhaps **ui, ua**) are hypothetically possible (§2.3.2.2).

PGmc */ō/ may show signs of incipient diphthongisation in stressed syllables. Given that this process is conventionally thought to begin in the 8th century (§2.3.2.3), it is unlikely that a reflex of */ō/ would appear as a digraph, though the possibility should not be ruled out *a priori*; it is at least conceivable that some early modification of the long vowel might be underway, and that a carver might feel the need to represent it with two runes (e.g., ***oa**).

Otherwise, we can reasonably expect any reflex of */ō/ to appear as **o** if in a stressed syllable, alternating with **u** in unstressed positions.

The semivowel, where it is present, may be transcribed **u** or **w**. Although the fuþark offers carvers the means to distinguish between syllabic /ŭ/ and non-syllabic /w/, it remains to be seen to what extent this distinction is upheld in the use of these two runes. A spelling **o** is also possible, especially where a reflex of */w/ has become syllabic in final position or as a compositional vowel (§2.3.2.4).

In the survey of the data below, it will also be necessary to consider the possible deletion of /w/ in contexts where this occurs in the later dialects.

4.1 Data

The following are excluded from this survey:

- Instances of **u** or **o** which are reliably (or at least consistently) interpreted as the off-glide of a diphthong < PGmc */eu au/ (including products of WGmc gemination, i.e., */euwj auwj/ < */euj auj/). These have been discussed in §3.1 and §3.3.

- Instances of **-o** representing the nom.sg. suffix of weak nouns or pers.ns. (see §7.1).

- Terminal **-u, -a, -o** (or -Ø) interpreted as nom.sg. ō-stem suffixes < PGmc */-ō/ (see §7.2).

1. Aalen neckring

noru

This sequence is believed to be a pers.n., either a nom. masc. *u*-stem or a nom.(?)/dat. fem. *ō*-stem. Nedoma argues that the stem-vowel must be long, since the same element appears to be attested with diphthongisation in the PN *Novrenberc* (modG *Nürnberg*) < **Nuoro-* < **Nōro-* (Nedoma 1999a:12-13; 2000:26; 2004a:390-391; compare Bammesberger 1995/96). He offers two possible etymologies relating this name-element to:

1. OSwed *nōr*, Norw *nor* "strait, sound, narrow stretch of water"; or

2. Norw Dan *nor* "infant"; OIc *nóra* f. "small piece".

Underlying both of these is a PGmc adj. **nōraz*, related by ablaut to **narwaz* (> OE *nearu*, OS *naru* "narrow, oppressive"). As a personal name-element, it is likely (so Nedoma) to have developed from a byname "little one" or similar.

Some weak support for Nedoma's identification of the vowel as long may be found in the fact that, if it is a reflex of PGmc short */u/, we would expect to find the high allophone [u] conditioned by **-u** in the following syllable; the sequence would regularly be ***nuru**. As noted in §2.3.2.1, however, the regular distribution of these allophones is disrupted in OHG and OS, so an irregular form is conceivable here.

Referring to dithematic names like OHG *Norigand, Norigaud, Norigas*, Kaufmann (1968:270) posits a PGmc stem **nori-* < PIE **narja-* (> Skt *narya-* "manly, masculine") (compare Düwel 2000b:21-22). No cognate of Skt *narya-* is attested in OHG, and I would add that Pokorny (1959-1969) does not cite any Gmc reflexes for PIE **narja-* or for any derivative of the underlying

root *ner-* (see also Nedoma 1999a:13-14). The *Nori-* forms with overt

compositional vowels (and without diphthongisation) seem to point to a short

root-vowel; on the other hand, the majority of the witnesses cited by

Förstemann (1900:1168-1169) lack a compositional vowel (e.g., *Nor-Ø-bert,*

Nor-Ø-heri), suggesting a long stem; and while <Nor-> is the predominant

spelling of the root, a few digraphs are recorded (e.g., *Nuorinc*).

Nedoma (1999a:12; 2004a:392) is doubtful about the identification of **-u** as

a nom. *u*-stem suffix (< PGmc */-uz/). In OHG and OS, long-syllable *u*-stems

have a zero suffix in nom.sg., e.g., OS *hand*, OHG *hant* "hand" < PGmc

xanđuz. Düwel (2000b:21) comments that in OHG, a /-u/ ending could only

be inst.sg., a very rare form.

If we are dealing with an *ō*-stem, **-u** is either nom. /-ŭ/ < PGmc */-ō/, or dat.

/-ŭ/ < PGmc inst. */-ō/ (replacing inherited dat. */-ōi/) (Prokosch 1939:236).

For further discussion, see §7.2.

Düwel (*loc.cit.*) also considers the possibility that **-u** here represents an

alternant of the nom.sg.masc. weak suffix /-o/ (see §7.1.3.1).

2. Aquincum fibula

[I] **fuþarkgw**   [II] **?lain:kŋia**

One of several interpretations of **kŋia** proposed by Krause is that it

represents a word related to OIc *kunningi* "friend" (derived from PGmc

*kuninȝaz/*kununȝaz* > ON *konungr*, OE *cyning*, OFris *kining, koning, kening,*

OHG OS *kuning* "king"). If this is correct, we are dealing with an

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unrepresented stem-vowel /u/. We cannot appeal to "Grønvik's law"

($C_0V_{[+high]}RC \rightarrow C_0RC$) to account for the elision (§2.5.2), unless **i** represents a

consonantal /j/ – that is, if the sequence should be expanded to *kungja* or

kuningja. This has not been proposed in the literature, and it is not clear what

it might mean. A more plausible alternative is that **kŋia** → *k(i)ngja* or *kinga*

"brooch, fibula" (§5.1). The case for an unexpressed /u/ here is weak, and this

inscription will be excluded from further discussion.

3. †Arguel pebble

[I] **arbitag** [II] **wodan** [III] **luïgoʷ/ꝥhaŋ** [IV] **zej** [V] **kim**

That the sequence **wodan** represents the theonym PGmc *Wōđanaz* (> ON

Óðinn, OE *Wōden*, OS *Wōdin*, OHG *Wuotan*) is accepted without reservation

in the literature, if the inscription is to be regarded as genuine. This name is

derived from PGmc *wōđaz* (> Go *woþs* "possessed"; ON *óðr* "mad, frantic,

furious"; OE *wōd* "mad"). Bizet (1964) believes the dialect of the inscription

to be EGmc, and accounts for the absence of an overt inflectional ending by

interpreting the name as voc. *Wōdan-Ø*. The theonym is not attested in Gothic,

although I see no phonological or morphological grounds for objecting to this

analysis.

Bizet interprets **luïgoʷ/ꝥ** as *liuhaþ* "light", which invokes several eccentric

spellings, and which I do not consider reliable (§3.1.1; §6.1).

4. Arlon capsule

goduṇ : (?)ụḷọ : þeṣ : rasuẉaṃụd(?)wo<u>þ</u>roþ(…)

goduṇ is treated throughout the literature as an oblique form of a weakly inflected FN *Gŏda*, with **u** representing an unstressed long /ū/ < PGmc */ō/ (PGmc dat.sg. /-ōni/ > OHG /-ūn/ (BR §221; Lehmann 2005-2007 §3.2.3; Ringe 2006:280)) (see further §7.1.2.3). The quantity of the stem-vowel is uncertain: it could be long /ō/, if the stem is derived from PGmc **ʒōđaz* (> Go *goþs*, ON *góðr*, OE OFris OS *gōd*, OHG *guot* "good"); or short /o/, if the etymon is PGmc **ʒuđz/*ʒuđaz* (> Go *guþ*, ON *goð ~ guð*, OE OFris OS *god*, OHG *got* "god"). In the latter case, the form *godūn* (as opposed to **gudūn*) would have to reflect analogical levelling from the nom. **goda*.

There seems to be a consensus in the literature that **(?)ụḷọ** represents a weakly inflected nom. MN (suggestions include *Lul(l)o, Fūlo, Þulo*). Because all of these are speculative, they cannot tell us anything of use about the quantity of the vowel. Here, as with **goduṇ** and <u>1. Aalen</u> **noru**, if the stem-vowel is short, it displays a form at odds with the distribution of the PGmc allophones; a regular form would be */-olo/ → ***-olo**.

That **rasuẉamụd** represents a dithematic MN is uncontroversial. The prototheme is interpreted as *Rāsuwa-* : OIc *ræsir* "chief, captain, king"; OE *rǣswa* "counsellor; prince, king, leader", *rǣswan* "to think, suspect, consider"

(< PGmc *rēswa- ?) (Nedoma 2004a:396), with an anaptyctic vowel (compare OHG *zesawa* f. "right side" < PGmc *texswōn (§2.3.5)).

The deuterotheme is identified as *-mu(n)d*, commonly associated with PGmc *munđō (> ON OE OS *mund*, OHG *munt* f. "hand, protection"; OFris *mund* m. "protection") (Förstemann 1900:1133; Kaufmann 1968:262). Nedoma (2004a:231-232) argues for a connection with late OHG *munt* m. "guardian"; OFris *mund ~ mond*, MHG *munt* "protection"; OIc *mundr* "bride-price". Nedoma traces these to a pre-form *Mundu-*, a masc. *u*-stem (PGmc *munđuz*) derived from the same root as *munđō and functioning as a *nomen agentis* "protector".

The final sequence is difficult to read and interpret. All the interpretations in the literature identify **woþro** as a weakly inflected MN: (i) *Woro* (Arntz and Zeiss 1939:436); (ii) *Wōro* (Krause 1966:286) (both of these assume **þr** to be an error for **r**); or (iii) *Wōþro* (Nedoma 1992; 2004a:417-422). Arntz offers no etymology; Krause identifies *Wōro* with OE *wōrian* "to wander" and *wērig* "weary" (< PGmc *wōraʒaz/*wōriʒaz). Nedoma treats *Wōþro* as a short form of a dithematic name with a prototheme *wōþ-r- < PGmc *wōþ-/*wōđ- > *wōđaz "mad, furious, possessed" (see **wodan** in 3. [†]Arguel; 56. Nordendorf I). Both of these etymologies involve a long stem-vowel */ō/. On the terminal **-o**, see §7.1.3.

7. Bad Ems fibula

[I] **]m̩adal̩i?**   [II] **ubadạ[**

Complex II has been interpreted in several ways: Arntz interprets **uba** as a pers.n. *Uba*, for which he offers no etymology (Arntz and Zeiss 1939:200). All other interpretations posit an omitted nasal *u(m)b...*:

The whole complex is commonly interpreted as a compound *u(m)bi-badą* (or *u(m)ba-badą*) "consolation, comfort, health" (Krause 1966:282; Nedoma 2004a:370; Opitz 1987:29, 127-134). The first element *umbi- ~ umba-* is connected to OE *ymb(e)*, ON *um(b)*, OFris *umbe*, OS OHG *umbi* "around, about" (< PGmc **umƀi*). Opitz treats it as an independent word *umba*, with the sense "for the sake of". In OHG, *umbi-* appears as a prefix in numerous verbs (e.g., *umbi-faran* "to go around") and deverbal nouns (*umbi-fart* "circuit, circulation").

Most commentators relate the sequence **badą** to OS *gibada* f. "consolation". This noun declines as an *ō*-stem (see §7.2.3), but the etymology is uncertain. It may be derived from a PGmc root **ƀađ-* < PIE **bʰeh₁-* "to heat, warm" (Krause and Werner 1935:333; Nedoma 2004a:370-371). Looijenga (2003a:228) treats it as a name-element < PGmc **ƀađwō* (> OE *beadu*, ON *böð*, OS *badu*, OHG *batu* "battle"). Nedoma (2004a:370-371) objects that a short-syllable *wō*-stem would regularly have a nom.sg. form in /-u/ (BR §208 Anm. 5); in practice, however, both OHG and OS show conflation of the *wō*-stems with the "pure" *ō*-stems (BR §206; Gallée 1910 §310; Holthausen 1921 §286). If it were a regular development consistent with the attested reflexes of the "battle"-word in OHG and OS, then a FN with this element should have the form ***-badu** if strongly inflected (nom.), or ***-bad(w)a ~ *-bad(u)a** if weakly

inflected. Looijenga's interpretation is not impossible, but it depends on the assumption that the element has lost the */w/ of its stem-formant. It appears here in a phonological context where medial /w/ is normally deleted in OHG (§2.3.2.4), but the reflex of *ƀađwō (whether it appears as a noun "battle" or as a name-element) is one of the known exceptions to this rule (compare OHG *gazzo* "lane, alley; quarter, district of a town", < PGmc *ʒatwōn). I find it unlikely, therefore, that the word written **badą** involves a deleted */w/.

8. Bad Krozingen A fibula

[I] **boba:leub**   [II] **agirike**

boba appears to be a weakly inflected nom. FN with a direct analogue in OHG *Buoba, Puopa, Bova* (Förstemann 1900:318). The diphthongs of forms like *Buoba* (8th c., cited by Nedoma 2004a:244) indicate that the stem-vowel is long /ō/.

Bōba is a parallel to masc. *Bōbo* (14. Borgharen **bobo**). Etymologically, this is probably derived from PGmc *ƀōƀōn* (> ON *bófi* "knave, rogue"; MLG *bōve* "scam, scoundrel"; MHG *buobe* "boy, servant"). The names *Bōba, Bōbo* are distinguished from the superficially similar form **bubo** on 80. Weimar II.

9. Balingen fibula

ą?ụẓdnloamịlu?

The beginning of the inscription is in such poor condition that it cannot safely be read or interpreted. Proposals such as that of Krause (1966:303) that

a̦?u̦z̦ represents PNorse *ansuz* "god" (→ "Wodan"?) must be regarded as speculative.

Several authors interpret **ami̦lu?** as a patronymic *Amilu(n)k = Amilung* "descendant of the Amals", perhaps referring to Theoderic the Great (v. Grienberger 1908:267; Krause 1966:303; Opitz 1987:112-121). This name-element most commonly appears as *Amal-*, but *Amil- ~ Emil-* forms are attested (Förstemann 1900:88-96). For further discussion of the stem and its etymology, see §5.1; §6.1.

The *Amilu(n)k* interpretation faces two difficulties: first, it depends on the reading of the final sign as **k**, which is doubtful in itself, and even if allowed requires us to accept the Balingen inscription as a very early product of the Second Consonant Shift (§2.4.1) or of an independent final devoicing process.

Second, the patronymic interpretation invokes the orthographic rule whereby a nasal can be elided before a homorganic obstruent (§2.5.2). While this rule is based on a number of examples where **n** or **m** are omitted, there are no direct parallels to indicate that **ŋ** can be treated in the same way.

Arntz regards **amilu** (alternatively read **a̲m̲u̲l̲u̲**) as a nom. *ō*-stem FN (Arntz cites similar names *Amilo, Amulo, Amela, Amulunc* in the Libri Confraternitatum (Arntz and Zeiss 1939:129; see also v. Grienberger 1908:264-266)). In his later comments (1939:131) and in his translation of the text, however, he treats it as a dative. Nedoma (2004a:188) argues that the suffix /-u/ must be dat., not nom. (see §7.2.1).

10. Beuchte fibula

[I] **fuþarȥj** [II] **buirso**

Complex II **buirso** is generally believed to be a metathetic form of a pers.n. *Bŭriso*. In principle, the stem-vowel could be either long (*Būr-* < PGmc *ƀūran* n. (> ON *búr* "chamber, pantry"; OE *būr* "cottage, dwelling, room"; OS *būr* m. "dwelling, room"; OHG *būr* m. "house")) or short (*Bur-* < PGmc *ƀuriz* m. (> Go *baur* "he who is born"; ON *burr*, OE *byre* "son")).

Alternatively, it has been proposed that the medial /-i-/ of *Bŭriso* has been syncopated and the digraph **ui** represents an *i*-umlauted vowel, /u/ = [y] (Syrett 1994:183); or else **u** represents a mutated vowel followed by an epenthetic /i/ (Grønvik 1998:35). Nedoma (2004a:262) rejects these interpretations, arguing that there is a lack of evidence for *i*-umlaut in the "runic" period (for my own comments on "primary" *i*-umlaut of /a/, see §§6.2-6.3); that an initially allophonic distinction [u] vs. [y] is unlikely to be represented orthographically; and that medial unstressed vowels after long syllables are normally retained in the Continental runic inscriptions (e.g., 24. Freilaubersheim **goḷida**; 62. Pforzen II **gisali**).

As for the terminal **-o**, the majority view is that *Bŭriso* is a weakly inflected pers.n.; most interpreters assume that it is masc., in line with the regular pattern for weakly inflected names in OHG. Antonsen, however, identifies it as fem. *Būrisō*, literally meaning "little daughter" (Antonsen 1975:78). On this topic, see further §§7.1.2-7.1.3.

11. Bezenye I fibula

[I] **uṇj̣ạ**   [II] **godahid**

There appears to be universal agreement in the literature that complex I represents a reflex of PGmc *wunjō (> OE *wynn*, OS *wunnia*, OHG *wunna*, *wunnia* "joy"), either acc.sg. *(w)un(n)ja* (< *wunjōn*) or acc.pl. *(w)un(n)jā* (< *wunjōz*). In this case, the rune is not simply representing the short vowel /u/ < PGmc */u/, but is a haplogram for a CV sequence /wu-/. I know of no direct parallels in the runic record; Krause (1966:309) notes the spelling of /wu-/ as **w** on the Thorsberg shield-chape (KJ 20) **owlþuḅewaz** → *W(u)lþuḅewaz* (Krause interprets the preceding **o** as a Begriffsrune, rather than treating **owlþu-** as a metathetic form of a name-element *Wolþu-*).

Complex II is uncontroversially interpreted as a dithematic FN *Gŏdahi(l)d*. The first element could be derived from either PGmc *ʒōđaz* "good" or *ʒuđz/*ʒuđaz* "god" (see 4. Arlon). Attested names in *Gŏd-* and *Gōd-* are common, and it is often difficult to distinguish between them (Haubrichs 2004:84; Nedoma 2004a:310-311). Nedoma argues (with reservations) that the presence of a compositional vowel probably indicates that the preceding syllable is short. On the deuterotheme **-hid**, see §5.1.

12. Bezenye II fibula

[I] **ʔarsiḅoda**   [II] **seǥun**

That **arsiƀoda** represents a dithematic FN *Arsiboda* is generally accepted in the literature (although the etymology of the element *Arsi-* is unknown – see §5.1). The deuterotheme is identified as a feminised derivative of PGmc *ƀudōn* m. (> ON *boði*, OE OFris *boda*, OS *bodo*, OHG *boto* "messenger") (Arntz and Zeiss 1939:329; Krause 1966:309; Nedoma 2004a:207-209).

The terminal **-a** is commonly interpreted as a weak inflectional suffix (§7.1.2.1). Nedoma, however, argues that since dithematic names are normally declined strong, this cannot be correct. He instead interprets the suffix as gen. /-ǎ/, to an *ō*-stem deuterotheme (Nedoma 2004a:205; also Looijenga 2003a:231). If this is correct, then **-a** represents a suffix < PGmc */-ōz/ (Lehmann 2005-2007 §3.3.2; Ringe 2006:269). Braune (BR §207 Anm. 3) states that this suffix is probably still long /ā/ in the earliest OHG sources (but shortened to /a/ later on, as in OS (Gallée 1910 §307; Holthausen 1921 §§282-283)); if so, then presumably it is also long here, although we have no direct way to verify this.

The semantic interpretation of complex II is a topic of debate in the literature, but it is generally agreed to represent a word similar to OHG *segan* m. and to be a loanword from Lat. *signum* n. "mark, sign" (→ "sign of the Cross" → "blessing, benediction"). Whatever meaning is intended in this inscription, since we are dealing with a loanword **u** represents either an adaptation of the Lat. thematic vowel /-u-/ (< PIE */-o-/), or perhaps an anaptyctic vowel (*signum* → **sigun-Ø* → **segun-* ?). In the latter case, it belongs to the common WGmc anaptyxis (§2.3.5) (compare PGmc

*reȝnan/*reȝnaz* > Go *rign*, ON OE *regn*, OFris *rein*, OS *regan-* ~ *regin*, OHG *regan* "rain").

13. Bopfingen fibula

mauo

The various interpretations of this sequence have been summarised in §3.2.2. Two of the three proposed etymologies (etyma *maȝuz* "youth", *maȝwjō* "girl") involve **u** representing a semivowel /w/ derived from PGmc intervocalic */ɣ/. The third – the one favoured by Nedoma – derives the stem from the onomatopoeic *maiw-*, with **u** again representing /w/, though in this case it is a reflex of the PGmc semivowel.

In most interpretations, **mauo** represents a weakly inflected MN in /-o/. The sole exception is Looijenga (2003a:231), who sees in **-o** a dat.sg. *ō*-stem suffix /-ō/. This is improbable, however: OHG *ō*-stems can have a dat.sg. ending /-o/ (alongside regular /-u/ – see §7.2.1, and compare 1. Aalen); but this form is not attested before the 10th century (BR §207). Nedoma (2004a:387-388) therefore rejects Looijenga's analysis. I am inclined to be more cautious about rejecting the **-o** spelling as a possible irregular or erroneous representation of final /-u/.

14. Borgharen buckle

bobo

This inscription probably contains a MN *Bŏbo*, which is common in OHG sources (Nedoma 2004a:245). A feminine parallel is attested in <u>8. Bad Krozingen A</u> **boba**. For the etymology, and discussion of the evidence for a long stem-vowel, see the Bad Krozingen entry, above.

15. Bülach fibula

[I] f̣rifridiḷ [II] dụ̣ [III] (ḷf)tṃ?

The readings (and hence, the interpretations) of complexes II-III are uncertain. Krause's suggestion that **dụ̣** represents a 2.sg.nom. personal pronoun (< PGmc *þū) is widely accepted (Krause 1966:307); this, however, assumes that /θ/ has undergone *Spirantenschwächung*, a hypothesis firmly rejected by Nedoma (2004a:298) (see §2.4.2).

In complex III, Krause (*loc.cit.*) speculatively expands the sequence **(f)t** to a verb-form *f(a)t(o)* 2.sg.imp. "embrace", to PGmc *fatōjanan* (> ON *fata* "to step"; OHG *fazzōn* "to grasp"). Krause's interpretation is accepted by Klingenberg (1976b:314) and Opitz (1987:14, 196-197). Schwerdt (2000:205) accepts this expansion, but suggests an alternative sense for *f(a)t(o)* "clothe".

Since the final /-o/ (< PGmc */-ō/) here has been inserted by a modern interpreter, it does not constitute useful data for the present study, but reflects only what Krause expects to find, given his (implicit) notions of what the language of the inscriptions is like.

16. Charnay fibula

[I] **fuþarkgwhnijïpzstbẹṃ(?)**   [II] **:uþfṇþai:id**   [III] **dan:ḷiano**

[IV] **ⁱ/ḷia**   [V] **ḳ r**

The sequence **uþ** in complex II is invariably interpreted as a particle *u(n)þa-* with an unrepresented nasal (§2.5.2), etymologically connected with Go *unþa-*, OE *ūþ*¸ON *unn-* "away" (which Lehmann (1986) traces back to PGmc **unþa*); and/or PGmc **unđa* (> Go *und* "up to, for"; OHG *untaz, unzi*, OS OE *und* "to, as far as") (Antonsen 1975:77; Arntz and Zeiss 1939:189). The Continental forms do not appear to be derived from **unþa* (which would regularly produce OHG **und-* (not *unt-*), OS **ūth- ~ und-* (Gallée 1910 §283; Holthausen 1921 §191)). On the other hand, an underlying PGmc **unđ-* > OHG **und-* > *unt-*, OS *und-* ought to be represented as ***u(n)d-**. If this interpretation of **uþ** is correct, it would seem to support the identification of the inscription as EGmc (see §3.2.1).

17. Chéhéry fibula

[I] **DEOS : DE**   [II] **ḥṭid : E** (or **E : ditaṇ**)   [III] **sụṃ(Ŋịḳ)**

Complex III contains a graph **ụ**, but no interpretations are available in the literature (and I have no suggestions of my own).

20. Eichstetten sheath fitting

?a?i [chi-rho/**nþ**/**nw**] **munịwiwo?(??)**

Looijenga reads the first part of the inscription as **fiaginþ**, which she inteprets as a FN in *-ginþ* = *-gunþ* (see 54. Neudingen-Baar II **bliþguþ**). She attempts to explain the alternate form *-ginþ* by appealing to the variation in the name-element *-birg* (*-berg* ~ *-burg*; see 46. [†]Kleines Schulerloch in §5.1). There is no evidence for an equivalent variation *-ginþ* ~ *-gunþ*, however. All of the witnesses listed by Förstemann (1900:693-713) have /-u-/ or /-o-/, the latter only when the element is a prototheme.

The sequence **munị** has two readings and interpretations in the literature:

1. **muni** → *muni* 3.sg.pres.opt. to a verb related to PGmc **muniz* m. (> Go *muns* "thought, intention"; ON *munr* "mind, longing, delight"; OE *myne* "mind, purpose, desire"; OS *munilīc* "lovely"). Looijenga (2003a:238) and Fischer (2007:133) ascribe the meaning "remember" to *muni* in this text. On the interpretation of the suffix, see §3.2.2.

2. **munt** → OHG *munt* "hand" → "protection" (PGmc **munđō* f. > ON OE OS *mund* "hand"; OFris *mund* m. "protection, guarding"; OHG *munt* "hand, palm as a length measure") (Opitz 1982:486).

From the available images (see catalogue entry), I am inclined to favour the reading **muni**. In assigning the meaning "remember", Looijenga has in mind Go *ga-munan* and its cognates (OE *ge-munon* "to remember"; OS *far-munan* "to despise"). The "remember"-verb (PGmc **mana* < PIE **men-*) is a class IV pret.pres., for which the 3.sg.opt. stem would have the PGmc form **mun-*

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(Ringe 2006:243-244, 260-262). For our present purposes, then, it is plausible that **u** here represents a short /u/ < PGmc */u/.

Another possibility, not discussed in the literature, is that **munį** may represent a noun (pers.n.?) < PGmc *muniz* (> Go *muns* "thought, intention"; ON *munr* "mind, longing, delight"; OE *myne* "mind, purpose, desire"). A name-element *Muni-* (perhaps < PGmc *muniz*) is attested, though not particularly frequent (Förstemann 1900:1136-1138). For parallels and further discussion, see §5.2.1.2.

For the sequence **wiwo?**, several interpretations are available. Firstly, it may represent a phrase *wī wol* (Fischer 2007:133; Opitz 1982:485-486; Sasse 2001:81). In this interpretation, **wi** is the adverb *wī* : OHG *wio* "how" (< PGmc *xwai wē*); and **wo?** → **wol** is a nom.sg.neut(?). adj./adv. *wol* (PGmc *welō(n)/*walō(n)* (> Go *waila*, ON *vel, val*, OE OFris *wel*, OS *wela ~ wala*, OHG *wol ~ wola ~ wela ~ wala*[35] "well").

The second possibility is that **wi** represents a name-element *Wī-*, as attested in OHG *Wīwa, Wīwila*. Rune-sequences interpreted as names with this element appear in several Scandinavian inscriptions: Eikeland fibula (KJ 17a) **wiz** (→ *W(īw)az*?), **wiwio**; Tune stone (KJ 72) **wiwaz**; Veblungsnes rock wall (KJ 56) **wiwila** (Krause 1966:164-165; Reichert 1987:793). These are thought to be short forms of names with a prototheme based on PGmc

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[35] Köbler (1993) contains an entry for *wol*, but no such form appears in Schützeichel (2006) or in Kluge's (2002) etymology of modG *wohl*.

*wīxanan/*wīʒanan* (> Go *weihan*, ON *vega*, OE *wīgan* "to fight"; OHG *ubar-wehan* "to overcome"); or *wīʒjanan/*wīxjanan* (> ON *vígja*, OFris *wīga*, OS *wīhian*, OHG *wīhen* "to consecrate" (< *wīxaz* adj. > Go *wihs*, OHG *wīh* "holy"; OE *wīg-bedd* "altar"; OS *wīh-dag* "holiday")) (Krause, *loc.cit.*; Looijenga 2003a:239; see also Schramm 1957:61). Looijenga reads **wiwogan**, and analyses it as an oblique form of a weakly inflected MN *Wīwoga*. She comments on the etymology of the element *Wī-*, but not on the remainder of the name. As far as I am aware, no element *wog-* is attested. We might speculate that **-wog-** is a variant representation of the element *wag-*, which appears twice in Scandinavian runic inscriptions (Opedal (KJ 76) **wage**; Rosseland (KJ 69) **wagigaz**); although, if Antonsen (1975:40) is correct in identifying this with PGmc *wēʒaz/*wēʒiz* (> Go *wegs* "storm"; OIc *vāgr* "sea"; OE *wǣg*, OS OHG *wāg* "rough water, swell"), a form in **-o-** is anomalous.

Schwerdt (2000:207-208) suggests that **wiwol** might be a dithematic MN with the deuterotheme *-wolf* (PGmc *wulfaz* > Go *wulfs*, ON *ulfr*, OE OS *wulf*, OFris OHG *wolf* "wolf"). The first element could be derived from one of the following:

1. PGmc *weljōn* (> Go *wilja*, ON *vili*, OE OFris *willa*, OS *willio* "will"; OHG *willo* "desire, wish");

2. PGmc *welþjaz* (> Go *wilþeis*, ON *villr*, OE OFris *wilde*, OS OHG *wildi* "wild");

3. PGmc *weniz* "friend" (see 56. Nordendorf I for more etymological detail);

4. PGmc *wiđuz (> ON *viðr*, OE *widu ~ wudu*, OHG *witu* "wood"; OS *wido-hoppa* "hoopoe").

A further possible interpretation of the sequence, not mentioned in the literature, is a connection with PGmc *wīwōn* m. (> ON *lang-vé* "a kind of bird"; OHG *wīo* (> modG *Weihe* f.), MLG *wie, wige* "bird of prey, harrier, kite"),[36] perhaps as a name-element (compare *arōn* "eagle", possibly attested in 45. Kirchheim/Teck II **arŭgis**; 67. Schretzheim I **arogịs**). Whether this etymology is valid or not, **wiwo** could conceivably be a weakly inflected MN *Wĭwo*.

22. Erpfting fibula

lda·gabu

The only available interpretation is that of Düwel (2003c:13-16), who interprets **gabu** as a dat.sg. *ō*-stem noun *gābu* "(as a) gift" (forms in *gāb-* (> modG *Gabe*) are attested in OHG alongside regular *geb-* < PGmc *ʒeƀō; see §5.1). On the dat.sg. *ō*-stem suffix, see also 1. Aalen, above.

Alternatively, if **gabu** represents an *ō*-stem noun, **-u** could represent the nom.sg. suffix /-ŭ/ < PGmc */-ō/ (see §7.2.1).

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[36] modG *Weihe* has the specific meaning "harrier", but appears in compound names for other raptors (e.g., *Gabelweihe* "kite"). OHG *wīo* glosses Lat. *avis rapax* "bird of prey"; *asida* "ostrich"(!); and *milvus* "kite" (Köbler 1993).

23. Ferwerd comb case

?(?)ura

This inscription is assumed in the literature to be Frisian, but has been included in this study as it may be an import, and there is nothing in the content of the text which positively identifies it as belonging to a "coastal" rather than an "inland" dialect (§§1.2.1-1.2.2).

ura is interpreted as a form of a pers.n. *Ūra* with a stem derived from PGmc *ūruz* (> ON *úrr*, MLG *ūr*, OHG *ūro* (*n*-stem) "aurochs"; OE *ūr* (*a*-stem) "a kind of ox, bison") (Arntz and Zeiss 1939:209; Looijenga 2003a:303-304). This element is attested in, e.g., OHG *Uro, Urich, Urold, Urolf* (Förstemann 1900:1482-1483; Müller 1970:24-25).   In Looijenga's view, the present example may be a weakly inflected MN or a dat.sg. *ō*-stem. The latter is only plausible if the terminal **-a** is transliterated as Frisian **-æ** and interpreted as a parallel to OFris dat.sg. /-e/, which is in any case a product of analogical levelling: *ō*-stems have /-e/ throughout the singular in OFris (Heuser 1903 §38).

Düwel (Düwel and Tempel 1968/1970:371) transliterates **muræ**, which he interprets as a weakly inflected nom. MN *Mur(r?)a*. The etymology is not clear, but it might be a *nomen agentis* to an OFris verb *murra/*morra* (which Düwel does not gloss or explain further; perhaps PGmc *murrōjanan* (> ON *murra* "to murmur"; MLG *murren* "to drone"; modG *murren* "to grumble")?).

24. Freilaubersheim fibula

[I] **boso:wraetruna:**   [II] **þk·ḍaᛈïna:goḷïda**

There is general agreement that **boso** represents a MN *Bōso* : OHG *Buoso* (early forms UG *Poso*, WFrk *Boso* are recorded). The presence of a diphthong in the OHG witnesses indicates that the name is based on a stem in PGmc */-ō- / (§2.3.2.3). The most plausible etymology connects the name with OIc *bósi* "clumsy man" < PNorse/NWGmc *bōsan "lump, chunk", and/or OHG *buosum* "roundness, bosom, womb" (Nedoma 2004a:254, 256).

Alternative etymologies (rejected by Nedoma) are that the name is cognate with Gk *φώς, φωτός* "light; man, nobleman" (this association of meanings is disputed) : PGmc **ƀōs-* (Arntz and Zeiss 1939:224; Haubrichs 2004:79); or with OHG *bōsi* "worthless, senseless, weak, evil" < PGmc *ƀausaz. The former is based on an unsupported connection with a Greek word, the etymology of which is itself uncertain (Nedoma 2004a:254-255). The latter involves a product of monophthongisation, which I have already discussed and rejected (§3.3.2).

boso:wraetruna is one of several witnesses to the formula *NN wrait rūnă* "NN wrote a rune/runes" (compare <u>54. Neudingen-Baar II</u>; <u>62. Pforzen II</u>). The presence of **w-** (**u-** in the other witnesses) indicates that deletion of initial /w-/ in consonant clusters (§2.3.2.4) has not taken place.

Since we appear to be on safe ground in the interpretation of this sequence (there are no difficulties with the reading and we have two parallels), we can

be confident that **-u-** in **runa** represents a reflex of PGmc **/ū/.* [37] On the

suffix, see §7.2.3.1.

Most commentators interpret **goḷida** in complex II as 1./3.sg.pret. to a reflex

of PGmc **ȝōljanan* (> Go *gōljan* "to greet"; ON *gæla* "to comfort, to make

happy" (Arntz and Zeiss 1939:229; Krause 1966:284; Looijenga 2003a:241;

Nedoma 2004a:251; Opitz 1987:198-199).

An alternative interpretation is advanced by Jänichen: **goḷida** → *gōl Ida*

"invoked Ida". Here, *gōl* is 1./3.sg.pret. to a verb < PGmc **ȝalanan* (> ON

gala "to crow, sing"; OE *galan* "to sing"; OHG *galan* "to enchant") (Jänichen

1951:227). On the pers.n. *Ida*, see §5.1; §7.1.2.1.

Meli (1988:112, cited by Nedoma 2004a:251) treats the sequence as a

product of metathesis, **goḷida** → *glōida* "inflamed [with love]" (PGmc

*ȝlōōjanan > ON *glóa* "to glitter, shine"; OS *glōian* "to glow"; OHG *gluoen*

"to glow, burn"), supposedly forming part of a love-charm.

All of these interpretations regard **o** as representing a reflex of PGmc **/ō/.*

26. Friedberg fibula

þuruþhild

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[37] I avoid addressing the semantics of the word "rune" in detail. The widely accepted

connection between the concepts "rune", "mystery" and "counsel" is open to question

(compare, e.g., Elliott 1989:1-2; Page 1999:106-107). Morris (1985) argues persuasively that

the etyma of NWGmc **rūn-* (> ON *rún*, OE *rūn*, OS OHG *rūna* "written message,

inscription(?)") and Go *rūna* "mystery, secret" are distinct.

Throughout the literature, this inscription is interpreted as a dithematic FN with a prototheme < PGmc *þrūþiz/*þrūþijō f. (> OE þrýð, ON þrúðr, OHG þrūt, drūd "force, power, strength"). The first **u**-rune is taken to represent an anaptyctic vowel, and the second is the stem-vowel /ū/ < PGmc */ū/. The deuterotheme will be discussed in §5.1.

28. Geltorf II-A bracteate

ḷaḷg̃wu

This inscription is generally regarded as uninterpretable (Clavadetscher et al. 1984-1989:2,1:71; Jacobsen and Moltke 1941-1942:493; Nielsen 1978:358; Nowak 2003:583). Arntz (1937:7, citing v. Grienberger) does propose a reading **k̨algwu** → *(i)k alu g(i)bu* "I give an amulet". In this interpretation (used by Arntz as support for his own treatment of 65. †Rügen), **w** represents a fricative allophone of /b/ in the root *g(i)b-* "give" < PGmc *ʒeƀ-*. This is not plausible: intervocalically, the reflex of PGmc */β/ is a fricative [β] or [v] in OS, OLF, OFris and OE, but a plosive in OHG dialects except for MFrk (BR §134; Gallée 1910 §219; Holthausen 1921 §220; Prokosch 1939:76). Regardless of whether a fricative allophone is present in the dialects of the runic inscriptions, the hypothesis that **u** or **w** might be used to represent this allophone depends on the similar use of <u v> in OS mss.

The Roman letters <u> and <v> can be used interchangeably to represent Lat. /u/ or /w/. From the 2nd century AD, Lat /w/ is realised as a fricative [v]; since Lat. /b/ also has a fricative allophone [v], confusion between the two is

possible (Allen 1978:40-42; Kent 1945:62). However, there is no such development in any of the Gmc languages: only the phonemes /b/ and /f/ can have the phonetic realisation [v] or [β]. To transcribe one of these fricatives as **u** or **w** in a runic inscription could only arise analogically from knowledge of Roman script, as it reflects a sound change peculiar to Latin. Whatever the state of Latin literacy among the makers of runic inscriptions may have been (see Düwel 1994b), in the absence of supporting evidence it seems highly unlikely that they habitually followed Latin orthographic practice. On phonetic grounds, the only reasonable runic transcriptions of a fricative [v, β] would be **b** or **f**.

Von Grienberger sees the terminal **-u** as a 1.sg.pres.ind. verb-ending (< PGmc */-ō/). If, as I have argued, **gw** cannot plausibly represent the verbal root *gib- ~ geb-*, his entire interpretation is undermined and we cannot pursue it any further.

29. Gomadingen fibula

[I] **(g)**   [II] **iglu$^g/_n$**   [III] **?...**

Düwel (1996:13) suggests that complex II may contain a pers.n. *Iglun/Iglug* or *I(n)glun/I(n)glu(n)g*. Haubrichs (2004:87) favours *Iglung*, with a patronymic *-ung* suffixed to a stem < PGmc **iʒilaz/*iʒulaz* (> ON *igull*, OE OS OHG *igil* "hedgehog"). Pers.ns. with this element (possibly meaning "sea urchin" rather than "hedgehog") are attested in Viking-Age Scandinavian runic inscriptions (Müller 1970:96). On the Continent, it may be present in WFrk

Higelricus (8th c.), and in PNs *Igilsbuch* (8th c.), *Igilistruoth* (11th c.)

(Förstemann 1900:947). The stem will be discussed further in §5.1.

If *Iglun* or *I(n)glun* is intended, then the ending could plausibly be *-ūn*, to an

oblique form of a weakly inflected FN **Igla/*Ingla*. This possibility has not

been discussed in the literature.

30. Griesheim fibula

[I] ḳoḷo: [II] aͥg̑iḷaþruþ

The consensus in the literature is that complex I represents a weakly

inflected MN *Kolo* (compare Langob *Colo*, OE *Cola*, ON *Koli*), with a stem

probably derived from PGmc **kulan* (> ON *kol*, OE *cōl*, OFris *kole*, MLG *kol,*

kole, OHG *kol* "coal, charcoal") (Nedoma 2004a:352-353). Nedoma rejects an

alternative etymology connecting *Kŏlo* and related names with ON **kollir*

"helmet" (Förstemann 1900:371; Gottschald 1982:297; Looijenga 2003a:242),

on the grounds that the ON word in question is actually *kellir* (de Vries 1961);

this may, however, be related to PGmc **kullaz* (> ON *kollr* m. "round peak;

head, pate"), which might itself be a plausible etymon for ḳoḷo (→ *Kol(l)o*), if

not for *Colo, Cola, Koli*.

There is general agreement that complex II is a dithematic FN *Agilaþrūþ*,

with a deuterotheme < PGmc **þrūþiz/*þrūþijō*; see 26. Friedberg, above. On

the prototheme, see §5.1.

31. Hailfingen I sax

ali̲s̲rhlaþawihu (Arntz and Zeiss 1939:245-248).

The only available interpretation of this inscription is that of Arntz (Arntz and Zeiss 1939:245-248), who reads the final sequence **wihu** → *wīhu* 1.sg.pres.ind. "I consecrate" (< PGmc **wīʒjanan/*wīxjanan*; see 20. Eichstetten, above). If this is correct (which is very doubtful), **w** represents a reflex of PGmc */w/ and **u** represents /ŭ/ < PGmc */ō/.

34. Heide-B bracteate

alu

Alu is a "formula-word" which appears in a number of Scandinavian inscriptions, and is also attested as an element in pers.ns. (e.g., Værløse fibula (KJ 11) **alugod**). Heizmann (2004:374) lists 14 bracteates with **alu** in "pure" form, and another 10 which may contain abbreviated or concealed forms.

The etymology given by Krause connects PNorse *alu* with ON *ǫl* "beer, ale" (: OE *ealu*; OS OHG *alu-* in compounds) < PGmc **alu(þ)* n., which itself (so Krause) may originally have been connected with Hitt. *alwanzaḫḫ-* "enchant", *alwanzatar-* "magic"; Gk `ἀλύειν "to be beside oneself". From this

he infers that the basic meaning of PNorse *alu* is "ecstasy" (Krause 1966:239. See also Antonsen 1975:37; Fingerlin et al. 1998:818; Polomé 1996).[38]

Another possibility is that *alu* is connected with OE *ealgian* "to protect"; Go *alhs* "temple"; Gk ʾαλκή "protection, defence", although this may be in some way derived from an association of beer with religious or magical practices (Düwel in Fingerlin et al. 1998:817). Since all the attested Gmc cognates preserve a consonant derived from PGmc */x/ or */ɣ/, I find this explanation of *alu* questionable (though not impossible) from a phonological perspective.

Elmevik (1999) raises objections to both of these etymologies, and instead interprets *alu* as a 1.sg.pres. verb-form, to PGmc *alanan* (> Go *alan* "to grow on, feed on"; ON *ala* "to beget, bear"; OE *alan* "to nourish, grow, produce"). He glosses it "(I) give strength, (I) keep alive" and/or "(I) protect" (1999:28).

Whether Krause's speculations about the "original" meaning of the word and its function in inscriptions are correct or not, the text **alu** connects Heide with other bracteates of Scandinavian origin (though it could conceivably be a Continental cognate, rather than the PNorse word). The **u** represents a reflex of a short */u/ if *alu* is the "ale"-word, or of a long unstressed */ō/ (the 1.sg.pres.ind. suffix) if it is a verb-form.

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[38] I refrain from comment on the speculation that ale had cultic uses and was associated with shamanic or religious ecstasy. For sceptical approaches to the question, see Heizmann (2004:377); Lüthi (2004:329-330).

35. Heilbronn-Böckingen I belt fitting

(?)?arwi

The legible part of the inscription is interpreted throughout the literature as a MN *Arwi*. The most widely accepted etymology for the stem is that it is a reflex of PGmc **arwaz* (> OIc *ǫrr* "swift, ready"; OS *aru* "ready for harvesting, ripe") (Haubrichs 2004:77; Krause 1966:296; Nedoma 2004a:211). Nedoma explains the final /-i/ as being derived from a suffix */-ija-/.

Two alternative etymologies have been proposed:

1. *Arw-* is related by a Verner's Law alternation to PGmc **arƀjan* (> ON *erfi* "wake, funeral feast"; OE *erfe*, OFris *erve*, OS OHG *erbi* "inheritance") (Schwerdt 2000:213). Nedoma rejects this on the grounds that there is no such alternation: the Verner alternant of */β/ is */f/ (Nedoma 2004a:211-212). See also my comments on 28. Geltorf II.

2. The name is an abbreviated form of a dithematic name **Ar(a)-wī(h)* (Düwel 1972:139; see also Schwerdt 2000:213-214). If correct, **w** represents the initial *w-* of a deuterotheme < PGmc **wīx-/*wīʒ-* (see 20. Eichstetten, above). Nedoma (2004a:212) argues against this etymology that it involves an apocope of /-h/ (for which there are no runic parallels, except perhaps 49. Liebenau **ra?ẓẉị**; Düwel also cites *-wī* forms in Latin mss.); and the omission or deletion of the compositional vowel /-a-/ after a short stem.

36. Hitsum-A bracteate

[I] **fozo**   [II] **g?o^b/₁a**

Complex I is interpreted as either the ethnonym *Fosii* (Tacitus, *Germania* XXXVI) or as a (possibly related) pers.n. (Clavadetscher et al. 1984-1989:1,2:140; Looijenga 2003a:208). Düwel (1970:285) cites Much's (1967:414) etymology of *Fosii* < PGmc **fōzōz/*fōsōz*, nom.pl. to a cognate of Gk *πηός*, Doric *παός*, Lat. *parus* "relative". Hitsum **fozo** → *Fōzo* would be a hypocoristic derivative with a weak inflection. Düwel is noncommittal on the gender of the name (see §7.1.3.1). Krause (1971:150) favours an interpretation as a feminine *Fōzō*, on the grounds that the object is probably to be associated with the area of the earliest runic inscriptions, i.e., southern Scandinavia (see catalogue entry).

Looijenga (2003a:208) suggests that complex I could be (i) a NGmc nom. *ō*-stem FN *Fōzō* (no etymology is offered); (ii) a form or derivative of the ethnonym *Fosii*, as Düwel suggests; or (iii) a weakly inflected WGmc (Frankish) nom. MN *Fozo*.

At first glance, a WGmc identity appears unlikely, given that PGmc */z/ > /r/ in root syllables in the WGmc dialects. Seebold, though, points out that in the Continental runic corpus we have no clear examples of a reflex of PGmc */z/, and we cannot therefore be certain whether or not rhotacism had occurred in the "runic" period of WGmc (Seebold 1996:195). I am not sure I agree with this assessment: in the case of 83. Weingarten I **a^{li}/ₑrguþ**, while we have

alternative readings **alir-** vs. **aer-**, both involve etyma with /r/ < PGmc */z/ (see entries in §3.2.1; §5.1).

Düwel (1970:286-287) reads complex II as **gḷola**, representing a pers.n. with a stem < PGmc *ʒlōōjanan (see 24. Freilaubersheim **goḷida**, above) and the dim. suffix */-il-/ ~ */-ul-/ (i.e., *Glōla* < *Glōw-ula*) (on the inflectional suffix /-a/, see §7.1.2.1). Looijenga (2003a:208), on the other hand, reads **groba**, which she interprets as a WGmc nom./acc.sg. *ō*-stem noun < PGmc *ʒrōƀō* f. (> Go *groba* "dugout, hole"; ON *gróf,* OHG *gruoba* "pit"). Seebold (1996) offers two interpretations: **groba** may be a noun *groba* "inscription", derived from the verb PGmc *ʒraƀanan* (> Go *graban,* ON *grafa,* OE *grafan,* OFris *grēva ~ griova,* OS *gravan,* OHG *graban* "to dig, carve", with a presumed extended sense "inscribe"). Alternatively (and this is the interpretation which Seebold seems to prefer), it might be a vriddhi-derivative of PGmc *ʒraƀan* n./*ʒraƀō* f.(> Go *graba* "trench, ditch"; ON *grof* "hole, pit"; OE *græf* "grave, trench"; OS *graf,* OHG *grab* "grave"); compare modG *Muhme* "maternal aunt" (OHG *muoma* < *mōma*, derived by vriddhi from *mame,* a hypocoristic word for "mother" (Kluge 2002)). Morphologically, it could be a nom.sg.fem. *n*-stem, a nom./acc.sg. *ō*-stem, or a nom./acc.pl. *ō*- or *a*-stem. Seebold proposes that *groba* here means "that which belongs to the grave or to burial"[39] (1996:196).

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[39] "das zum Grab oder zum Begräbnis Gehörige".

37. Hoogebeintum comb

[I] **?nlu**   [II] **(ded)**

Complex I contains a **u**-rune, but is not clearly interpretable. Düwel
suggests that it may be a pers.n., and mentions several potential parallels, but
no further conclusions can be drawn (Düwel and Tempel 1968/1970:368).

38. Hüfingen I *Kleinbrakteat*

[I] **VVIT (????)**   [II] **alu**

This is another inscription containing the "formula-word" *alu* (see 34.
Heide). Given its appearance on an imitation coin influenced by the
Scandinavian bracteate tradition, and the presence of an unintelligible
sequence of Roman letters in complex I, it seems likely that we are dealing
here with script-imitation rather than the intentional carving of the word.

39. Hüfingen II *Kleinbrakteat*

(??? ?) **ota**

The sequence **ota** appears on a number of Scandinavian bracteates. The
most credible interpretation is that of Düwel, who connects it with ON *ótti*
"fear, dread" (< PGmc *ōxtan*) (Düwel 2008:54; Fingerlin et al. 1998:818;
Heizmann 2004:375-376; see also §7.1.2.1). As with 38. Hüfingen I, we may
be dealing with a straightforward imitation of models from Denmark or

elsewhere in the PNorse linguistic area, in which case it is of little use to us as evidence for the Continental dialects.

Schwab (1999a:18-19) suggests that the Hüfingen example may have been reinterpreted by an Alamannic designer as the adjective OHG *ōtag* "wealthy, prosperous" (< *ōdag*; see 48. Lauchheim II **?dag**, which Schwab reads **odag**). In order to do this, she invokes both the Second Consonant Shift and monophthongisation of PGmc */au/ (for which there is no corroborating evidence in the corpus – §3.3.3). Even if Schwab's interpretation is linguistically plausible, there is no way to test whether the present text involves reinterpretation of a sequence which otherwise would be incomprehensible to an Alamannic reader, or whether it was simply copied from some Scandinavian model without concern for its linguistic meaning.

42. †Kärlich fibula

wodanị : hailag

The first part of the inscription appears to be a dat. form of the theonym *Wōdan* < PGmc (nom.) *wōđanaz* (see 3. †Arguel). This interpretation is not controversial, though the doubtful authenticity of the inscription makes it an unreliable witness.

43. "Kent" fibula

ik w?f?? gadu (Looijenga 2003a:244).

[I] **gam(:)ụ**   [II] **iku**   [III] **ẉ?fa** (my transliteration).

The only interpretation available in the literature is that of Looijenga (2003a:244), who suggests that **gadu** represents a nom. or dat.sg. *ō*-stem *gadu* < PGmc *ʒaðō*, which would be a feminised form of PGmc *ʒaðōn* m. (> OE *gada*, MHG *gate* "companion"; Du *gade*, modG *Gatte* "husband"). The only attested feminine cognate is Du *gade* "wife". Given the partial and speculative nature of Looijenga's reading, this can be considered at best an uncertain case. I would add that, since *ʒaðōn* is an *n*-stem, we would expect a feminised form to belong to the same declension (see §7.1).

If my reading of complex I as **gam(:)u̯** is correct, it might represent a word connected with PGmc *ʒamanan* n. (> ON *gaman* "game, sport"; OE *gamen*, OFris *game* ~ *gome*, OS *gaman* "joy, game, pleasure"; OHG *gaman* "joke, joy"). For such an interpretation to work, we would have to account for the missing /n/: the sequence could perhaps represent a nom./acc.pl. *gamnu* with the /-a-/ elided as in, e.g., OE *hēafod* → nom./acc.pl. *hēafdu* (Campbell 1959 §574); OHG *zeihhan* "sign" → *zeihnu* ~ *-o* (BR §196). The /n/ might be omitted either by error, by nasalisation as in the OFris cognates, or by assimilation to the preceding /m/(?). This is pure speculation on my part, and cannot be taken any further at this point.

In my reading, the large **u** of complex II (which might form a bind-rune **au/ua** with the **a** of complex III) follows on from **ik**. I have no suggestions for an interpretation.

Looijenga does not offer any interpretation of the sequence which I have designated complex III. If my reading **w̨?fa** is correct, OE OFris OS *wīf* "woman" (gen.pl. *wīfa*?) springs to mind (§5.1); but, again, this is no more than speculation.

44. Kirchheim/Teck I fibula

ba̧da(?)ḥ?al̨i

Here, as in 7. Bad Ems, we have a sequence which Looijenga (2003a:245) interprets as a FN *Bada* < PGmc **ƀađwō*, with a deleted medial */w/. See the entry on Bad Ems for further discussion of this interpretation.

45. Kirchheim/Teck II fibula

aru̧gis

This sequence is treated throughout the literature as a dithematic MN equivalent to 67. Schretzheim I **arog̨is** (qv). Two etymologies have been proposed for the prototheme:

1. *Aro-* < PGmc **arōn* m. (> Go *ara*, ON *ari*, OS OHG *aro* "eagle") (Arntz and Zeiss 1939:338; Düwel 1984:325; Haubrichs 2004:77; Krause 1966:299; Looijenga 2003a:255). In this case, **u̧** and Schretzheim **o** represent a compositional vowel (though not a regular reflex of the PGmc stem-formant */-ōn-/. Compare 89. Wremen **lgu-**).

2. *Aru-* < **arwa-* < PGmc **arwaz* adj. (see 35. Heilbronn-Böckingen I **arwi**) (Nedoma 2004a:199). If this is correct, **u̯** and Schretzheim **o** represent reflexes of PGmc */w/, which regularly becomes syllabic in syllable-final position (§2.3.2.4).

Both of these are attested name-elements in OHG. According to Nedoma (*loc.cit.*), dithematic names with a prototheme derived from **arōn* normally have a compositional vowel /-a-/ (e.g., OHG *Arafrid, Aragēr, Aragīs, Aralind*), while those in **arwaz* have /-u-/ or /-o-/ (e.g., OHG *Arogoz*, WFrk *Arohildis*, Langob *Aruchis*); in Nedoma's view, therefore, **aru̯gis/arogi̯s** should be associated with **arwaz*. On the other hand, it is at least conceivable that this variation in the compositional vowels reflects the levelling in the unstressed vowels of OHG, which might make names in **arwa-* indistinguishable from those in **arō-*. Förstemann (1900:136-137) places forms like *Aragis* together with *Arigis, Aregis* etc.

47. Lauchheim I fibula

aoṇofada

One of Nedoma's criticisms of the interpretation of this inscription as a dithematic FN *Aonofada* (§3.2.2; §3.3.1) is that a dithematic name with a long-stemmed prototheme would normally lack a compositional vowel between the elements (compare 41. Igling-Unterigling **aunṛ?ḏ** → *Aun-Ø-rād*). For the element *Aun-* (< **aunaz/*aunuz* "prosperous", in Nedoma's view), the

compositional vowel should in any case be /-a-/ or /-u-/; /-o-/ would be anomalous (Nedoma 2004a:194).

An apparent counter-example (not mentioned by Nedoma) is *Aunobert* (bishop of Sagiensis, a.689) (Förstemann 1900:208). Braune notes that the thematic vowel of the *u*-stems appears as <-o> in nom./acc.sg. from the end of the 9th century (and occasionally in earlier sources), as part of the general lowering of OHG /i u/ in final position (BR §220c Anm. 2) . Förstemann also cites a variety of other forms for this name-element with the shapes *Auni-, Aune-, Aun-Ø-*. It appears from these forms that we cannot afford to be too dogmatic about the presence and quality of compositional vowels in dithematic names.

If, as Nedoma argues, **aoņo** represents a weakly inflected MN *Aono*, the terminal **-o** represents the nom. inflectional suffix (see §7.1.3.1).

48. Lauchheim II comb

?dag

Alternative reading: **odag** (Schwab 1999a:20)

Schwab interprets the sequence as an adjective *ōdag* "wealthy", with **o** representing a monophthongal reflex of */au/ – an analysis about which I am sceptical (see §3.3.2).

49. Liebenau bronze disc

ra…

Alternative reading: **ra?ẓẉi** (Düwel 1972:138).

Düwel interprets this sequence as a dithematic MN *Ra(u)zwī* with a deuterotheme < PGmc *wīxaz* "consecrated one" (to *wīʒjanan/*wīxjanan* "consecrate"). Looijenga (2003a:246) suggests that it might alternatively be derived from *wīʒanan* "to fight" or a derived noun "warrior" (see 20. Eichstetten **wiwo?** for more on these etyma; compare also Düwel's interpretation of 35. Heilbronn-Böckingen I **arwi**). On the prototheme, see §3.3.2.

53. Neudingen-Baar I fibula

[I] **(?)ud̦im̦** [II] **midu**   [III] **k̦lefi̦??**

The reading of complex I is uncertain, but if **udim** is correct, then it probably represents a reversed form of the same word as complex II. Two interpretations have been proposed:

1. *mid(d)u* < PGmc *međjaz* adj. (> Go *midjis*, ON *miðr*, OE *midd*, OFris *midde*, OS *middi*, OHG *mitti* "middle"); or a derived noun, PGmc *međjōn* f. (> ON *miðja*, OE *midde*, OS *middia*, MHG *mitte* "middle"). In this case, **-u** would represent an inflectional ending. The commentators who offer this interpretation (Düwel 1990:8; Fingerlin and Düwel 2002:110; Nedoma 2004a:244) do not go into detail. On the identity of the suffix, see §7.2.1.

2. *midu* < PGmc *mizđō(n)/*mē₂đō* f. (> Go *mizdo*, OE *meord, mēd* "reward" (compare also Undley bracteate (IK 374) **medu**); OFris *mēde* "rent"; OS *mēda* "payment"; OHG *mieta* "price") (Düwel

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1990:8; Looijenga 2003a:247). In this case, **-u** might represent a

nom. or dat.sg. *ō*-stem suffix /-ŭ/ < PGmc */-ō/ (again, see §7.2.1).

54. Neudingen-Baar II wooden stave

lbi·imuba:hamale:bliþguþ:uraitruna

All the sources (except Schwab, who emends **imuba** to **leuba** − see §3.1.1)

interpret **imuba** as a pers.n. *Imba* with an anaptyctic vowel (on the etymology

of the name, see §5.1).

That **bliþguþ** is a nom. dithematic FN *Blīþgu(n)þ* with an unrepresented

nasal is undisputed in the literature. The deuterotheme is a reflex of PGmc

*ʒunþz/*ʒunþijō (> OHG *gund-* (in compounds), **gundea* (Prokosch 1939:73),

gūdea (Schützeichel 2006), OS *gūthea*, ON *gunnr, guðr*, OE *gūð* "battle").

This name-element appears several times in the corpus (67. Schretzheim I

alaguþ; 83. Weingarten I **a**^{li}/_e**rguþ**), with possible (but more doubtful)

witnesses in 20. Eichstetten **fiaginþ**; 76. Stetten **ạmelkuḍ**.

Again, the sequence **uraitruna** stirs no controversy, being interpreted as

wrait rūnă "wrote a rune/runes". **urait** is in this case 3.sg.pret. to *wrītan*

"write" (see 24. Freilaubersheim; 62. Pforzen II), with **u** representing a reflex

of */w/. The **u** of **runa** clearly represents the root-vowel < PGmc */ū/.

55. Niederstotzingen strap end

[I] **bịgw̧s(:)?liub**   [II] **ụẹ??d?^{igu}/_{du/ud}?**

The only part of this inscription which can be read and interpreted with any confidence is **liub** (§3.1.1). Jänichen (1967a:46, 1967b:235-236) reads **idun** in complex II (see 81. Weimar III), while Looijenga suggests that the complex might contain **dedun** → *dedun* 3.pl.pret. "made" (see 67. Schretzheim I). Still more speculative is Opitz' proposal that **ẉs** might represent OHG *(h)waz(z)* "something" (with Second Consonant Shift) (1987:234). None of these interpretations is sufficiently reliable to be useful for our present purposes.

56. Nordendorf I fibula

[A] [I] **logaþore**   [II] **wodan**   [III] **wig^i/$_u$þonar**   [B] **ạẉạḷeubwini?**

The etymology of complex A.I **logaþore** is uncertain, but **log-** probably represents one of the following:

1. a reflex of the zero-grade of the PGmc verbal root **leuʒ-* "to lie" (inf. **leuʒanan* > Go *liugan*, ON *ljúga*, OE *lēogan*, OFris *liāga*, OS *liogan*). A related *nomen agentis* is attested as OE *loga* < **luʒa-* (attested in compounds, e.g., *word-loga* "one who is false to his word" (BT)).

2. a reflex of PGmc **luʒōn/*luxōn* m. (> ON *logi*, OFris *loga*, MHG *lohe* "flame").

A third possibility, found in the literature on the Bergakker scabbard mount (**log^e/$_u$ns**) but not that on Nordendorf, is that **log-** might be derived from the

root *lōʒ- (> ON lóg, OE lōg, OFris lōch "place"; OHG luog "den, pit")

(Vennemann 1999:154). What this might imply for the whole complex

logaþore depends on the interpretation of the remainder of the sequence.

According to the most popular interpretation, **logaþore** is connected with

OE logeþer ~ logþer ~ logþor subst. (m.) "intriguer, sorcerer" (Stanton Cawley

1939:325; Krause 1966:293) and/or adj. "crafty, wily" (BT; Clark Hall 1960).

The etymology is uncertain: both the zero-grade of the verbal root *leuʒ- "lie"

and the "flame"-word < *luʒōn/*luxōn have been invoked, the presumed sense

of OE logeþer etc. being either "liar" or "inflamer".

-þore is likewise ambiguous. If the whole complex is a compound, **-þor-**

may be connected with PGmc *þurisaz m. (> ON þurs, OE þyrs "giant"; OHG

duris "devil, evil spirit"); or perhaps with *þurzuz adj. (> Go þaursus, ON

þurr, OE þyrre, MLG dorre, OHG durri "dry"). In both of these cases, the

terminal **-e** causes problems (§3.2.2). Düwel analyses the sequence into a root

(either *luʒ- "lie" or *luʒ- "flame") with an agentive suffix -þra- (possibly

connected with PIE *tor- "loud, audible" (Düwel 1982:82-83; Grønvik

1987:117; Pokorny 1959-1969)). This fits into the overall interpretation of

inscription A as logaþore Wodan Wig[i]/[u]þonar "Wodan and Wig[i]/[u]þonar (are)

liars [or: mendacious, if logaþore is an adjective]", taken to be an abnegation

of heathen deities. The troublesome **-e** is accounted for as a nom.pl.

inflectional suffix (§3.2.2), but the analysis leaves us with a stray **-o-** (perhaps

an anaptyctic vowel, comparable to that in 26. Friedberg þuruþhild).

Another suggestion (Wagner 1995:111-112) is that **-þor-** is a *nomen agentis*

formed from a cognate of ON þora "to dare", which (so Wagner) is attested in,

among other things, the ethnonym *Thuringi*. Wagner analyses the whole text as *Logaþore* [dat.] *Wōdan* [nom.] *Wigiþonar* [nom.] "Wōdan and Battle-Þonar oppose the one who dares (tell) a lie" (1995:112).

Departing from the literature, we might be able to combine the *lōʒ-* root with any of the interpretations of **-þore** to construct yet another set of etymologies. If **-þore** represents the "giant/demon"-word, then perhaps *lōgaþor-* could carry a sense "place-demon" or "lodging-demon" (referring to some sort of *genius loci*?). If it is the agentive *-þra-*, then it ought to be attached to a verbal base. *lōʒ-* is a nominal root, but it produces a denominal verb which appears as OE *lōgian* "to lodge, place, arrange". If this were the basis of a *nomen agentis* "lodger; arranger" or agentive adjective "lodger-like, arranger-like"(?), we would expect a form ***logeþore** or ***logiþore**.

The identification of complex A.II as the theonym *Wōdan* (< PGmc *wōđanaz*) is the least contentious aspect of the Nordendorf inscription. See <u>3. [†]Arguel</u> for the etymology.

In complex III, **wig-** is usually taken to represent a root derived from one of the following:

1. PGmc *wīxjanan/*wīʒjanan* "consecrate" (see <u>20. Eichstetten</u>).
2. PGmc *wīxanan/*wīʒanan* > "fight" (again, see Eichstetten entry)
3. PGmc *winʒ-* as in ON *Ving-þórr* (a by-name of Þórr), itself of uncertain etymology, but possibly derived from one of the above

with a sense "holy" or "battle"; or (less likely) connected with ON *vingull* "horse's penis" (Kabell 1970:4-6; de Vries 1961).

The first of these etymologies is generally preferred in the literature (to a large extent influenced by Krause (1966:293)). In all of them, **w** clearly represents consonantal /w/.

Interpretations of complex II tend to focus on the following sequence **-þonar** (see below), to which **wig^i/$_u$-** is attached as an attribute. Little attention is given to the compositional vowel **-^{i}/$_u$-**. A reading **i** is generally preferred, and is easily accounted for if the sequence is etymologically connected with *wīxjanan/*wīʒjanan* (etymology 1) (see, *inter alios*, Grønvik 1987:118-119). A compositional vowel */-u-/ would require further explanation, a point which does not appear to have been addressed in the copious literature on the Nordendorf fibula. If there is any merit to Kabell's suggestion of a connection with ON *vingull* (etymology 3), this might provide us with a medial /-u-/.

Although the interpretation of **wig^i/$_u$-** is uncertain, there seems to be general agreement that **þonar** represents the theonym identified with PGmc *þunraz* (> ON *þórr*, OE *þunor*, OFris *thuner*, OS *thunar*, OHG *donar* m. "thunder"). If this is correct, then **o** clearly represents a reflex of PGmc */u/.

In inscription B, **ạwạ** is normally interpreted as a pers.n. in *Awi-* (**ạw-** representing a reflex of PGmc */au/; see §3.3.1). An alternative suggestion is that it represents a noun derived from PGmc *awōn* m.(?) (> Go *awō*

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f. "grandmother"; ON *ái* m. "great-grandfather") (Klingenberg 1976d:181; Steinhauser 1968b:27); Nedoma disputes this etymology, arguing that there are no known parallels and that it is semantically unmotivated (Nedoma 2004a:227). A third possibility, **ạ̈ẉ̣ạ** → *ǽwǽ* "always" (< PGmc **aiwai*) has been discussed and rejected in §3.2.2.

ḷeubwini is variously treated as a dithematic pers.n. or other compound, or as two words (§3.1.1). In either case, **wini** is a reflex of PGmc **weniz* (> ON *vinr*, OE OFris *wine*, OS OHG *wini* "friend"), probably functioning here as a name-element. On the termination **-i?**, see §5.1.

57. Nordendorf II fibula

ḅirl?ioel?

While this inscription is widely regarded as uninterpretable, attempts have been made to extract some sense from it (§3.1.1). Looijenga (2003a:251) proposes that **io** is a conjunction **jō(h)* < PGmc **jō xwē* (> Go *jah*, OE *ge*, OS *ja*, OHG *jŏh ~ jā* "and"). If we accept this speculation, **o** represents a reflex of **/ō/*.

58. Oberflacht spoon

** g̣ḅa˙/ᵢduḷþafd**

The interpretation of **duḷþ** as a reflex of PGmc **đulþiz* f. (> Go *dulþs*, OHG *tuld ~ tult ~ dult* "festival") has gained general acceptance. Klingenberg

(1974:88) notes that a form of this word without Second Consonant Shift survives in (modern) Bavarian and East Swabian *Dult* "church festival"; and he infers that both this and Oberflacht **dulþ** are therefore loanwords from Gothic. However, this assertion presupposes that Consonant-Shift devoicing of /d/ has taken place in the contemporary dialects of the region, for which we do not have strong evidence in the runic data (§2.4.1). PGmc *ðulþiz* would regularly produce a pre-OHG *dulþi* > *dulþ* > Frk *duld*, UG *tuld* (with apocope of the thematic vowel after a long stem (BR §§214-215)).

60. Osthofen fibula

go?:furad?ḥdẹọf̣ịle?

All commentators accept a reading of the first sequence as **goḍ**. Krause (1966:285) interprets this as "God" (< PGmc *ȝuđz*) in the specifically Christian sense (compare the interpretation of **dẹọf̣ịle** as "Devil" (§3.1.1)). It may alternatively be a form of the adjective < PGmc *ȝōđaz* "good", or a pers.n. with a stem based on either of these roots (compare 4. Arlon **goduṇ**).

In Krause's much-repeated interpretation, **fura** is a preposition, PGmc *fura* (> Go *faur*, ON *for-*, OE *fōr*, OFris OS OHG *fora* "before, in front of"). If this is correct, the allophony of PGmc */u/ would regularly give us a surface ***fora**. This does not necessarily undermine Krause's interpretation, but the form would be historically irregular (as are many attested forms in OHG and OS – see §2.3.2.1).

Arntz offers two alternative (and speculative) interpretations (Arntz and Zeiss 1939:318-319):

1. **furad?** represents a reflex of PGmc *fraþaz* (> OHG *frad* "strong, vigorous") with an anaptyctic vowel (and *Spirantenschwächung* – §2.4.2).

2. **furad** might represent the beginning of the fuþark in a scrambled form (compare 10. Beuchte **fuþar**), with the substitution of **d** for **þ** motivated by *Spirantenschwächung*. Quite apart from the question of whether or not this sound change has taken place, this interpretation requires us to accept a reordering of the fuþark for which there is no corroborating evidence.

61. Pforzen I buckle

[I] **aigil·andi·a$^{\ddot{i}}/_{\iota}$lrun?(…)** [II] **ḷṭahu·gasokun?**

One of the few uncontested features of this inscription is that **a$^{\ddot{i}}/_{\iota}$lrun** represents a dithematic FN in *-rūn* < PGmc *rūnō* (see 24. Freilaubersheim). Here, as with Freilaubersheim **runa**, we can be reasonably confident that **u** represents a reflex of PGmc */ū/.

On the identity of the prototheme, opinion is for the most part divided between those who read **aïl-** → *Ail-* (§3.2.1) and those who read **all-** → *All-* (§6.1). A third option is discussed by Marold (2004:220-223): Pieper's examination of the item revealed traces of a **u**-rune, a mark apparently made at the planning or preparatory stage of the carving process (Pieper 1999:30-32). Pieper regards this mark as an error, while Nedoma (2004a:158) identifies it as

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an unintentional scratch. Marold, on the other hand, argues that since it was present at the planning stage, the designer of the inscription intended it to read **allurun** (Marold 2004:221). In this case, the prototheme of the name may be connected with the name-element **alu-*, for which there are several possible interpretations:

1. a reflex of PGmc **aluþ* "ale(?); protection(?)" (see <u>34. Heide</u> **alu**).

2. a variant of an underlying **alƀ-* < PIE **alb^h-* "white" (from which the "elf"-word, ON *alfr*, OE *ælf*, MLG *alf*, OHG *alb*, may also be derived (Kaufmann 1968:28-29; Orel 2003)). I have earlier argued against the plausibility of the notion that a reflex of PGmc **/β/* can be spelled **w** or **u** (see <u>28. Geltorf II</u>).

3. a variant of PGmc **alis-* "alder" (see <u>31. Hailfingen I</u> in §5.1), in a pattern comparable to *Sigu- ~ Sigis* < PGmc **seȝez/*seȝaz* (*s*-stem) > OHG *sigu* (*u*-stem) "victory" (see <u>51. München-Aubing I</u> in §5.1) (Kaufmann 1968:29).

The sequence **l̦ṭahu**/**elahu** is one of the most contentious aspects of the inscription, and the interpretation of the terminal **-u** remains uncertain. The following proposals appear in the literature:

1. **elahu** → *elahu(n)*, acc.pl. to a weakly inflected **elaho* = OHG *elahho* "elk, deer" (PGmc **elxaz/*elxōn* – see <u>89. Wremen</u>); or possibly an oblique form of a related pers.n. (masc. *Elahun* / fem. *Elahūn*) (Düwel 1993:10-11; 1994b:291; 1999b:47-49; Marold 2004:225-226; McKinnell et al. 2004:57). If we are dealing with an

oblique *n*-stem, the **u**-rune represents the vowel of the inflectional suffix (acc.sg./pl. masc. /-un/ or acc./gen./dat.sg. fem. /-ūn/), with the final /-n/ unrepresented. For further discussion, see §7.1.3.3.

2. <u>el</u>**ahu** → *elahu*, inst.sg. to an underlying *a*-stem (PGmc **elxaz*) with a sociative function "together with the deer (→ Christ?)" (Grønvik 2003:181-182). **u** → /ŭ/ < PGmc **/-ō/* (see interpretation 3, below).

3. <u>lṭ</u>**ahu**/<u>el</u>**ahu** is a compound with the second element *-ahu* < PGmc **axwō* (> Go *aƕa*, ON *á* "river"; OE *ēa*, OFris *ā ~ ē*, OS OHG *aha* "running water, stream") (Nedoma 1999b:106-108; 2004a:161; 2004b:347; Schwab 1999b:64-68). Nedoma identifies the suffix /-u/ as formally inst.sg. (< PGmc **/-ō/* (Ringe 2007:269)) with a locative function; Schwab analyses it as dat.sg. (and syntactically the dat. object of *gasōkun*), which amounts to the same thing: in the ō-declension of OHG and OS, the inst. case-ending (/-u/ < **/-ū/* < **/-ō/*) was transferred to the dat., replacing the reflexes of PGmc **/-ōi/* and making the cases indistinguishable (Prokosch 1939:234-236). Nedoma's interpretation of <u>lṭ</u>**-** and Schwab's of <u>el</u>**-** will discussed in §5.1; §6.1.

4. **ahu** → *ahus*, inst.sg. to a *u*-stem noun < PGmc **axuz* : Lat. *acumen* "point; sharpness of understanding; trickery" (< PIE **aḱ-*): *ahu*

gasōkun = "rejected/condemned with caution" (Seebold 1999:89).[40]
No such noun is attested anywhere in the Gmc languages. We do
have reflexes of *ak̂-* in, for example OE *awel* n. "awl" (< PGmc
axwalaz m.), but none – so far as I can tell – with a meaning
analogous to Lat. *acumen*. "With caution" seems to be the most
appropriate approach to Seebold's analysis.

5. **aŋiltahu** is a dat. FN *Angil-tahu*, with a deuterotheme < PGmc
    tanxuz (> OE *tōh*, MLG *ta ~ teie* "tough"; OHG *zāh* "hard, firm")
    (Wagner 1995:105; 1999a:93-95). The "cross-hatched" marks
    which Wagner treats as a triple bind-rune **aŋi** are generally regarded
    as decorative or other paratextual marks (see further §5.1).

6. **tahu** is a deadjectival adverb "vigorously" < PGmc *tanxu-* (see
    interpretation 5) (Looijenga 2003a:254-255), with the termination /-
    u/ a plausible precursor to the /-o/ which is normal for adverbs of
    this type in OHG (BR §267). I see no formal reason to object to
    this, though Looijenga does not offer any justification for the
    semantic shift "toughly, firmly" → "vigorously".

7. **hu·ga** → *huga*, acc.sg. to PGmc *xuʒiz/*xuʒuz* (> OHG *hugu* (*u*-
    stem); Go *hugs*, OIc *hugr*, OE *hyge*, OFris *hei*, OS *hugi* (*i*-stem)
    "mind, thought, sense, spirit"). No-one has seriously advanced this

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[40] Seebold reads the preceding signs **lt**, and treats them as Begriffsrunen *lagu-* "water, sea,
lake"; *tīwa-* "god". These are supposed to stand for a compound *lagu-tīwa-* "lake-god"
(1999:89).

interpretation; it is briefly mentioned and rejected by Düwel (1999b:46).

There are no objections to the interpretation of **gasokun** as *ga-sōkun* (: OHG **gi-suohun*, OS **ga-sōkun*), a 3.pl.pret. form of a verb cognate with Go *ga-sakan* "to scold, rebuke"; OHG *gi-sahhan* "to condemn, quarrel(?); fight(?)" < PGmc **ʒa-sakanan* (class VI). The semantic and syntactic properties of this verb are much debated in the literature (see catalogue entry for references).

The 3.pl.pret.ind. suffix /-un/ (< PGmc */-un/) is regularly spelled <-un> in OHG and OS. In OS it alternates with a (relatively uncommon) spelling <-on> (Gallée 1910 §382; Holthausen 1921 §415); in OHG, Notker has <-en> where other sources have <-un> (BR §304, §320).

62. Pforzen II ivory ring

[I] **?lụ?ụlgisali[**   [II] **]?ę̣:aodliþ:urait:runa**

We have no interpretations of the initial part of complex I except for a tentative suggestion of Düwel's (1999c:130), that it might be a palindromic ***luaul** representing *alu* (see 34. Heide). I know of no parallel palindromic representations of *alu*, though I suspect Düwel has in mind **sueus** (Kylver stone, KJ 1), the meaning of which is not clear (Krause 1966:14). One of the arrow-shafts from Nydam (KJ 19) has an inscription **lua**, which Krause (1966:51) unhesitatingly identifies as *alu*. As far as I am aware, no direct parallel for **aul** is attested.

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The sequence **urait:runa** is reliably interpretable as *wrait rūnă* "wrote a rune/an inscription/runes" (see 24. Freilaubersheim; 54. Neudingen-Baar II). Apart from the word-divider, the forms here are identical to those of the Neudingen-Baar witness.

64. †Rubring stone piece

[I] **ʔïndǫ?**   [II] **(?)r̥iŋ[(…)**   [III] **w(?)**

In Steinhauser's (1968a:5) interpretation, **dǫ?** = **doï** → *dōē* 3.sg.pres.opt. to PGmc **dōnan* (> OE *dōn*, OFris *dwa*, OS *dōan*, OHG *tuon* "to do, make"). On the termination **-ï**, see §3.2.2. As indicated in the earlier discussion, I do not believe this interpretation to be reliable.

Steinhauser reads complex III **wþ** and interprets it as an abbreviated formula **wīhi Þonar* "Consecrate, Þonar" (1968a:8; 1968b:1).

65. †Rügen stone piece

fgiu

Arntz (1973b:7-8) expands **giu** → *gi(b)u* 1.sg.pres.ind. "I give" (§3.1.1). In this interpretation (which I do not consider to be phonologically plausible – see 28. Geltorf II), **-u** represents the inflectional suffix /-ŭ/ < PGmc **/-ō/*.

66. Saint-Dizier sword pommel

ąlu

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In spite of its unusual context (on a sword pommel of Continental (or Kentish?) manufacture; see §4.2.1.2), I see no reason to distinguish this inscription from the numerous other witnesses to the "formulaic" sequence **alu**. (see 34. Heide; 38. Hüfingen I). Fischer (2007:107), following Elmevik (1999) favours the treatment of *alu* as a verb-form (see Heide entry).

67. Schretzheim I capsule

[I] **alaguþ:leuba:dẹḍun** [II] **arogị̣sd**

The treatment of **alaguþ** as a dithematic FN in *-gu(n)þ* < PGmc *ʒunþz/*ʒunþijō* "battle" (see 54. Neudingen-Baar II **bliþguþ**), with an unrepresented nasal (§2.5.2) is uncontroversial.

Likewise, there are no objections or alternatives in the literature to the interpretation of **dẹḍun** as *dĕ̌dun* 3.pl.pret. "made" (to a reflex of PGmc *đōnan*; see 64. †Rubring), with **u** representing the vowel of the suffix, /u/ < PGmc */u/. On the preterite stem of the "do"-verb, see §5.1.

In complex II, there is general agreement that **arogị̣s** is a MN equivalent to 45. Kirchheim/Teck II **arųgis**. If this is correct, the alternation **o ~ u** for etymologically the same element in the same context requires further discussion (see §4.2.5).

68. Schretzheim II fibula

[I] **siþwagadin**   [II] **leubo**

The interpretation of complex I as either a two-word phrase *si(n)þ
wag(j)a(n)dĭn*, or a compound with very similar meanings, is generally
accepted (Krause 1966:298; Looijenga 2003a:256; Nedoma 2004a:359, 411;
Opitz 1987:39). On **siþ**, see §5.1. *Wag(j)a(n)din* is interpreted as some form
or derivative of the present participle from PGmc *waʒjanan* (> Go *wagjan* "to
shake"; OE *wecgan* "to wag, move, shake"; OS *weggian*, OHG *weggen* "to
move"). Krause interprets the complex as a masc. dative of dedication, *sinþ
wagjandin* = "to the one [masc.] undertaking a journey"[41] (1966:298; also
Koch 1977:164). Looijenga treats *wagjandin* as "a compound of a pres. part.:
'travelling', and the fem. ending *-in* < *-injō*" (2003a:256). She translates this
compound as "female travelling companion", possibly in the sense "spouse".

In another variation of the theme, Nedoma interprets complex I as
si(n)þwag(g)a(n)dīn "because of the undertaking of a journey"[42] (2004a:359,
411). Here the element *-waggandīn* is a dat.sg.fem. (dat. of cause) deverbal *īn*-
stem noun (compare OHG *dauffīn* : Go *daupeins* "baptism", from *toufen* :
daupjan "to dip, immerse, baptise" (< PGmc *đaupjanan*)) (BR §§228-231).
The underlying verb, argues Nedoma, is not a regular reflex of *waʒjanan* (we
would expect a form retaining the semivowel /j/). This is a causative verb

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[41] "dem die Reise Betreibenden"

[42] "Wegen der Reisebetreibung"

derived from *weʒanan (> Go ga-wigan "to move, shake"; ON vega "to move, carry, lift, weigh"; OE wegan "to move, bear, carry"; OFris wegan "to weigh, bring"; OHG wegan "to move, weigh"), and Nedoma suggests that the elision of /-j-/ in waggandīn is a result of analogy from the base form wegan.

69. Schretzheim III spatha

(g)aba^{u}/$_{r}$

Among the diverse interpretations of the "rune-cross" is a suggestion that it should be read **uaba**, representing a weakly inflected pers.n. Wa(m)ba < PGmc *wamƀō (> Go wamba, ON vǫmb, OE wamb, OFris MLG wamme, OHG wambo "belly, womb" → "mother") (Nedoma 2004a:198). If this is correct, **u** represents a reflex of */w/ (compare 54. Neudingen-Baar II, 62. Pforzen II **urait**).

71. Sievern-A bracteate

ṛ̣ẉriḷu

This text is universally interpreted as PNorse r(ūnōz) wrītu "I write runes": wrītu 1.sg.pres.ind. to *wrītan (< PGmc *wrītanan; see 24. Freilaubersheim), with the suffix /-ŭ/ < PGmc */-ō/. This obviously depends on an assumption that ḷ is an erroneous or malformed **t**. Nowak (2003:537) comments that the **l** is quite clear (this is not evident from the photograph in Krause 1966, Taf. 58), and that the error must have been present in the model; it is not the case that

one twig has been obscured from an original **t**. Nowak adds that the distance

between **i** and **ḷ** is rather large, with enough room for an additional twig.

The classification of the inscription as PNorse is typological: the bracteates

in general are associated with Denmark; and this item is an A-type bracteate,

believed to be relatively early (Clavadetscher et al. 1984-1989:1,1:21-22;

Munksgaard 1978:341). A hypothetical Continental imitation with a WGmc

inscription would be more likely to belong to the more common B- or C-types.

On purely linguistic grounds, there is nothing in the text which is distinctly

non-WGmc; but it is only with caution that we can consider it admissible into

the present study.

72. Skodborg-B bracteate

aujaalawinaujaalawinaujaalawinjalawid

That **alawin** is a dithematic MN in *-win* < PGmc **weniz* "friend" (see 56.

Nordendorf I) is undisputed in the literature. The absence of an overt

inflectional suffix for **alawin** and **alawid** is taken by Antonsen (1975:76) as

evidence that the inscription is WGmc (although for the former we would

expect an overt suffix /-i/ even in WGmc – OE OFris *wine,* OHG OS *wini*). It

is elsewhere explained as a voc. form (Krause 1971:48-49; Stiles 1984:27-28)

or perhaps an indication of late PNorse apocope (Syrett 1994:66-67).

alawid appears to be another MN with a deuterotheme *-wīd*, the etymology

of which is unclear. Krause identifies it as a voc. form of PNorse **-wīdaz* (no

etymology given; on the zero suffix, see above) (Krause 1966:241; 1971:163;

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Stiles 1984:30), while Antonsen (1975:76-77) identifies it as a WGmc reflex of

a PGmc *weđiz > Go *ga-wadjōn* "to pledge, betroth"; MHG *wetten*, OE

weddian, OIc *veðja* "to pledge".

I find Antonsen's proto-form slightly puzzling in this case: he treats */-e-/

as the root vowel in PGmc, and the Go reflex as a form with ablaut, rather than

reconstructing a PGmc */-a-/ and deriving the MHG, OE and OIc cognates via

i-umlaut, which seems to me a more straightforward way of accounting for the

surface forms. Orel (2003) reconstructs for all of these verbs a proto-form

wađjōjanan, derived from the noun *wađjan* n. (> Go *wadi*, ON *veð*, OE

wedd, OFris *wed*, OS *weddi*, OHG *wetti* "pledge"). Aside from the lack of

corroborating evidence for "primary" *i*-umlaut of /a/ in the runic inscriptions

(§6.2), an umlaut-reflex of /a/ would give us an open or mid vowel which

could plausibly be represented as **e**, but not **i**.

According to Förstemann (1900:1562), the name-element *wid-* may have

any one of several etyma, and it is often not possible to distinguish which

underlies a particular case. These etyma are: (i) PGmc *weđanan* (> Go *ga-*

widan, OHG *wetan* "to bind"); (ii) PGmc *wiđuz* (> Go *widus*, OHG *witu*, OE

wudu "wood"); (iii) PGmc *wīđaz* (> ON *víðr*, OE OFris OS *wīd*, OHG *wīt*

"wide"); (iv) *Winid-, Wind-* (extension of *weni-* "friend", or connected to the

ethnonym *Wend* < PGmc *weneđaz*, and/or perhaps to the verb *wenđanan* (>

Go *us-windan* "to plait"; ON *vinda*, OE OS *windan*, OFris *winda*, OHG *wintan*

"to twist")) (Förstemann 1900:1617; Kaufmann 1968:406-408).

As another alternative, I would suggest that **jalawi** might be simply a fourth, abbreviated, repetition of *auja Alawin*, with the final symbol a paratextual marker, rather than a **d**-rune. It would make little sense to have a special symbol to mark the beginning and end of an inscription which consists simply of two words repeated; on the other hand, I note that the **d** is situated directly below the hanger of the bracteate and directly above the head of the figure depicted on it. All of this is circumstantial and speculative, but given the repetitive nature of the text and the suspicious similarity between the two names, we should not be too quick to dismiss it. For the more widely-accepted interpretations of **j**, see §5.1.

73. Skonager III-C bracteate

[I] **niuwila** [II] **lẉụ**

The consensus in the literature is that complex II contains an abbreviated form of the "formula-word" *laþu* (< PGmc **laþō* > Go *laþons*, ON *lǫ ð*, OE *laþu*, MHG *lat* "invitation") (Antonsen 1975:61; Krause 1966:253). If this is correct, **-u** represents the nom.sg. inflectional suffix < PGmc **/-ō/*. As has been mentioned in earlier discussion (§3.1.1), the majority view is that this inscription is PNorse; there is, however, nothing in the content which excludes the possibility that a Continental dialect is present: PGmc **laþō* would regularly produce OHG **lada*, OS **latha*.

75. Steindorf ṣax

?husị?alḍ??(?)

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That the legible part of the inscription consists of a dithematic MN *Hŭsibald* or *Hŭsiwald* is widely accepted, though it is not well supported (see below). The sequence **husi̧** is clearly legible and may represent a name-element either derived from PGmc **xūsan* (> Go *hus*, ON *hús*, OE OFris OS OHG *hūs* "house"); or cognate with OE *hyse* "young man, warrior" (the etymology of which is not clear – it has no known cognates in any of the other Gmc languages). Nedoma (2004a:336) favours the latter (for which he posits a proto-form **xusiz*) because the presence of a compositional vowel /-i-/ indicates that the preceding stem is short; if it were long, the expected form would be **Hūs-Ø-$^b/_w$ald* (Nedoma 2004a:336; compare Nedoma's comments on <u>47. Lauchheim I</u>). Bammesberger (1969:8-9) also raises the objection that the "house"-word is an *a*-stem, and a compound of this element with a compositional vowel /-i-/ would be unlikely.

If the first element is a reflex of **xusiz*, the further etymology of this proto-form is not clear. Bammesberger (1969:9) suggests a connection with OHG *hosa* f. "trousers" (< PGmc **xusōn*), though he does not seem convinced. Noting that OE *hyse* declines like an *a*-stem rather than an *i*-stem, and that its oblique forms have a geminate /-ss-/ (gen.sg. *hysses*, dat.sg. *hysse*, nom.pl. *hyssas* are attested), Bammesberger prefers to interpret it as a *ja*-stem (PGmc **xusjaz*). He does, however, acknowledge that in this case the nom.sg. *hyse* (vs. regular **hyss*) would be problematic (1969:10). I would add that the paradigm of the masc. *i*-stems is strongly influenced by that of the *a*-stems (compare OE *giest*, gen.sg. *giestes*, nom./acc.pl. *giestas ~ gieste* (Campbell

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1959 §600)). The alternation between short /-s-/ in the nom.sg. and geminate /-ss-/ in the oblique forms remains a problem whether we assign the word to the *i*- or the *ja*-declension. The OE material is quite consistent: a search of the DOE corpus produces only one instance of nom.pl. *hysas* (*Maldon* 123), and none of a nom.sg. **hyss(e)*.

Looijenga, reading **<u>hu</u>isi**, suggests a link with OHG (Bav.) *Huosi*, the name of a noble family mentioned in the *Lex Baiuvariorum*. She does not explain how **ui** relates to the OHG diphthong /uo/ < /ō/. In the OHG sources, diphthongal reflexes of */ō/ appear as <oa, ua, uo>, but not *<ui>.

The second part of the sequence is variously read as **-bald** or **-wald**, though neither reading is reliable. It is true that both *-bald* (PGmc **ƀalþaz/*ƀalđaz* > Go *balþaba* adv. "boldly, openly"; ON *ballr* "hard, stubborn"; OE *beald*, OS OHG *bald* "bold, brave") and *-wald* (PGmc **walđanan* > Go *waldan*, ON *valda*, OE *wealdan*, OFris *walda*, OS *waldan*, OHG *waltan* "to rule, govern, control, wield") are common name-elements, but given the doubtfulness of the reading and the presence of further (illegible) material after **ḏ**, I cannot support the assumption that one or the other is present here.

76. Stetten pin-head(?)

ạ̱m̱e̱lkuḍ ꟊ

The reading of this tiny inscription, if it is an intentional inscription at all rather than just a collection of incidental scratches (see catalogue entry), remains uncertain. Pieper (1990:7; 1993:81-82; Weis et al. 1991:313)

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interprets **ạmelkuḍ** as a FN *Amelku(n)d* (compare OHG *Amalgundis, Amalgunda, Amalgudis* (Förstemann 1900:93; Nedoma 2006a:137)), with a deuterotheme *-ku(n)d* < *gunþ* < PGmc *ʒunþz/*ʒunþijō* (see 54. Neudingen-Baar II **bliþguþ**). This interpretation invokes two sound changes in the consonant system (/g/ > /k/ via Second Consonant Shift; and *Spirantenschwächung* – see §2.4). On the prototheme *Amal-*, see §5.1.

78. †Trier serpentine object

[I] **wilsa**   [II] **wairwai**

This item is regarded as a forgery by the runological community, with the exception of Schneider (1980) (see catalogue, Appendix 2). While I wholeheartedly reject Schneider's interpretation (§3.2.1), we may nevertheless be able to salvage some linguistic sense from the text as he reads it.

Schneider identifies complex I as a 2.sg.imp. form of a denominal verb (OHG?) *willisōn* (structurally parallel to OHG *lustisōn* "to desire", *grimmisōn* "to rage), for which he proposes a meaning "to want with great intensity, to desire greatly, to long for" (1980:197).[43]

This form has two unusual features: firstly, Schneider explains the terminal **-a** (where we would expect **-o** for 2.sg.imp. *williso*) by suggesting that the carver analysed it as an open *ǫ* ([ɔ, ɒ]?) which would be confusible with a back *ą* ([ɑ]) and might therefore be transliterated **-a**. Whether this *ad hoc*

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[43] My translation is not exact – Schneider's German reads "wiederholt intensiv wollen, heftig verlangen, begehren".

explanation is correct or not, it is true that unstressed /o/ can appear as <a> in both OHG and OS (with respect to the class 2 weak verbs, see BR §312; Gallée 1910 §379 Anm. 9; Holthausen 1921 §§463-464. I am not, though, aware of any 2.sg.imp. forms in <-a>). There is no supporting evidence for this conjecture (§4.2.3.2).

Secondly, Schneider explains the syncope of /-i-/ as a natural process in rapid speech. Again, this is not unreasonable in itself: *williso* does not fit any of the conditions for the syncope of medial vowels in OHG (BR §§62-68), but deletion of an unstressed medial vowel following a long stem-syllable appears to be more widespread in OS (Gallée 1910 §138; Holthausen 1921 §137). Schneider does not, however, offer any linguistic evidence to support his hypothesis; he simply alludes in vague and general fashion to the "naturalness" of syncope.

An alternative, and more straightforward, interpretation might be derivable from a slightly different reading. The symbol which Schneider transliterates **s** is an unusual form �ↄ, which he sees as an asymmetrical variant of ꜱ (a form of **s** common in Scandinavian inscriptions, although – according to Parsons (1999:31) – the vertical version is a relatively late variant. The only known witness to this form of **s** on the Continent is <u>62. Pforzen II</u>). On the other hand, this sign is also similar to a known variant of **j** (e.g., in the fuþark on <u>16. Charnay</u>) (Arntz and Zeiss 1939:182; Arntz 1944:68). The Charnay **j** is symmetrical, and formally a mirror-image of ꜱ; if the Trier rune is **j**, it is still a

peculiar form. Nevertheless, I maintain that this reading is no less plausible

than Schneider's.

If a reading **wilja** is allowable, this could represent a weakly inflected FN

Wil(l)ja, which appears quite frequently as OHG *Wilia, Wila, Willa*

(Förstemann 1900:1592). Förstemann connects this and similar pers.ns. with

Go *wilja* m."will, desire" (: ON *vili*, OE OFris *willa*, OS *willio*, OHG *willo* <

PGmc *weljōn*).

Schneider divides complex II into two words, *wair wai*, which are discussed

in §3.2.1. In both of them, **w** is taken to be a reflex of PGmc */w/.

80. Weimar II fibula

[I] **si**^g/**n (…)**   [II] **bubo:**   [III] **hiba:**

Complex II is interpreted throughout the literature as a weakly inflected MN

equivalent to OHG *Bubo, Pupo*. Förstemann (1900:318; also Kaufmann

1968:64) identifies this with OHG *Bōbo ~ Buobo*, a name-element attested in

two other inscriptions (8. Bad Krozingen A **boba** f.; 14. Borgharen **bobo**).

Förstemann's account is widely accepted (e.g., by Arntz and Zeiss 1939:369;

Krause 1966:289). Nedoma, however, argues that **u** here cannot plausibly

represent /ō/, or any stage in the diphthongisation process /ō/ > OHG /uo/

(§2.3.2.3). Instead, he suggests that *Bŭbo* is a lall-name, either abbreviated

from a name with a stem in *Bŭ°*, or perhaps an imitative or meaningless

sequence of sound (Nedoma 2004a:259-260).

81. Weimar III buckle

[I] **ida:bịgina:hahwar**   [II] **:awimund:isd:ḷẹoḅ**   [III] **idun^i/**.

In complex I, **hahwar** is interpreted uncontroversially as a dithematic MN. The identity of the prototheme is uncertain (see §3.3.2; §6.1). The deuterotheme is thought to be associated with PGmc *waraz* (> Go *wars*, ON *varr*, OE *wær*, OS *war*, OHG *gi-war* "wary, aware, careful") (Arntz and Zeiss 1939:373; Krause 1966:289; Looijenga 2003a:261). Nedoma, however, notes (2004a:317-321) that for names in -*war*, it is difficult to distinguish between a short stem < *waraz* and a long stem < PGmc *wēraz* (> Burg. *wers*, OFris *wēr*, OS OHG *wār* "true") (see also Förstemann 1900:1531-1537). In either case, **w** represents a reflex of PGmc */w/.

All commentators interpret **awimund** as another dithematic MN, with a prototheme *Awi-* < PGmc *aujan* "luck(?)" (§3.3.1), and a deuterotheme -*mund* < PGmc *mundō* (see <u>4. Arlon **rasuᵤamụd**</u>).

Complex III is believed to contain an oblique form of the FN *Ida* (see §5.1). Formally speaking, *Idūn* could have any oblique case; in the context of what has gone before, it is usually interpreted as dative, although Arntz offers a genitive interpretation (Arntz and Zeiss 1939:375). For further discussion, see §7.1.2.3.

82. Weimar IV bead

ᵇ/ᵂiuᵇ/ᵂ:ida:?e????a:hahwar:

Several interpretations of the sequence $^{\text{þ}}/_{\text{w}}$iu$^{\text{þ}}/_{\text{w}}$ are available (§3.1.1). Judging from the available photographs, I consider **wiuþ** to be the most attractive reading. Arntz' interpretation (as a 3.du. verb-form *wīhjuþ* "they (two) consecrate") cannot be correct, however: the dual is not preserved in the verbal systems of any Gmc language other than Gothic, and here only for 1st and 2nd person (Lehmann 2005-2007 §3.8; Prokosch 1939:210-212; Wright 1954 §284). There are, as far as I am aware, no parallels in the runic corpus either on the Continent or elsewhere. There is, moreover, no evidence for the preservation of the 3.du. in PGmc (Lehmann 2005-2007 §3.8; Ringe 2006:171). We might attempt to treat **wiu** as a 1.sg.pres.ind. form of the same verb, *wī(h)(i)u* (compare Nebenstedt I-B bracteate (IK 128; KJ 133) **uïu**; Vimose buckle (KJ 24) **wija**).

Looijenga's interpretation, **þiuw** → *þiuw* "servant", is unproblematic; however, the text as a whole is too poorly preserved for a complete interpretation to be possible. If Looijenga's hypothesis is correct, then **iu** here represents a diphthong /iu/ arising from contraction of *þeww- < *þeȝw-, while **w** represents a simple reflex of PGmc */w/.

83. Weingarten I fibula

[I] **a$^{\text{li}}/_{\text{e}}$rguþ:?(?)**   [II] **feha: writ?...$^{\text{i}}/_{\text{l}}$a**

Complex I is interpreted throughout the literature (with one exception - see below) as a dithematic nom. FN with the second element *-gu(n)þ* < PGmc

*ȝunþz/*ȝunþijō* "battle" (see <u>54. Neudingen-Baar II</u> **bliþguþ**). On the

prototheme, see §3.2.1; §5.1.

Jänichen (Arntz and Jänichen 1957:127) sees a direct parallel between

alirguþ (as he reads it) and <u>67. Schretzheim I</u> **alaguþ**. He interprets the

second element of the name not as *-gu(n)þ* but as "god", by reference to Go

guþ, which is a reflex of PGmc *ȝuđz/*ȝuđaz* (> OE OFris OS *god*, OHG *got*).

Unless the inscription is EGmc, this is implausible: the final /-θ/ of *guþ* results

from a devoicing process peculiar to Gothic (Wright 1954 §172) and

dependent on the preservation of a fricative reflex of PGmc */ð/. In all of the

WGmc dialects, this phoneme consistently develops into a plosive /d/, and

there is no evidence in the runic corpus to support the notion that the

inscriptions predate this development. Jänichen's claim that "magical

formulae, once they have been fixed in writing, could remain preserved in an

unchanged form for centuries"[44] (Arntz and Jänichen 1957:127) is therefore

irrelevant, since *guþ* is not a possible archaism.

writ?...[i]/**ıa** in complex II appears to contain the present stem of the verb "to

write/carve" (< PGmc *wrītanan*; see <u>24. Freilaubersheim</u>; <u>71. Sievern</u>).

Unfortunately, the following runes which would give us the inflectional ending

are not clear. Opitz (1987:200) reads **writ**ₓ**la**, which Schwab (1998a:418;

1999a:14) and Beck (2001:315-316) interpret as *wrīt(u) al(u)* "I write/carve

_____

[44] "magische Formeln, wenn sie einmal schriftlich fixiert waren, jahrhundertelang

unverändert erhalten bleiben konnten"

alu (protection)" (see 34. Heide). Bammesberger (2002:120) proposes a similar reading **writ[i]la** representing a fem. *nomen agentis* "(female) carver"; compare Nedoma's interpretations of 15. Bülach **fridil** and 61. Pforzen I **aigil** (both masc.), in §5.1. I note that OHG *rīzil* m. "circle" appears to have a similar structure (but a very different sense development). This interpretation will be discussed further in §7.2.3.3.

Nedoma (2004a:177) speculates that the correct reading might be **writi̡[d]** → *wrītid* 3.sg.pres. "carves" (OS *rītid*, OHG *rīzit* < PGmc **wrītiđi* (Ringe 2006:237)/**wrīteþ* (Lehmann 2005-2007 §3.8)).

A further possibility mentioned by Nedoma (*ibid.*) is that the rune transliterated as ⁱ/ı might actually be **r**, in which case we should perhaps read **ra** → *r(ūn)ā* acc.pl. "runes" (compare 71. Sievern **ṛẉriḷu**). The formula "NN carved runes", with a pret. form of the verb, is attested several times (Freilaubersheim, Neudingen-Baar II, Pforzen II, as mentioned above). Nedoma freely admits that this is pure speculation.

85. †**Weser I bone**

[I] **latam(ŋ)hari**   [II] **kunni(ŋ)?e**   [III] **hagal**

The sequence **kunni** at the beginning of complex II is accepted throughout the literature (leaving aside Schneider's interpretation as a reference to the genitals of a sacrificial bull (Schneider 1969)) as nom./acc.sg. *kunni* < PGmc **kunjan* n. (> Go *kuni* "clan, tribe, race, generation"; ON *kyn*, OE *cyn(n)*, OFris *kinn* ~ *kenn*, OS OHG *kunni* "kin, kind"). This is a common name-element (Förstemann 1900:378-383).

The penultimate sign in this complex, which most sources (Antonsen 2002:318; Looijenga 2003a:267; Opitz 1987:55; Pieper 1987; 1989 *passim*; 1991; Seebold 1991:501) transliterate as **w**, resembles a Roman Y. Nedoma (2004a:326) states categorically that the sign cannot be either **w** or, as was suggested in some of the early literature, **k**. There are no known parallels: similar forms appear on the Denmark VII-C bracteate (IK 197), but these cannot be transliterated satisfactorily (Nowak 2003:558). The possibility that it is a **z**-rune cannot be ruled out on formal grounds – Pieper (1989:79) notes that there are indications of a full stave in the "pre-carving" stage of production, though not in the final carving – but a **z** reading would make no linguistic sense.

If this sign is to be transliterated **w**, it is subject to several interpretations: (i) part of a pers.n. or theonym *Ingwe* (in gen. case?) (Pieper 1987:238; 1989:156-158; 1991:356-357); (ii) the interjection *wē* "woe" or the related noun (Holthausen 1931:304; Pieper 1987:235-236) (see §3.2.2); (iii) an enclitic particle "and" < PGmc **xwe* (Orel gives the proto-form **uxwe* > Go -*uh* : Lat. *-que*) (Seebold 1991:502).

86. †Weser II bone

lokom : her

Pieper (1987:236; 1989:182) follows the interpretation proposed by earlier commentators (*inter alios*, Holthausen 1931:305), and treats **lokom** as *lōkŏm*, 1.sg.pres.ind. or 1.pl.pres.ind./opt. to a verb "look" (PGmc **lōkōjanan* > OE

lōcian, OS *lōkon* "to look"). The interpretation of this form as 1.pl.pres.opt. might be vulnerable to the same objection as in the case of 85. Weser I **latam** (§3.2.2); on the other hand, the later Continental sources have in the second class of weak verbs a variant suffix OHG /-ōm/, OS /-on/, alongside the more regular OHG /-ōēm/, OS /-oian/ (< PGmc */-ō-aima/) (BR §304; Gallée 1910 §§375-376; Holthausen 1921 §§463-464).

Another possibility (Ellmers 1994:127-128) is that the verb underlying **lokom** is PGmc **lukkōjanan* (> ON *lokka* OHG *lockōn* "to entice"; OE *ge-loccian* "to stroke gently"). Nedoma (2004a:326) argues against this: given that a geminate consonant is represented by a double rune in **kunni**, we would expect **lokk-** here. I am not sure that we can rely on the carver to be so consistent; Nedoma's criticism is valid, but not compelling.

87. †**Weser III bone**

ulu:hari dede

Pieper (1987:240; 1989:182-183) regards **ulu:hari** as a dithematic MN *Uluhari*. A sequence **hariuha** on the Sjælland II bracteate (IK 98; KJ 127) may represent a MN *Hariūha* with the same elements in reverse order. Pieper suggests that *Ulu-* might be connected with OHG *ūla ~ ūwila* "owl" (PGmc **uwwalōn* f. > ON *úgla*, OE *ūle*, OHG *ūwila*), referring to the similar interpretation of Sjælland **hariuha**. Müller (1970:74-75), cited by Pieper (1987:240) in support of this interpretation, does not in fact regard it as credible. Nedoma, too, objects on the grounds that *Uluhari* is phonologically

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irregular: PGmc *uwwala-xarja- would regularly produce pre-OS *Ūwala-hari. Even if the contraction *uwwala- > *ūwala- >*ūla- is acceptable in a 5th century text (which Nedoma does not believe to be the case), the compositional vowel would be /-a-/, not /-u-/ (Nedoma 2004a:329). He speculates (tentatively) that **ulu:** could be the end of a word, the earlier part having been obscured by wear; and that **hari** → hari "army" (§5.1).

As another possibility, Pieper (1989:182) proposes a connection between Ulu- and the theonym ON Ullr < PGmc *wulþuz (> Go wulþus "splendour"; possibly also OE wuldor "glory" (de Vries 1961; Holthausen 1931:305)). This again is phonologically problematic: ON Ullr has undergone deletion of initial /w-/ before a rounded vowel and assimilation in the consonant cluster /-lþ-/, both of which are distinctively ON developments (Noreen 1923 §275; Prokosch 1939:89, 91). A regular OS reflex of *wulþuz would be *wulþ-Ø (: OHG *wuld-Ø), and the Weser text ought therefore to be ***wulþ:hari** (or ***wulþu:hari**, if the thematic vowel is preserved after a long stem at this early date).

Pieper comments that the name-form *Inghari has attested parallels with an overt compositional vowel, e.g., Inguheri (1989:183). This argument seems to me to rely on circular reasoning through its reference to the form **iŋhari**, which is attested only on Weser I, and is only plausible if the ⋇-like mark is a **ŋ**-rune (see entry on 85. [†]Weser I in §5.1).

88. Wijnaldum B pendant

hiwi

Düwel interprets **hiwi** as a FN *Hīwi* (§3.1.1). If this is correct, **w** represents a reflex of PGmc */w/. On the interpretation of the terminal **-i**, see §3.2.2.

89. Wremen footstool

   [I] **ksamella**   [II] **lguskaþi**

Most commentators transcribe **lgu** as *(a)lgu* < PGmc **alʒiz/*elxaz/*elxōn* (> ON *elgr*, OE *eolh*, OHG *elah(h)o* "elk"). Düwel proposes a meaning "deer" rather than "elk", in order to link the inscription to the hunting scene depicted on the stool (Düwel 1994d:15. See also Looijenga 2003a:240-241; Marold in Schön et al. 2006:324-325). If this is correct, the presence of a compositional **-u-** demands explanation. All of the attested WGmc forms belong to the *a-* or *n*-declensions, and the ON form to the *i*-declension. Marold offers several possible solutions (while acknowledging that none of them is satisfactory): **-u-** could represent (i) a nom.sg.masc. *n*-stem suffix /-u/(?) (compare OHG OS /-o/); (ii) an irregular variant perhaps motivated by the process of compounding (if the whole complex is a compound *alguskaþi*); or (iii) a secondary epenthetic glide (presumably added to a base **alg-Ø-*) (Schön et al. 2006:325-326).

Nedoma suggests that **-u-** represents a reflex of thematic */-i-/ which has undergone reduction in unstressed position to a close-mid central vowel [ə] (Nedoma transcribes this *ǝ*) (Theune-Großkopf and Nedoma 2006:57-58). Several pers.ns. or nouns with an anomalous medial or final **u** appear in Frisian runic inscriptions, e.g., **adujislu, jisuhidu** (Westeremden weaving-slay, AZ

37; L IX.12). It has been proposed that these runes represent a "murmur"-vowel (*Murmelvokal*), a reduced reflex of thematic */-a-/ (Düwel and Tempel 1968/1970:363-368; Insley in Blackburn 1991:172-174; Nielsen 1991a:300-302). Nedoma argues that these and Wremen **lgu-** are conservative forms preserved in a period when compositional vowels are regularly deleted after long syllables – compare, e.g., 26. Friedberg **þuruþhild** → **þurūþ-Ø-* < **þrūþ-i-*. Marold (Schön et al. 2006:326) makes a similar suggestion; for further comments, see §5.2.1.2.

Another possibility is that **lgu** might represent a reflex of PGmc **laȝuz* (> ON *lǫgr* "sea, lake"; OE *lagu* "sea, water"; OS *lagu-strōm* "sea current" (: Lat *lacus*, OIr *loch* "lake")). This is mentioned by Looijenga (2003a:240), but she does not explore it further. If it is correct, **u** represents the thematic vowel, regularly preserved after a short stem-syllable. On the other hand, the possible meanings of a compound "lake-harmer", "lake-harming", or an imperative "harm the lake", are obscure. *Lagu-* could be a name-element (compare Illerup shield-grip III (L V.3) **laguþewa**), although in this case it is probably connected with ON *lǫg* (neut.pl.) "law" (< PGmc **laȝan*) (Förstemann 1900:995; see also Pons Sanz 2007:50, 69). Of the various *Lag-* names listed by Förstemann, none has a compositional vowel /-u-/.

90. Wurmlingen spearhead

?:dorih

dorih is generally interpreted as a dithematic MN *Dōrrīh*, with a deuterotheme *-rīh* < *-rīk* via Second Consonant Shift (or possibly "pseudo-Consonant Shift" – see §2.4.1). On the etymology of *-rīk*, see <u>8. Bad Krozingen A</u> **agirike** in §5.1.

A name-element *Dor-* ~ *Tor-* is well attested in OHG sources, but its etymology remains uncertain (Düwel 1981b:157-158 n.214). It cannot be cognate with the ON theonym *Þórr*, as this is a product of a nasal assimilation which does not occur in the WGmc dialects (PGmc **þunraz* > ON *Þórr* : OHG *Donar*, OE *Þunor*). Düwel suggests a connection with ON *þora* "to dare" (< PGmc **þurēnan*), *þorinn* "brave". I see two reasons for caution in accepting this etymology: firstly, for **dorih** to contain a reflex of **þur-*, it must be a product of *Spirantenschwächung* (§2.4.2), which is uncertain, even if we accept that *-rīh* is a product of the Consonant Shift. Secondly, the alternant *Tor-* in OHG parallels suggests an underlying PGmc **/ð-/*, not **/θ-/*.

Nedoma infers from the absence of a compositional vowel that the element must have a long stem, i.e., *Dōr-Ø-rīh*. As parallels he cites OHG *Toro, Dorolf*, OS *Torolf*; but no forms with OHG diphthongal /-uo-/, an observation which would appear to indicate a short vowel. Looking further afield, Nedoma suggests a parallel in ON *Dóri* (*Vǫluspá* 15), which is probably related to Ic *dór* "gimlet; aglet"; Norw *dor* "short steel bolt, sinker" (de Vries 1961). Nedoma notes that a modG noun in the same semantic field, *Stift* m. "pin, peg, pen", has in colloquial usage a transferred meaning "small boy" (Nedoma 2004a:283-284). According to Kluge (2002), this usage is not attested before the 17th century.

Steinhauser (1968b:18-19) sees in **dorih** a phrase *dō rīh* "make rich/powerful"; *dō* is 2.sg.imp. < PGmc **đō* (> OHG *tuo*), to **đōnan* (see 64. †Rubring **dǫ?**). Opitz (1987:247 n.3) objects that Steinhauser assumes the presence of shifted /k/ in *-rīh*, but unshifted /d/ in the imperative *dō* (: OHG *tō* > *tuo*). This criticism involves assumptions about the chronology of the Consonant Shift which do not appear well substantiated: according to Braune (BR §88 Anm. 1), the St. Gallen witnesses show vacillation between unshifted /d/ and shifted /t/ in the 8th century; we cannot safely assume that the voiced and voiceless plosives underwent the shift concurrently. Moreover, in some OHG dialects (MFrk, RFrk), /k/ is subject to the shift, but /d/ is not. Wurmlingen is in UG dialect territory, but it is far from impossible that the spearhead could have been an import from further north. I note also that Opitz readily accepts an interpretation of 60. Osthofen: **d?ḥ** → *dih*, with shifted /h/ < /k/ (note that Opitz does not invoke "pseudo-Consonant Shift" here (§2.4.1)), and **dǫfịle** → *deofile*, with unshifted /d/ (see entry in §5.1).

For our present purposes, none of the proposed interpretations is entirely satisfactory. If **dorih** is a pers.n., the later forms in *Dor-* ~ *Tor-* suggest an underlying */dur-/ or */dōr-/. If the stem-vowel is short, then we have an anomaly in the absence of a compositional vowel; but if it is long, then the element appears to be distinct from *Dor-*, which does not produce diphthongised forms **Duor-* ~ **Tuor-*. These uncertainties lead me to wonder

whether the interpretation of **rih** as *-rīh* < *-rīk* can be considered reliable (see §5.1).

4.2 Summary

4.2.1 Reflexes of */u/

4.2.1.1 Stressed/stem syllables

Several of the pers.ns. in the corpus contain elements for which we have plausible etymologies both with long and with short back stem-vowels: <u>4. Arlon</u> **goduṇ** (PGmc **ʒuđ(a)- / *ʒōđa-*); <u>10. Beuchte</u> **buirso** (PGmc **ƀūra- / *ƀuri-*); <u>11. Bezenye I</u> **goda-** (PGmc **ʒuđ(a)- / *ʒōđa-*); <u>60. Osthofen</u> **go?** (if read as **goḍ**) (PGmc **ʒuđ(a)- / *ʒōđa-*); <u>75. Steindorf</u> **husị-** (PGmc **xūsa- / *xusi-/*xusja-*); <u>80. Weimar II</u> **bubo** (PGmc **ƀōƀōn* (§4.2.3.1) / lall-name **bŭ-*); <u>90. Wurmlingen</u> **dorih** (etymologies uncertain – see entry in §4.1).

There are 11 cases where we can be reasonably sure that we are dealing with a reflex of PGmc short */u/:

Item	Sequence	PGmc etymon (Orel 2003)	Regular (expected) allophone	Transliteration
<u>4. Arlon</u>	**rasuw̭aṃụd**	**munđuz*(?)	[u]	**u**
<u>12. Bezenye II</u>	**arsiƀoda**	**ƀuđōn*	[o]	**o**
<u>54. Neudingen-Baar II</u>	**bliþguþ**	**ʒunþz/*ʒunþijō*	[u]	**u**
<u>56. Nordendorf I</u>	**wigᶦ/ᵤþonar**	**þunraz*	[o]	**o**
<u>58. Oberflacht</u>	**duḷþ**	**đulþiz*	[u]	**u**
<u>67. Schretzheim I</u>	**alaguþ**	**ʒunþz/*ʒunþijō*	[u]	**u**

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81. Weimar III	**awimund**	**munðō*	[u]	**u**
83. Weingarten I	**aᶒrguþ**	**ȝunþz/*ȝunþijō*	[u]	**u**
85. †Weser I	**kunni**	**kunjan*	[u]	**u**

None of these forms is unexpected, and all of them conform with the reflexes in OHG and OS (*munt, mund; boto, bodo; gund-, gūth-; donar, thunar; tuld ~ tult ~ dult* (unattested in OS)*; kunni, kunni*). Given the limited amount of data and the tendency for OHG and OS to preserve the inherited forms /u o/ after phonologisation (§2.3.2.1), we should not infer that the reflexes of PGmc *[u o] are still allophones rather than fully developed phonemes.

Arlon **goduṇ** (perhaps also **(?)ᶙlọ**) and Weimar II **bubo** might be counter-examples, if their stem-vowels are short (regular forms would be ***gudun, *bobo**). If **goduṇ** represents an oblique *Gŏdūn*, the appearance of **o** might be a result of analogy from the nom. *Gŏda* (compare OHG OS inst.sg. *goldu* (≠ **guldu*) ← nom. *gold*). We cannot account for **bubo** in the same way: it might simply be an erroneous form of an underlying *Bŏbo*.

Several more sequences which may contain reflexes of **/u/ (although their interpretation is less reliable than those listed above) are: Bad Ems **ubadạ** → *u(m)b(i/a)-*; Bezenye I **uṇj̇ạ** → *(w)un(n)ja*; Eichstetten **munị̇**; Griesheim **ḳoḷo** → *Kolo*. All of these show the expected forms.

One further phenomenon to consider is the interpretation of **ui** in Beuchte **buirso** as an *i*-umlaut reflex of */u/ or */ū/. While I am inclined to be more cautious than Nedoma about rejecting it, I would like to raise two points against the umlaut interpretation: firstly, the digraph **ui** is unique in the corpus. Syrett cites "sparse but clear evidence … for the use of digraphs of this nature to represent vowels to whose value no rune corresponded" (1994:183); but none of the examples he adduces involves an umlaut allophone of /u/ or /ū/.[45]

Secondly, reflexes of */u/ and */ū/ followed by a potentially umlaut-triggering /i ī j/ are invariably represented as **u** elsewhere in the corpus: 11. Bezenye I **uṇḭạ**; 20. Eichstetten **muni**; 26. Friedberg **þuruþhild**; 30. Griesheim **ạg̣iḷaþruþ** (→ *-þrūþ-Ø < *-þrūþiz/*-þrūþijō*); 75. Steindorf **husị?alḍ**; 85. †Weser I **kunni**.

4.2.1.2 Unstressed syllables

One significant group within this category consists of the **alu**-inscriptions (34. Heide; 38. Hüfingen I; 66. Saint-Dizier).[46] The "formula-word" *alu* presents us with a problem: on the one hand, its frequency in Scandinavian

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[45] I might add that Syrett's own discussion of these examples (primarily of the 3.sg.pret.ind. suffix attested on the Nøvling fibula (KJ 13a) **talgidai** in comparison to the Udby fibula (Stoklund 1990; 1991) **talgida**) indicates that the evidence is not quite as clear as he would have us believe (Syrett 1994:246-255).

[46] I have omitted 61. Pforzen I from this commentary. If we accept the reading **allu-** (which is contentious), then we are dealing with an element in a dithematic pers.n., not with the "formula-word" *alu*.

inscriptions suggests that the few examples in our study area are either imports from Scandinavia (Heide), or are inspired by the Scandinavian tradition (Hüfingen). The Saint-Dizier sword pommel belongs to the "Bifrons-Gilton" type. There is some disagreement about whether this type originates in Kent or Gaul, but it it is certainly not Scandinavian (Fischer 2007:15-21; Fischer and Soulat forthc.:75; Hawkes and Page 1967:19). This need not imply that the inscription belongs to the Continental rather than the Scandinavian tradition, but the object at least is not an import.

From a linguistic point of view, if *alu* is the "ale"-word, then an OHG/OS cognate of PNorse *alu*, OE *ealu* ought regularly to have the shape **alu*. OS *alu-/alo-* and OHG *elo-* are attested in compounds, e.g., OS *alo-fat*, OHG *elo-faz* "ale-vat" (Köbler 1993; 2000).

Aside from the **alu**-inscriptions, in only two cases can we be confident that we are dealing with a reflex of unstressed */u/: Pforzen I **gasokun** and Schretzheim I **dẹḍun**. Both of these involve the 3.pl.pret. verbal suffix < PGmc */-un/. Neither example is without its difficulties: while there is general agreement about the identity and morphology of the verb represented by **gasokun**, its syntactic properties and its meaning in the Pforzen inscription are disputed. If the accepted interpretation of Schretzheim **dẹḍun** as *dedun* (: OS *dedun*, vs. OHG *tātun* < **đēđun*) is correct, then the irregular stem-vowel requires some explanation (see §5.2.2.2).

Three inscriptions may contain short back vowels as compositional elements: Lauchheim I **aoṇofada**; Nordendorf I **wig^i/$_u$þonar**; Wremen **lguskaþi**. Nordendorf **-u-** is an uncertain reading (the alternative **i** being more widely accepted), with several possible interpretations; and Lauchheim **-o-** can be interpreted as a weak inflectional suffix (see §7.1.3.1). Wremen **-u-** has several competing interpretations (§4.1; §5.2.1.2; §7.1.3.2), but it may plausibly represent the thematic vowel of an underlying *u*-stem.

4.2.2 Anaptyctic vowels

We have 5 plausible examples of an anaptyctic back vowel: 4. Arlon **rasuẇaṃụd**; 12. Bezenye II **seǥun**; 26. Friedberg **þuruþhild**; 54. Neudingen-Baar II **imuba**; and 56. Nordendorf I **logaþore** (if we accept the derivation from a proto-form *luȝa-þra-*). 4 of them appear as **u** (the exception being **logaþore**). **þuruþhild** and **logaþore** involve a context appropriate for anaptyxis 1 (CR > CVR, the common WGmc type). Arlon **rasuẇaṃụd** is the only one which meets the criteria for type 2 (/-sw-/), while **imuba** does not conform to any of the contexts for anaptyxis described in §2.3.5; no parallels for anaptyxis in the context /mb/ (or /mp/) are recorded by Reutercrona (1920).

seǥun is a special case, since it represents a Latin loanword. The epenthetic vowel here does not harmonise with the stem-vowel. However, OHG *segan* does appear to show anaptyxis of type 1 (CR > CVR), and has parallels with Gmc etyma (e.g., *degan* "warrior" < PGmc *þeȝnaz*; *regan* "rain" < *reȝnan/*reȝnaz*); so we are probably safe in assuming that this interpretation of **seǥun** is correct (at least in respect of the phonology).

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4.2.3 Reflexes of */ō/

4.2.3.1 Stressed syllables

The first observation we can make about reflexes of PGmc */ō/ is that the corpus contains no digraphs which might indicate incipient diphthongisation. It is conceivable that the lowering of the second mora ([ō] > [oɔ] > [oɑ]) is underway (see §2.3.2.3), but that carvers did not feel that the phonetic difference was sufficient to require orthographic representation as anything other than a single **o**.

Our reliable examples for this phoneme are <u>1. Aalen</u> **noru**; <u>8. Bad Krozingen A</u> **boba**; <u>15. Borgharen</u> **bobo**; <u>24. Freilaubersheim</u> **boso**; <u>56. Nordendorf I</u> **wodan** (and its parallels, <u>3. [†]Arguel</u> **wodan** and <u>42. [†]Kärlich wodanị</u>, if these are genuine); <u>61. Pforzen I</u> **gasokun** (notwithstanding the semantic difficulties it presents); <u>86. [†]Weser II</u> **lokom**. To this list we may cautiously add Freilaubersheim **goḷịda**, although its interpretation is by no means certain.

The pers.ns. *Nōru*, *Bōba / Bōbo*, and *Bōso* are considered reliable because they have OHG parallels with a diphthong /-uo-/. If, in spite of Nedoma's reservations, Weimar II **bubo** does represent the same name as **bobo**, then it would be unique in representing a reflex of PGmc stressed */ō/ as **u**. This could be an idiosyncratic or erroneous spelling, but its explanation as a representation of /ŭ/ looks more promising in the light of its uniqueness.

4.2.3.2 Unstressed syllables

The corpus contains a number of sequences with terminal **-u** interpreted as one or another of several inflectional suffixes /-ŭ/ < PGmc */-ō/. Some of these are believed to be nom.sg. or dat.sg. *ō*-stem nouns or pers.ns. (1. Aalen **noru**; 9. Balingen **amilu**; 22. Erpfting **gabu**; possibly 53. Neudingen-Baar I **uḍịm**, **midu**; possibly 73. Skonager III **lþụ**). These are dealt with in the discussion of the *ō*-stems in §7.2.1.

A gen.sg. *ō*-stem suffix (/-ằ/ < PGmc */-ōz/) may be present in 12. Bezenye II **arsiḅoda**, if Nedoma's interpretation is correct.

The 1.sg.pres.ind. strong verbal suffix < */-ō/ may be present in 71. Sievern **wṛilu** and in the **alu**-inscriptions (§4.2.1.2). Another possible case is 65. [†]Rügen **giu**, if the inscription is genuine, and if Arntz' interpretation is valid (which I do not believe to be the case).

Given that this suffix appears as /-u/ in both OHG and OS, a spelling **-u** in the runic inscriptions is unsurprising. Unfortunately, though, we cannot be certain that any of our witnesses is WGmc: the Sievern bracteate is probably an import from Scandinavia, and the **alu**-inscriptions are likely to be either imports or imitations of Scandinavian models. If we are dealing with a 1.sg.pres.ind. verbal suffix, it is likely that these data are witnesses to PNorse /-u/ < */-ō/ (§2.3.2.3; Krause 1971:88; Syrett 1994:237-238).

The medial **u** of 45. Kirchheim/Teck II **arụgis** and 89. Wremen **lguskaþi**, and the **o** of 67. Schretzheim I **arogịs**, might represent the stem-formant of a weak masc. (< PGmc */-an-/ or */-ōn-/) (§7.1). On Nedoma's interpretation of Wremen **-u-** as representing a reflex of PGmc */i/, see §5.2.1.2. For

arᶙgis/arogįs, I consider **arwaz* "ready" a more plausible etymon than **arōn*
"eagle"; if this is the case, **ᶙ** and **o** represent reflexes of */w/ (§4.2.5).

Further examples of **u** representing a reflex of unstressed PGmc */ō/ are in
the sequences interpreted as oblique forms of weak feminines: 4. Arlon
goduᶇ; 81. Weimar III **idun** (§7.1.2.3).

4.2.4 Reflexes of */ū/

4.2.4.1 Stressed syllables

The corpus contains two readily identifiable words or name-elements in */-
ū-/, both attested more than once: PGmc **þrūþiz/*þrūþijō* (26. Friedberg
þuruþhild; 30. Griesheim **ağiḷaþruþ**); PGmc **rūnō* (24. Freilaubersheim
runa; 54. Neudingen-Baar II **runa**; 61. Pforzen I **aïlrun**; 62. Pforzen II **runa**).
In every case, the reflex of */ū/ is written **u**, as we would expect (§2.3.2.2).

Several of the pers.ns. which may have short or long stem-vowels belong in
this category, if they are in fact long: Beuchte **buirso** → *Bŭriso*; Steindorf
husị?alḍ → *Hŭsi?ald*; Weimar II **bubo** → *Bŭbo* (unless it is a variant of *Bōbo*
– §4.2.3.1). Again, in all of these examples the spelling is **u**.

4.2.4.2 Unstressed syllables

The corpus contains no reflexes of PGmc unstressed */ū/.

4.2.5 Reflexes of */w/

Probably our most useful evidence for the development of PGmc */w/ is the
group of inscriptions containing forms of the verb **wrītanan*: 24.
Freilaubersheim **wraet**; 54. Neudingen-Baar II **urait**; 62. Pforzen II **urait**; 71.

Sievern **wriḷu** (if **ḷ** is an error for **t**); 83. Weingarten I **writ?ⁱ/ₗa**. The Sievern

example may be PNorse, but there is nothing internal to the text which

excludes the possibility that it is WGmc. Here and on Weingarten I we can be

reasonably confident that we have the present stem *wrīt-*, even though the

ending is illegible in the latter case.

These data suggest that the OHG deletion of /w-/ in the cluster /wr-/ (and

perhaps, therefore, also in /wl-/) has not taken place (or at least, that it has not

spread to this lexical item, though it may be underway elsewhere) (§2.3.2.4).

Düwel regards the alternation **w** ~ **u** here as an unsolved problem, but

suggests that the **u**-spellings are a later variant (Düwel 1999c:135-136;

likewise Looijenga 2003a:268-269). I am not convinced that the available

datings support this hypothesis: on the one hand, a date of c.520-560 seems to

be widely accepted for Freilaubersheim, while Pforzen II is conventionally

dated to c.600. Düwel's suggestion assumes Neudingen-Baar II to be

relatively late; but later dendrochronological analysis of wood remains from

the burial chamber (not from the inscribed object itself) yield a date of 532-

535; this makes Freilaubersheim **wraet** and Neudingen-Baar **urait** roughly

contemporary (see catalogue entries for details and references). The datings

for Weingarten I vary so widely that we cannot draw any conclusions from it

(see catalogue for references).

The variation between **u-** and **w-** spellings in the reflexes of **wrītanan*

might be a feature of local dialects and/or orthographic traditions. Although

Neudingen-Baar and Pforzen are not especially close to one another, they stand

apart from Freilaubersheim, which is considerably further north. As

mentioned in §3.2.1.1, this geographical distribution might account for the variant spellings of the diphthong **ai ~ ae**. For /w-/, however, the pattern is complicated by the Weingarten example, with a **w-** spelling in (broadly speaking) the same region as the two **u-** spellings (Map 3).

A more promising explanation is that the spelling reflects a phonological distinction conditioned by the preceding sound: in the Neudingen-Baar and Pforzen examples, **urait** follows a word with a final consonant (respectively **bliþguþ, aodliþ**), while the Freilaubersheim and Weingarten examples follow word-final vowels (**boso:wraet**; **feha:writ-**). In continuous speech, it might be natural for a semivowel to be syllabicated (/w/ > /u/) between two consonants, even where those consonants belong to separate words. Here, as in the distribution of */eu/-spellings (§3.1.2.1), we may have evidence for phonotactically-conditioned variation not constrained by word-boundaries. It could be significant that in both examples preceded by a consonant, that consonant is a continuant (and indeed the same phoneme, /θ/).

This pattern appears to be peculiar to the Continental material: reflexes of *wrītanan* appear in the Scandinavian corpus of Older Fuþark inscriptions, but they are consistently spelled with **w-** (e.g., Eikeland fibula (KJ 17a; SUR 18) **wiwio writu i runo**; Järsberg stone (KJ 70; SUR 42) **ek erilaz runoz waritu** (with anaptyxis); Reistad stone (KJ 74; SUR 72) **ek wakraz : unnam wraita**). Initial /w-/ before /ĭ/ is sometimes written **u** or **uu**, but these spellings can follow consonants or vowels: e.g., **farauisa** → *Fāra-wīsa* (by-name "one who knows dangerous things") (Sjælland II bracteate, IK 98; KJ 127; SUR 81); **glïaugizuïu** → *Glīaugiz wī(h)u* "I, Glīaugiz, consecrate" (Nebenstedt I-B

bracteate, IK 128; KJ 133) (examples and interpretations from Krause 1971:95).

The **u-** spellings in the Continental reflexes of *wrītanan* might, then, indicate syllabication of interconsonantal /w/ (C./w/C > C./u/.C). Unfortunately, we do not have any further data with /w/+C against which to test this hypothesis, and we have no evidence for a parallel development in the reflexes of */j/ (§5.2.3). Every other reliable consonantal reflex of PGmc */w/ in the corpus is followed by a vowel (or an inherited semivowel), and almost all are written **w** (except perhaps for Bopfingen **mauo** – see below): 4. Arlon **rasuu̯amu̯d** → PGmc *rēswa-*; 35. Heilbronn-Böckingen I **arwi** → PGmc *arwaz*; 56. Nordendorf I **wodan** (also 3. †Arguel **wodan** and 42. †Kärlich **wodani̯**, if genuine) → PGmc *wōđanaz*, **wig**[i]/[u]**ᚦonar** → PGmc *wīȝjanan* or *wīȝanan*, **wini** → PGmc *weniz*; 72. Skodborg **alawin** (*ter*) → PGmc *weniz*, **alawid** (etymology uncertain); 81-82. Weimar III, IV **hahwar** → PGmc *-waraz* or *-wēraz*.

Reflexes of */w/ written with a vowel-rune may appear in 45. Kirchheim/Teck II **aru̯gis** and 67. Schretzheim I **arogi̯s**, if the prototheme is derived from PGmc *arwaz* "ready" (see Kirchheim/Teck II entry in §4.1). While I find Nedoma's etymology more plausible, the alternative identification with the "eagle"-word (PGmc *arōn*) is more popular (and if this is correct, **u̯** and **o** here appear to be reflexes of */-ōn/ or */-an/; (§4.2.3.2); on the reconstruction of the PGmc *n*-stems, see §7.1).

The vowel-spellings are easily accounted for if root-final */w/ here is syllabicated following the deletion of the thematic vowel (*ar.wa- > *ar.u-). This still leaves us with the question of the variation between **u̯** and **o**. If we are dealing with an inherited /-u-/ < */-w-/, we might expect a spelling **u**; on the other hand, if the thematic */-a-/ has influenced this vowel (compare §4.2.1), a surface /-o-/ is plausible. Where reflexes of */w/ become syllabic, they are normally spelled <o> in OHG and OS, with a variant <u> possibly reflecting phonological levelling, or else simply free orthographic variation (§2.3.2.4). Note that this pattern in the later dialects is consistent with Braune's proposed three-member system of unstressed vowels for OHG (§2.3.2.1; for my own conclusions on this point, see §8.2.1.2).

We have one example of an unrepresented initial */w-/ in 11. Bezenye I **uṇ̣J̣ạ**, if this sequence represents a reflex of PGmc *wunjō*. Given that initial /w-/ is preserved in all the attested reflexes and that this word does not meet any of the criteria for /w/-deletion in OHG or OS, it is probable that this is a purely orthographic phenomenon (perhaps comparable to the practice in OHG of writing /wu/ as <uuu> ~ <uu> ~ <u>); or perhaps the interpretation is faulty.

One possible case of consonantal /w/ written **u** is 13. Bopfingen **mauo**. In all of the proposed etymologies, **u** represents /w/ (either inherited from PGmc */w/ or resulting from the vocalisation or deletion of a medial */ɣ/). However, given the uncertain identification of the stem, we should not give too much weight to this example.

4.3 Conclusions

The corpus shows a remarkable consistency in the graphemic representation of the back vowels:

- The reflexes of the PGmc short back vowel are consistently represented as **u** → /u/, **o** → /o/. There is no satisfactory evidence for the kind of analogical disruption in the distribution of the PGmc allophones that we see in OHG and OS sources.

- Every example of an anaptyctic back vowel is spelled **u**.

- Reflexes of PGmc *\/ō/ are consistently represented as **o** in stressed position and **u** in unstressed final position.

- Every reflex of PGmc *\/ū/ is spelled **u**.

For the semivowel, it seems that the the use of **w** for non-syllabic (i.e., consonantal) reflexes of *\/w/ is quite consistent. The only credible example of **u** for consonantal /w/ is Bopfingen **mauo**, which is a questionable case. Although we have an alternation between **u** and **w** in the reflexes of *wrītanan*, this alternation (which I have suggested reflects phonotactically conditioned resyllabication) is not to be found elsewhere in the dataset.

5. The front vocalics

Given the considerable variation between /i/ and /e/ in the reflexes of PGmc */i e/, it would not be surprising to find corresponding variations in the inscriptions: we might expect to see a pattern reflecting umlaut, with **i** appearing before high and **e** before non-high vowels; **i** for reflexes of */e/ before a syllable-final nasal or N+C cluster; and/or other (irregular?) alternations similar to those described in §2.3.3.1; §2.3.3.2.

The long vowels are likely to have consistent spellings, */ī/ → **i** §2.3.3.3); */ē₁/ → **a** or **e** (the latter either an "archaic" spelling, or representing a preserved phonological form /ē/) (§2.3.3.4). For */ē₂/, we would expect **e**, and if the diphthongisation process is underway, digraphs such as **ea, ia, ie** may be present (§2.3.3.5).

There may be some variation in the mappings between **j** and consonantal /j/ on the one hand, and **i** and syllabic /i/ or /ī/ on the other.

A further issue to consider is the role of the "yew-rune" ᛇ. Although Grønvik (1981) contends that the original value of this rune was [ç], the majority view is that it originally represented a front vowel. If Antonsen's proposal that its original value was */ǣ/ (= */ē₁/) is valid, we might expect to see it in use for reflexes of */ē₁/ (see §5.2.4 for references). On the other hand, Antonsen argues plausibly that ᛇ is obsolete by the period of the earliest (Scandinavian) runic inscriptions: the sound */ǣ/ which this rune originally represented has shifted to /ā/ in stressed position (where it lends itself to the

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spelling ᚽ) (§2.3.3.4); and unstressed /æ/ only appears as a reflex of PGmc */ai/, meaning that an archaic spelling ᚺ is available (§2.3.1.2; §3.2.2). Early in the runic period, NWGmc */æ/ > */ē/, which can be spelled ᛗ (Antonsen 1970:318-319).

5.1 Data

The following are excluded from this survey:

- Instances of **i** or **e** which are reliably (or at least consistently) interpreted as the off-glide of a diphthong < PGmc */ai/, or as a monophthongal reflex of */ai/. I have discussed these in §3.2.

2. Aquincum fibula

[I] **fuþarkgw**   [II] **?lain:kŋia**

The various interpretations of complex II are outlined in §3.2.1. As mentioned in that section, it is uncertain whether the sequence is meaningful at all. The sequence **kŋia** has been interpreted as:

1. *k[unni]ngia* : ON *kunningi* "friend" (a derivative of PGmc *kuninȝaz/*kununȝaz* > ON *konungr*, OE *cyning*, OFris *kining ~ koning ~ kening*, OS OHG *kuning* "king") (Krause 1966:24-25).

2. Expanded via "Grønvik's law" (§2.5.2) (or by the assumption that the **ŋ**-rune should be read /ing/ rather than simply /ng/) to *k(i)ngia* : Ic *kingja* < ON *kinga* "breast decoration, brooch(?)"(< *kengr* "bend, hook, bow" (Grønvik 1985:178-179; de Vries 1961)) (Krause 1966:24). Grønvik (1985:179) states that the ending /-ia/ is normal

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for fem. *jōn*-stems in early OHG. According to Braune (BR §226),
the nom.sg. suffix of these nouns usually appears as <-e> in the
earliest sources, although <-ia> does appear in *winia* "(female)
friend, loved one".

3. A metathetic form of *kinga* = ON *kinga* (see (2), above) (Looijenga
2003a:227).

In interpretations 1-2, **i** represents /j/ in the stem-formant of *kunningja* or
kingja. The formation of *kingja* is not made clear in the literature: de Vries
(1961) cites the modern Icelandic form as a reflex of ON *kinga*, but does not
discuss the relationship between the two forms. Presumably *kinga* is a fem. *n*-
stem, with *kingja* a *jōn*-stem derivative(?).

In interpretation 3, **i** is the root vowel of *kinga*.

Given the variety of interpretations, and the doubts about whether the
sequence is meaningful at all, we must treat this item with caution.

3. †**Arguel pebble**

[I] **arbitag** [II] **wodan** [III] **luïgo^w/$_þ$haŋ** [IV] **zej** [V] **kim**

Bizet (1964) suggests that the initial sequence **arbi** is connected with PGmc
arƀjan "inheritance" (see entry on 35. Heilbronn-Böckingen I in §4.1). This
seems perfectly plausible in itself, but Bizet interprets it as the object of **tag** →
tah, 2.sg.imp. to a verb cognate with Go *tahjan* "to tear, scatter" (< PGmc
taxjanan) and ON *taka* "to take" (< PGmc *takanan*). Thus he translates

complexes I-II as "Take the inheritance, Wodan"[47] (1964:47). Quite apart

from his conflation of two unrelated verbs (see Orel 2003), he assumes without

justification and without further comment that **g** here represents /k/ ~ /x/,

which I consider doubtful.

Nevertheless, *Arbi-* is a well-attested name element (Förstemann 1900:141-

144), and it is conceivable that **arbi** might represent a pers.n. *Arbi*, with the

terminal **-i** representing the suffix */-ija-/ (compare <u>35. Heilbronn-Böckingen I</u>

arwi → *Arwi*).

Bizet treats complexes IV-V together as a single word *reikim*, dat.pl. to a

substantive formed from Go *reikeis* "noble, powerful" (< PGmc *rīkjaz*). This

involves the unjustified assignment of the value /r/ to **z**. Bizet's interpretation

of complexes III-V is, in short, not sufficiently credible to be taken any further.

4. Arlon capsule

goduṇ : (?)ụlọ : þeṣ : rasuẉaṃụd(?)woþroþ(…)

In the view of Arntz (Arntz and Zeiss 1939:435), **þeṣ** is the

gen.sg.masc./neut. demonstrative < PGmc *þeza* < PIE *te-so* (Lehmann 2005-

2007 §3.4.2) or *þas* < PIE *to-so/*to-sjo* (Ringe 2006:208). An */-e-/

antecedent appears to be prevalent in the Gmc dialects (compare Go *þis*, ON

þess, OS *thes*, OHG *des* < *þe-*; OE *þæs* < *þa-*) (Prokosch 1939:267-269).

Although we can be sure that forms like OS *thes*, OHG *des* contain an

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[47] "Nimm das Erbe, Wotan"

inherited /e/, it remains unclear whether this is a PGmc */e/ < PIE */e/; from Ringe's reconstruction of a PIE *to-sjo, it might be possible to derive this */e/ as an *i*-umlaut allophone, */o/ = (?*[œ] ~) *[e], conditioned by */-j-/ in the suffix.

Given the uncertainty of the reading, I hesitate to accept Arntz' interpretation of **þeş**. It is accepted by Krause (1966:286) and Opitz (1987:8), while Looijenga (2003a:227-228) regards the sequence as illegible.

The sequence **rasuẉaṃụd** is treated throughout the literature as a dithematic MN *Rāsuwamund*, with a prototheme < PGmc *rēswa-* (§4.1). If this is correct, then we have here a reliable example of */ā/ (<*/ē$_1$/) represented **a**.

5. Aschheim II fibula

ḳahi

This is one of several inscriptions (the others being 12. Bezenye II; 35. Heilbronn-Böckingen I; 90. Wurmlingen) with an initial sign read as **k** and interpreted as the 1.sg.nom. personal pronoun *(i)k* : OS *ik* OHG *ih* (Düwel 2003c:12) < PGmc *eka* (Lehmann 2005-2007 §3.4.1; Orel 2003) or *ek ~ *ik* (Ringe 2006:290).

Düwel (*ibid.*) treats **ahi** as a pers.n. *Ahi*, for which he offers no etymology. Nedoma (2004a:271) notes this interpretation, but likewise attempts no analysis and does not give the name its own entry in his catalogue (perhaps because the find was very recent at the time of publication). Haubrichs

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(2004:76) mentions a name-element *aha-* (: Go m. *aha* "mind", < PGmc *axaz*?) in several place-names (e.g., Ehingen a.d. Donau (a.961 *Ehinga*)).

Förstemann (1900:14-27) groups various name-forms in *Ah-* together with those in *Ag-*, implying that they are derived from a common source. If this is so, the terminal **-i** of **ahi** may be explained in similar ways to the **-i-** of 8. Bad Krozingen A **agi-** (**i** → /i/ < */i/, */e/ in PGmc *aʒez* (> *agiz*?); or */j/ in PGmc *aʒjō*). Alternatively, we could be dealing with an abbreviated form of a dithematic name with the suffix */-ija-/ (see 35. Heilbronn-Böckingen I **arwi**).

6. Aschheim III fibula

d̦ad̦o

The reading of this inscription is not certain, although both Düwel (2003c:12) and Nedoma (2004a:271) consider it reliable, representing a MN *Dădo, Dādo* or *Da(n)do*. The same sequence of runes is found on 84. Weingarten II, and it is presumed that both inscriptions represent one of these names (though not necessarily the same one). The alternatives are discussed in more detail in the Weingarten II entry, below. The name is relevant to this chapter only if it can reliably be identified as *Dādo* with /ā/ < PGmc */ē₁/.

7. Bad Ems fibula

[I] **]m̦adal̦i?**   [II] **ubad̦[**

There is general agreement that **ṃadaḷi** represents a pers.n., but the etymology and the morphology are disputed. Krause (1966:282; Krause and Werner 1935:332) identifies it as a nom.masc. connected with PGmc *maþla- (> Go *maþl* "assembly, market-place", ON *mál* "speech, suit, case", OE *mæðel* "assembly, council, speech", OS *mahal ~ mathal* "law-court, assembly", OHG *mahal* "law-court"). Arntz, on the other hand, identifies it as fem. (Arntz and Zeiss 1939:196). He also cites v. Grienberger, who attaches the initial **u** of complex II to the name and analyses it as a dat.fem. *u*-stem *Madaliu* (the etymology of the stem is the same) (Arntz and Zeiss 1939:197). Here v. Grienberger has ignored the paratextual mark(?) between **i** and **u** (compare Marstrander's interpretation, mentioned in §3.1.1).

Nedoma (2004a:371-372) interprets **ṃadaḷi** as an abbreviated form of a dithematic pers.n. with the prototheme a Verner's Law alternant of *Maþla- (PGmc *maðl- vs. *maþl-). The etymon is the same as in the above interpretation, but the connection is explained through Verner's Law rather than an appeal to *Spirantenschwächung* (§2.4.2). If Nedoma's analysis is correct, then the terminal **-i** represents /-i/ as a reduced form of an inherited */-ija-/ suffix, with the final */-a/ deleted as in the nom.sg. *a*-stems (e.g., PGmc *wulf-a-z > OHG *wolf-Ø*) and the remaining */-ij/ > */-ī/, subsequently shortened > /-i/, as is regular for an unstressed third syllable (Antonsen 2002:241). We have no direct evidence that shortening has taken place in the present case.

8. Bad Krozingen A fibula

[I] **boba:leub**   [II] **agirike**

Complex II is uncontroversially interpreted as a dat. dithematic MN *Agirīke*. The first element is well attested in Gmc names and is probably a reflex of PGmc *aȝ-* "fear, horror" (Fingerlin et al. 2004:240; Nedoma 2004a:153). The development of the PGmc word is in doubt: Orel (2003) reconstructs a neut. *es*-stem *aȝez*; Nedoma offers an alternative *aȝan* (neut. *a*-stem). Either of both of these may have been reanalysed as an *i*-stem to give the name-element *Agi-* (as well as Go *agis*, OE *ege* "horror, fear"). If this etymology is correct, **i** here represents a stem-formant derived either from PGmc */-ez/, or from a substituted */-i-z/.

The other possible etymology for *Agi-* is *Ag(g)i-* < WGmc *aggj-* < PGmc *aȝjō* f "edge" (Haubrichs 2004:76). In this case, the **i** in the first element of *Agirīke* represents a syllabicated reflex of PGmc */j/.

Nedoma (2004a:153) comments that it is often difficult, if not impossible, to distinguish between the name-elements *Aggi-* < *aȝjō* and *Agis-* ~ *Agi-* < *aȝez/*aȝan* in literary sources. Hence, especially given that doubling of consonants is rare in runic orthography, it must remain an open question which of them is represented here. The same name-element may be present in 5. Aschheim II **ahi** and 30. Griesheim **a̧g̊i̧a̧þru̧þ**.

The second element is connected with PGmc *rīkz* (> Go. *reiks* "ruler"), or the derived adjective *rīkjaz* (Go *reikeis* "noble, princely"; ON *ríkr*, OE *rīc*, OS *rīki* "mighty, powerful"; OHG *rīhhi* "rich, mighty") (Förstemann 1900:1254). The form of **agirike** does not itself reveal whether the noun or the

adjective is the etymon, but Nedoma prefers the former since names in *-*rīkz/*-rīkaz* are much more common in general (Nedoma 2004a:157).

9. Balingen fibula

ạ?ụẓḍnloamịlu?

dnlo is regarded throughout the literature as a pers.n., expanded by Arntz (Arntz and Zeiss 1939:130), v. Grienberger (1908:258, 267-270) and Krause (1966:303) to *D(a)n(i)lo*, a weakly inflected MN < PGmc *đaniz* m. (> Go. *Danus*, ON (pl.) *Danir*, OE (pl.) *Dene*, OHG (pl.) *Teni* "Dane(s)") with the dim. suffix */-il-/ (cf. Go *Danila*, 7th c., cited by Nedoma 2004a:274. See also Neumann 1982:174). Other possible expansions are *D(ū)n(i)lo* (possibly related to OIc *dúni* "fire" and/or *dýja* "to shake" < PGmc *đeu-*(?)); and *D(ō)n(i)lo*, with an element **Dōn-* indicated in names like OHG *Tuoni, Tuonger* (9th c.) but with unknown etymology (Nedoma 2004a:276).

Opitz (1987:112-121), following an idea of Klingenberg's, sees in this sequence a "Germanised" form of the name of the prophet Daniel, and incorporates it into his attempt to draw links between a number of runic inscriptions (this item, 16. Charnay and 32. Hailfingen II) and the Daniel motif found on late migration-period belt buckles (Kühn 1942; Tischler 1982). This interpretation is firmly rejected by Nedoma on several grounds, chiefly semantic (Nedoma 2004a:273).

For our purposes, if this sequence is a name with unrepresented vowels, it is of limited value: there does not appear to be any suggestion that the vowels

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are omitted according to any orthographic rule ("Grønvik's law" does not

apply here). Unless we can find some regular pattern, we cannot be confident

that we are dealing with an unrepresented reflex of */i/.

The interpretations of **amịlu?** as a patronymic *Amilu(n)k ~ Amilu(n)g* and as

a FN *Amilu* have already been discussed in §4.1. The etymology is uncertain,

but Nedoma (2004a:188) constructs *Amilu* from a stem **ama-* (possibly

connected with ON *ama* "to trouble, annoy, vex", OHG *emiz* "persistent,

constant" (v. Grienberger 1908:265; Haubrichs 2004:77)), with **-u** representing

a dat.sg. *ō*-stem suffix. This leaves us with the problem of how to interpret **-il-**

; one possibility is that we are dealing with a dim. suffix < PGmc **/-il-/*. If this

is the case, then the name should decline as an *n*-stem and we would expect to

read nom. ***amila**, acc./gen./dat. ***amilun**. For further discussion of the *ō*- and

n-stem analyses, see §7.1.2.3; §7.2.1.

10. Beuchte fibula

[I] **fuþarẓj** [II] **buirso**

The **j** in complex I is not amenable to any overt linguistic interpretation;

Krause (1966:27-28) treats it as a Begriffsrune **j(ēra)/*j(āra)* "year" → "good

harvest".

If, as is the general view in the literature (see §4.1), **buirso** represents a

pers.n. *Bŭriso*, the element /-is-/ is taken to be a hypocoristic suffix, with **i**

representing medial unstressed /i/ < PGmc */i/. Nedoma (2004a:264) rejects

Antonsen's analysis of the name as *Būrisō* "little daughter" (1975:78), as it

assumes a feminised form of **ƀūri-* "son", for which there is no supporting

evidence; and because Antonsen assigns it fem. gender, while Nedoma is

adamant that weakly inflected names on the Continent in the "runic" period

follow the pattern of OHG (masc. /-o/, fem. /-a/) (see §7.1). On the alternative

interpretation of **ui** as an umlaut allophone of /ŭ/, see §4.1; §4.2.1.1.

11. Bezenye I fibula

[I] **uṇj̇ạ̇**   [II] **godahid**

If complex I represents *(w)unja* "joy" < PGmc **wunjō* (§4.1), **j** represents

the /j/ of the stem-formant.

godahid is believed to represent a dithematic FN *Gŏdahi(l)d*, with a

deuterotheme *-hild* < **xelđiz/*xelđjō* f.(> ON *hildr*, OE *hild*, OS *hild(i)*, OHG

hilt(i)a "battle") (on the prototheme, see §4.1). This element is common in

Gmc FNs and is also found elsewhere in the Continental runic corpus (26.

Friedberg **þuruþhild**). On the non-representation of /l/, see §2.5.2.

12. Bezenye II fibula

[I] **?arsiḅoda**   [II] **seǥun**

The sign preceding **arsiḅoda** may be a **k**-rune in the "roof"-form ^ (Arntz

and Zeiss 1939:326; Krause 1966:308; Opitz 1987:11). The authors who

accept this reading interpret the **k** as the 1.sg.nom. pronoun *(i)k* (see 5.

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Aschheim II). Nedoma views the sign as a paratextual symbol marking the beginning of the text, rather than a rune (2004a:203-204).

That complex I represents a dithematic FN *Arsiboda* is generally accepted. However, the etymology of the element *Arsi-* is uncertain (on *-boda*, see §4.1). According to Nedoma (*ibid.*), it is only attested in three MNs (all Langobardic): *Arsio* (a.810), *Arseramus* (a.873), *Arsu* (c.1000). A connection to PGmc **urzōn* (: Gk ’άρσην, Av *arṣan-* "man"; PCelt **erset* "hero; brave"), suggested by Arntz (Arntz and Zeiss 1939:329), cannot be direct but would have to be some sort of ablaut form. Direct reflexes of **urzōn* are OIc *orri* "moor-fowl, capercaillie", Norw *orre* "aurochs" (Orel 2003). The compositional vowel /-i-/ suggests that *Arsi-* is derived from a *ja-* or *jō*-stem (or possibly an *i*-stem, if the deletion of thematic /-i-/ after a long stem has not taken place), but what that might be is unclear.

Complex II **seǥun** is widely believed to represent a loanword based on Lat. *signum* (see §4.1). The OHG form *segan* indicates that Lat. /i/ could be borrowed as /e/, at least in this context. This may reflect the relatively open quality of Lat. short /i/ = [ɪ], and/or its merger with /e:/ > Romance /e:/ (Lat. *signum* > It *segno*, Sp *seña*, Fr *signe*) following the loss of length distinctions (Allen 1965:47-48; Kent 1945:46; Rohlfs 1960:41-44).

15. Bülach fibula

[I] **f̣rifridiḷ** [II] **dụ** [III] **(ḷf)tṃ?**

There is general agreement that complex I (the only readily interpretable part of the inscription) contains a MN *Frĭdil*. Arntz treats the whole complex as a dithematic name **Frī-fridil*, noting comparable names like OHG *Frī-liub, Frīo-win(e)*. The second element is here taken to be equivalent to OHG *fridil ~ friudil* "friend, beloved, husband". This etymology is accepted by many others (Klingenberg 1976b:311-312; Krause 1966:307; Looijenga 2003a:235; Opitz 1987:14, 195). Köbler (1993) derives it from a PGmc **friđila-*, though it is not clear why (this would regularly give us OHG **fritil*). Orel (2003) gives a proto-form **frijōđelaz* for *friudil*; but again, we would expect an OHG citation form in /-t-/. Nedoma protests that the connection between **fridiḷ** and OHG *fridil* rests on the invocation of *Spirantenschwächung*, which in his view is anachronistic (§2.4.2) (Nedoma 2004a:303). He is evidently assuming a proto-form in PGmc **/-θ-/, not **/-ð-/.

Instead, Nedoma analyses **fridiḷ** as a deverbal *nomen agentis* (with suffix /-il-Ø/ < PGmc **/-il-az/; see also <u>61. Pforzen I</u> **aigil**) comparable to OHG *zuntil* "instigator" (< *zunten* "to ignite"). It cannot be a construction with a hypocoristic **/-il-/ suffix, because names with this structure are weakly inflected. The stem may be derived from PGmc **frīđjanan* (> Go *freidjan*, OHG *frīten* "to take care of") (Nedoma 2004a:301-303). If so, *Frīdil* might originally have meant something like "carer, protector, nurturer".

For our purposes, the first **i** of this sequence could be either short /i/ or long /ī/, depending on which of the etymologies we favour. The second probably represents a short /i/ belonging to the nominalising suffix **/-il-/.

The "prefix" **fri** is explained by Krause (1966:307) as hypocoristic reduplication of the base **frīd-* (Krause 1966:307), perhaps alluding to the adjective "free" (PGmc **frijaz* > Go *freis*, OE *frēo*, OFris OHG *frī*). Nedoma allows that the sequence probably has an "iterative character" (compare OHG *wi-wint* "whirlwind"), but he notes that such a construction is hypothetical, with no known onomastic parallels (2004a:300).

Two alternative interpretations are offered by Haubrichs (1998:27; see also Nedoma 2004a:300): **frifridiḷ** could be a compound "dearly beloved" (**fri-** → *frī* < **frijaz*, as above); or a clause "love me, beloved!". In the latter case the initial **fri** is 2.sg.imp. to the deadjectival verb PGmc **frijōjanan* (> Go *frijōn*, OFris *friaia*, OS *friohon* "to love"; ON *fría* "to deliver"; OE *frēogan* "to free, to respect, to love"). In both of these interpretations, **i** represents a reflex of PGmc **/-ij-/*, with the semivowel being syllabicated after the deletion of the suffix. However, the presumed deletion of /-ō-/ in the 2.sg.imp. of a class 2 weak verb is at odds with the evidence of OHG and OS (BR §304; Gallée 1910 §376; Holthausen 1921 §409); compare OHG OS *salbo* "anoint".

Krause (1966:307; also Klingenberg 1976b:314; Opitz 1987:14, 196-197) sees in complex III **miḳ** (as Krause reads it) the 1.sg.acc. personal pronoun *mik*. Microscopic analysis of the fibula in 2001, however, supports a reading **mu̯** or **mi̯** (Nedoma 2004a:298). Nedoma offers no interpretation of complexes II-III. The putative **i̯** here is not a reliable reading, and no interpretation can be assigned to it with any confidence.

16. Charnay fibula

[I] **fuþarkgwhnijïpzstbẹṃ(?)**   [II] **:uþfŋþai:id**   [III] **dan:ḷiano**

[IV] **ⁱ/ḷia**   [V] **ḳ r**

In Krause's interpretation of **uþfŋþai** as 3.sg.opt. to an EGmc verb < PGmc *unþfenþanan* (PGmc *fenþanan* > Go *finþan* "to find out, recognise, learn"; ON *finna*, OE OS OHG *findan*, OFris *finda* "to find"), the root vowel is not represented orthographically. The context is appropriate for "Grønvik's law" (§2.5.2). Since this rule as formulated by Grønvik applies only to high vowels, the omitted vowel is taken to be /i/. The raising of PGmc */e/ > */i/ is regular before a tautosyllabic nasal (§2.2.1), so we are dealing with /i/ < an inherited */i/.

On Antonsen's alternative reading **faþai**, see §3.2.1.

The end of complex II and the beginning of complex III are usually treated as a single word, **id dan** → *Iddan*, taken to be an oblique form of a weakly inflected EGmc MN *Idda* (on the assignment of case and gender, see §7.1.2.3). For further discussion of this name, its parallels and its etymology, see <u>81. Weimar III</u>.

The representation of a double consonant by two runes **dd** is unusual (though by no means unique), and may be intended to assist the reader by showing the continuity of the text from one side of the headplate to the other (Düwel 1981a:374).

ḷiano is generally interpreted as a weakly inflected nom. FN *Liano*, of unknown etymology (Antonsen 1975:77; Düwel 1981a:374; Krause 1966:22) (see §7.1.3). On the suggestions that **liano** is a metathetic form of a pers.n. **Laino*, or of **laion* "lion", see §3.2.1.

Opitz (1987:115-116) objects to the reading of **id dan** as a single word because it involves reading across lines, and because it contains a double rune, which is not normal in runic orthography. Instead, he interprets complex II **id** as Go *iþ* "but" – here, as elsewhere, Opitz explains writing **d** for /θ/ not in terms of *Spirantenschwächung*, but as a convention influenced by Latin orthography (Latin sources often write <t> or <d> for reflexes of PGmc */θ/). Complex III **dan:liano** Opitz emends and expands to *Danila laion* "Daniel, lion" (see §3.2.1).

While the interpretation of ḷiano as a weakly inflected pers.n. seems reasonable, the lack of a reliable etymology makes it impossible to analyse. **ia** could conceivably represent a diphthongal reflex of */ē₂/, but no plausible etymon presents itself.

Complex IV contains **i** and a rune that may be **ï**. However, no-one has attempted to interpret this complex. Düwel remarks that if the first rune is read **l**, the sequence **lia** might have some connection with ḷiano (Düwel 1981a:373).

17. Chéhéry fibula

[I] **DEOS : DE**   [II] ḥṭid : E (or **E : ditaṇ**)   [III] **sụṃ(ŋ̣ịḳ)**

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Düwel offers no interpretation for the runic portion of the inscription.
Fischer sees in **ditaṇ** a dat. form of a weakly inflected FN *Dita*, for which he
cites as parallels 24. Freilaubersheim **daᵽïna**; 74. Soest **daþa**; 84. Weingarten
II **dạdo** (Fischer 1999:13; Fischer and Lémant 2003:251). No discussion of
etymology is offered, beyond a vague and unconvincing attempt at a
connection with the name-element *Theuda-* (< PGmc *þeuđ-*; see 82. Weimar
IV in §3.1.1).

Nedoma (2004a:280) is doubtful about Fischer's suggestion: there is a
possible parallel in OHG *Titza* f. (one instance only, 10th/11th c.), but the
termination **-an** is in his view anomalous. In OHG and OS – and, Nedoma
infers, in their 6th-century precursors – feminine *n*-stems end in /-ŭn/ in the
oblique cases. The possibility that **ditaṇ** could be an oblique form of a masc.
Dito is not mentioned (for further discussion, see §7.1.2.3).

Fischer and Lémant (2003:251-252) reject Düwel's reading **ḥṭid** (with a
double-barred � where they read ᚠ or ᛁᛁ). If their alternative reading **ditaị** is
correct, this could represent a 3.sg.pres.opt. verb-form (compare 16. Charnay
uþfṇþai), though "we find it difficult to imagine what a verb **ditai** could
possibly represent" (2003:252).

No interpretations are available for complex III. The portion which Düwel
reads as a runic sequence **ŋịk** is dismissed by Fischer and Lémant (2003:253)
as worn traces of a decorative design.

18. Dischingen I fibula

wi^g/_nka

The generally preferred reading is **winka**, believed to represent a hypocoristic FN *Win(i)ka*, with a stem < PGmc **weniz* (> ON *vinr*, OE OFris *wine*, OS OHG *wini* "friend"), and a dim. suffix /-ka/ (< PGmc **/-kōn/*). As parallels, Krause (1966:297) cites MLG *Winika* (11th c.) and OHG *Winicho* m. (8th c.). "Grønvik's law" (§2.5.2) is not applicable as an explanation for the non-representation of medial /-i-/.

An alternative discussed by Nedoma (2004a:416) is that **winka** might contain an element **Wink-*, found in e.g. OHG *Uuinclind* f. (9th c.); WFrk *Uincuinus* m., *Uincoildis* f. (9th c.). However, this element lacks a satisfactory etymology; Nedoma regards a connection with OHG *winkan ~ winken*, OE *wincian* "to wink, to give a sign" (< PGmc **wenkjanan*) as implausible, though he does not offer any further explanation.

Using the reading **wigka**, Looijenga (2003a:236-237) identifies the stem as PGmc **wīʒa-* "fight; warrior" (for the etymology, see <u>20. Eichstetten **wiwo**</u> in §4.1)).

The **i** of this inscription may therefore represent a reflex of PGmc **/e/* (attributable to PGmc umlaut and/or raising conditioned by the nasal – see §2.2.1), if the sequence represents a name in **weni-*; or of **/ī/*, if **wīʒa-* is

involved. We may also be dealing with a case of an unrepresented /i/ before the suffix **-ka**.

19. Donzdorf fibula

eho

Opitz (1987:17) suggests that **eho** could be a corrupt form of the PNorse "formula-word" *ehwaz* (PGmc *exwaz* > ON *jór* "stallion"; OE *eoh* "warhorse"; OS *ehu-skalk* "groom, ostler"), or a weakly inflected WGmc MN in /-o/ (see §7.1.3.1). Jänichen (1967b:234) favours the former interpretation, while Düwel (Düwel and Roth 1977:413) supports the latter.

Alternatively, the sequence could represent a PNorse *ō*-stem FN (still etymologically connected with *exwaz*) (Peterson 1994:144-145; also Looijenga 2003a:237) (§7.2.4).

With regard to the "formula-word" explanation, Nedoma points out that there is actually only one plausible occurrence of the "horse"-word in the Older Fuþark inscriptions, **ehwụ** (inst.sg.?) on the Tirup Heide-C/Skåne V-C bracteate (KJ 106; IK 352). The only possible parallel to **eho** in the Continental corpus is 63. Pleidelsheim **iịha**, if we accept Nedoma's tentative suggestion that it should be read **eha**.

20. Eichstetten sheath fitting

(?)?a?i [chi-rho/**nþ**/**nw**] **munịwiwo?(??)**

Fischer (2007:133) reads the first part of the inscription as **danil**, which he interprets as the MN *Danil* (compare 9. Balingen **dnlo**). Since the reading is doubtful, I am not inclined to accept this suggestion.

The interpretations of **munį** have been discussed in §4.1. If the reading **-i** (rather than **t**) is correct, then in the interpretations of Looijenga (2003a:238) and Fischer (2007:133) it represents a 3.sg.pres.opt. verbal suffix < PGmc */-ai/ (§3.2.2). If, as I suggest in §4.1, we are dealing with an *i*-stem nominal, then **-i** represents the thematic vowel < */-i/.

In §4.1 I discussed several interpretations of **wiwo?(??)**, in all of which **i** represents a reflex of PGmc long */ī/ (as the adverb *wī* "how"; a name-element *Wī*-; or **wīwo* "harrier"(?)).

22. Erpfting fibula

lda·gabu

Düwel tentatively suggests (2003c:15) that **lda** could be expanded to a FN *Hilda*, if we invoke "Grønvik's law" (§2.5.2) to infer an unrepresented /-i-/ (compare 61. Pforzen I **lțahu**, interpreted by Nedoma as *(I)ltahu*). It would be further necessary to assume an unrepresented initial /h-/. On the omission of Gmc /h/ in Latin texts – which appears to reflect a Romance phenomenon and cannot satisfactorily be invoked for a runic inscription – see Wagner (1989a).

As mentioned in §4.1, Düwel (2003c:13-16) interprets **gabu** as a dat.sg.

form of an *ō*-stem noun cognate with OHG *gāba* "gift" < PGmc **ȝēƀō* (vs.

geba < **ȝeƀō*). If this is correct, **a** here represents a reflex of PGmc **/ē₁/*.

23. Ferwerd comb case

   ?(?)ura

Looijenga (1996:93; 2003a:303) reads the material preceding **ura** as a bind-

rune **<u>me</u>** = 1.sg.dat. pronoun *mē* < PGmc **miz(a)* (> Go *mis*, ON *mér*, OE

OFris *mē*, OS *mī*, OHG *mir*). Alternatively, the bind-rune could be read **<u>em</u>** →

1.sg.pres.ind. *em* "(I) am" (PGmc **immi* (Ringe 2006:262) > Go *im*, ON *em*,

OE *eom*; compare OFris *bim ~ bem*, OS *bium*, OHG *bim*) (Looijenga 1996:93).

These readings are unique to Looijenga, and from my own examination of

the available images, I do not consider them reliable.

24. Freilaubersheim fibula

   [I] **boso:wraetruna:**   [II] **þk·d̬aᶲïna:goḷi̬da**

The first sequence of complex II, **þk**, is understood throughout the literature

to represent the 2.acc.sg. personal pronoun **þ(i)k* (PGmc **þeke* > ON *þik*, OE

þec, OS *thic*, OHG *dih*). The only dissenting view that I am aware of is one

advanced by Gutenbrunner and Klingenberg (1967:445), who identify these

two runes as magical Begriffsrunen.

All the sources treat **ḍaꝥïna** as a weakly inflected FN *Dăþīna*. A name-element **Dăd-* is well attested (and explained either as a lall-name or as a reflex of PGmc **đēđiz* > Go *ga-dēþs*, ON *dáð*, OE *dǣd*, OFris *dēde*, OS *dād*, OHG *tāt* etc. "act, deed" – see 6. Aschheim III **ḍaḍo**; 84. Weingarten II **dạdo**) (Förstemann 1900:387; Kaufmann 1968:88). Nedoma prefers to attribute **ḍaꝥïna** (and 74. Soest **daþa**) to an independent element **dăþ(i)-*, of unknown etymology (2004a:279). On the alternative interpretation of the stem as **Daþ-* : MHG *tadel* "blame", see §6.1.

That the termination **-ïn-** represents a name-forming suffix **/-īn-/* < PGmc **/-īn-/* is not disputed.

The case of *Dăþīna* is probably nominative, and it is generally understood to be the subject of *gōlida* (see below). Though he favours this interpretation, Krause (1966:284) also suggests that the name could be construed as a vocative, syntactically parallel with *þ(i)k*. Opitz (1987:199), following Arntz (Arntz and Zeiss 1939:231) prefers this option.

The most popular interpretation of **goḷida** is as 1./3.sg.pret. to a weak verb < PGmc **ʒōljanan* "greet", or possibly *ʒlōōjanan* "glow" (§4.1). If either of these is correct, **ị** here represents a syllabic reflex of **/j/*.

According to Jänichen (1951:227), **ịda** is a FN parallel to 16. Charnay **id dan**; 81. Weimar III **ida, idun**; 82. Weimar IV **ida** (see further §7.1.2.1).

25. Fréthun I sword pommel

h?e?(?)

Although the reading of this inscription is very uncertain, Fischer (2007:72)

suggests that it may represent a pers.n. in *Hlem-* < PGmc *xlammiz* (> ON

hlemmr "lid, cover"; OE *hlem* "sound, noise, crash"; OFris *hlem* "blow") (see

§6.1). No such name-element is recorded in the onomastic literature

(Förstemann 1900; Kaufmann 1968; Reichert 1987; Schönfeld 1911).

Given the difficulties of reading and the lack of parallels for Fischer's

interpretation, this item is of little use to the present project.

26. Friedberg fibula

þuruþhild

This inscription is uncontroversially interpreted as a dithematic FN

Þurūþhild (§4.1), with the deuterotheme *-hild* < PGmc *xelđiz/*xelđjō* (see 11.

Bezenye I **godahid**).

28. Geltorf II-A bracteate

ḷaḷg̊wu

In von Grienberger's interpretation of **g̊wu** as *g(i)bu* (§4.1), the root vowel

(assumed to be /i/ < PGmc */e/ on the basis of the following high vowel) is not

represented. Since the interpretation is demonstrably implausible, I shall not

pursue it any further.

29. Gomadingen fibula

[I] **(g)**   [II] **iglu$^g/_n$**   [III] **?...**

As discussed in §4.1, complex II may represent a pers.n. *Iglug/n* or *I(n)glug/n/(n)g*. If this is connected to the "hedgehog"-word (PGmc *iȝilaz/*iȝulaz*), as Haubrichs (2004:87) suggests, then the initial **i** here represents a reflex of PGmc */i/, with the medial */i/ omitted orthographically (but probably present phonologically, if the attested WGmc reflexes – OE OS OHG *igil* – are a reliable guide). Formally similar names recorded by Förstemann (1900:947) are OHG *Igil*; Go *Igila* (both with overt medial /-i-/). Förstemann sees in both of these a stem *Ig-* (also appearing in forms like *Igo, Igina*), which he regards as a meaningless "secondary stem". Kaufmann (1968:214) suggests that it may be connected to OHG *īwa* f./ *īgo ~ īwo* m. "yew" (PGmc *īȝwaz/*īxwaz* m.).

Nedoma (2004a:345) rejects Haubrichs' etymology and doubts that a pers.n. is present at all. His principal objection to the "hedgehog"-word as an etymon is that there is no motivation for the elision of the second vowel. That this is simply an orthographic omission does not seem to me impossible, given the widespread acceptance by runologists (including Nedoma) of vowel-omission in, e.g., 9. Balingen **dnlo** → *D(a)n(i)lo*(?).

30. Griesheim fibula

[I] k̦oḷo: [II] a̧ǥiḷaþruþ

That complex II represents a FN *Agilaþrūþ* is not disputed in the literature. The name has direct parallels in Langob. *Ageldrudis, Agildruda*; WFrk *Agledrudis* (all 9ᵗʰ c., cited by Nedoma 2004a:149). Nedoma (2004a:149-150) analyses the first element as an extension of the base *agi-* (see 8. Bad

Krozingen A **agirike**) with a suffix */-la-/, which he regards as one of a set of meaningless extensions added to meaningful stems in name-formation. In support of this argument, he cites another variant in Alamannic *Agena-richum* (4th c.). Nedoma rejects the notion that we are dealing with the dim. suffix */-il-/ (compare Peterson's (2004:5) analysis of **agilamudon** (Rosseland stone, KJ 69)). The deuterotheme *-þrūþ* has been discussed in §4.1.

31. Hailfingen I sax

ali̱srhlaþawihu (Arntz and Zeiss 1939:245-248).

Arntz' rather convoluted rendering of the inscription as *Alisrīh laþa wihu* (Arntz and Zeiss 1939:245-248) is based on a speculative reading. *Alisrīh* is supposed to be a name in PGmc **rīkz* or **rīkjaz*, with Second Consonant Shift (compare 90. Wurmlingen **dorih**). The element *Alis- ~ Elis ~ Als(e/i)-* is well attested (Förstemann 1900:77-79), though Förstemann is doubtful about the etymology: *Alis-* might be connected with OHG *alles* gen.sg.masc./neut. (< PGmc **al(l)as* (Lehmann 2005-2007 §3.5.1; Ringe 2006:281)), although he appears unconvinced. Perhaps more promising an etymon (not mentioned by Förstemann) is PGmc **alizō/*alisō* (> Go **aliso*, OS *elira ~ elis-* (in compounds), OHG *elira ~ erila* "alder"), although no */s/-form is attested in OHG.[48] This element may be present in 83. Weingarten I **a**[li]/[e]**rguþ**.

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[48] Wagner (1994/95) presents evidence from modG dialects that a "southern" /s/-form survives in *Else(n), Elsbeere* "service tree" (*Sorbus torminalis*).

32. Hailfingen II fibula

[I] **(a)????(?)**   [II] **(?)daạn?**

Opitz (1987:113) reads complex II as **daann̲l̲** and interprets it as the name of the prophet Daniel in a "Germanised" form (compare 9. Balingen **ḍnlo**).

If the final rune is **a** rather than **n̲l̲** – as Jänichen (1956:156) and Looijenga (2003a:266) suggest – then a reading **daạnạ** → *Dǎna* is at least possible (compare OHG *Dan(n)o* m., *Danna* f. (Förstemann 1900:401)). If correct, this could be a weakly inflected FN (on pers.ns. in *Dan-*, see Balingen) with a root vowel /a/ < PGmc */a/, or */ā/ < */ē₁/. While I do not intend to advance such a reading and interpretation with any confidence, it cannot be ruled out. See also §6.1; §7.1.2.1.

33. †Hainspach pendant

l̲þ̲sr (Krause 1935c:122-123).

In Krause's interpretation (1935c:124-125), **sr** is expanded to to *s(ā)r* "here" (: OS OHG *sār* "at once" < PGmc *sēr-*). This is at best a speculative expansion; if correct, it would involve a reflex of */ē₁/, but since it is unrepresented it tells us nothing about the development of the phoneme. On the interpretation of **l̲þ̲**, see §6.1.

35. Heilbronn-Böckingen I belt fitting

(?)?arwi

Various readings of the disputed beginning (or rightmost part) of the inscription (**ik**, **k**, **ïk**) are interpreted as the 1.sg.nom. pronoun *ik* (Arntz and Jänichen 1957:124; Looijenga 2003a:243; Opitz 1987:26). The doubtful reading makes this an unreliable witness.

According to the most widely accepted etymology (§4.1), **arwi** is a MN with a stem < PGmc **arwaz* "ready". Nedoma (2004a:211-212) accounts for the final **-i** as a reflex of a suffix */-(i)ja-/, which is used in short forms of dithematic MNs, e.g., OHG *Hari, Hildi* (compare Bach 1952/1953:106; Nedoma 2004b:341; Wagner 1975:23-27).

37. Hoogebeintum comb

[I] **?nlu**   [II] **(ded)**

Complex II may represent 3.sg.pret. *dede* "did, made" < PGmc **dĕdē/*dĕđa*, to **dōnan* (Lehmann 2005-2007 §3.8; Ringe 2006:251, 263). The later dialects show alternation in the length of the stem-vowel: OS *deda*, OHG *teta* (1./3.sg.pret.); OS *dādi*, OHG *tāti* (2.sg.pret.); OS *dedun ~ dādun*, OHG *tātum* (1./2./3.pl.pret.) (BR §381; Gallée 1910 §423 Anm. 5; Holthausen 1921 §§474-475). For the 3.sg.pret., we can probably reconstruct a proto-form with a short vowel. A pl.pret. form is attested in 67. Schretzheim I.

Although Düwel advances this reading and interpretation as a possibility (Düwel and Tempel 1968/1970:368; see also Looijenga 1996:93; 2003a:325), he earlier describes the complex as a group of non-runic signs (marks of this sort being common on early medieval combs and other bone implements)

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(1968/1970:355). We may be dealing with a geometric decoration, rather than a runic inscription.

40. Hüfingen III fibula

bi̯

If this inscription represents a word, it could be an adj./adv. : OHG *bĭ* "near"; or a prep. : OHG *bĭ* "by" (< PGmc *ƀi*); or the (verbal or nominal) prefix *bi-* (Düwel and Pieper 2004:11-12). What this might mean is unclear.

41. Igling-Unterigling fibula

[I] **aunr̥?ḍ** [II] **d**

Nedoma (2004a:221-222) tentatively reads the uncertain sign in complex I as **a̧**, and the whole complex as a dithematic MN *Aunrād* (on the prototheme, see §3.3.1). The second element could be *-rād* m. < PGmc *rēđaz* (> Burg. *reþs* "advice"; ON *ráð*, OE *rǣd*, OFris *rēd*, OS *rād*, OHG *rāt* "counsel, advice"); or *-rād* f. < PGmc *rēđō*, a fem. derivative of *rēđaz*. Whether the fem. form can genuinely be traced back to PGmc is uncertain; the early onomastic evidence for this element consists almost entirely of MNs, the earliest fem. witness being Langob. *Walderada* (6th c.) (Nedoma 2004a:222-223).

The name-element may be more closely connected with the related adjective, PGmc *rēđaz* (> Go *ga-redaba* (adv.) "respectably, commendably"; ON *harð-ráðr* "hard in counsel, tyrannical"; OE *ge-rād* "considered,

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instructed, learned"; OHG *ein-rāti* "secret, isolated" (Nedoma 2004a:224; Orel 2003)).

If Nedoma's reading is correct, then we have here **ạ** for /ā/ < */ē₁/. The element *-rād* also appears in 46. [†]Kleines Schulerloch **selbrade**.

43. "Kent" fibula

 [I] **gam(:)ụ**   [II] **iku**   [III] **ẉ?fa**

In complex II, **ik** may represent the 1.sg.nom. personal pronoun *ik* (see 5. Aschheim II) (Looijenga 2003a:244); although, given the uncertainties in reading and interpreting the whole inscription, this should be treated with caution.

Complex III remains uninterpreted. If the transliteration **ẉ?fa** is valid, it is conceivable that some cognate of OE *wīf* n. "woman" (PGmc **wīƀan* > ON *víf*, OE OFris OS *wīf*, OHG *wīb*) may be present. On the interpretation of the terminal **-a**, see §6.1.

44. Kirchheim/Teck I fibula

 bạda(?)ḥ?alị̲

As noted in §3.2.1, Looijenga (2003a:245) reads **gihiali** → *gihaili*, either a verb- or noun-form with the perfective prefix *gi-*. This is a questionable reading – the sign transliterated **gi** is a cross or swastika-like sign above the

following **h**. Nedoma (2004a:375) mentions this sign, but does not regard it as a rune.

If *gihaili* is a 2.sg.imp. verb-form (the first of Looijenga's suggestions), then the terminal /-i/ is the stem-final /-j-/, syllabicated in final position (§2.3.3.6). If the word is a noun, it is a nom.sg. *īn*-stem (compare PGmc **xailīn* > OHG *heilĭ* "salvation"). In this case, we are dealing with a reflex of PGmc **/ī/*.

Opitz (1979:366) suggests that **-al̦i** may represent the end of a MN, comparable to 7. Bad Ems **m̦adal̦i** (< PGmc **mađl-ija-*?).

45. Kirchheim/Teck II fibula

aru̦gis

All interpreters regard this inscription as a dithematic MN *Arugis*, equivalent to 67. Schretzheim I **arogi̦s**. The prototheme is discussed in §4.1. The second element is generally identified with Langob. *-gīs(a)-* "arrow, spear" (< PGmc **ʒīsa-*, probably related to **ʒaizaz* > ON *geirr* "spear"; OE *gār*, OFris OS OHG *gēr* "dart, javelin, spear") (Arntz and Zeiss 1939:338; Haubrichs 2004:83; Krause 1966:299; Nedoma 1998a; 2004a:201). Nedoma notes that *-gīs(a)-* alternates with *-gīs(a)la ~ -gīsila* in versions of the same name, but he rejects the notion that the shorter form is an abbreviation of Langob. *gīsil* "arrow" (or some cognate), which in his view is derived from the base *gīs(a)-* in a pattern comparable to *Agi- ~ Agila- ~ Agina-* (compare 8. Bad Krozingen A **agirike**; 30. Griesheim **aǧi̦l̦aþruþ**). The name-elements *-gīsala, -gīsila* can also be directly related to PGmc **ʒīslaz* m. (> ON *gísl*, OE *gisel*,

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OFris *jēsel* ~ *gīsel*, OS OHG *gīsal* "hostage"); but *-gīs(a)-* cannot be a contraction of these, as this type of clipping is a feature of MHG and MLG (Nedoma, *ibid.*).

If either of these etymologies is correct, then we appear to be dealing with **i** representing a reflex of PGmc */ī/.

46. †Kleines Schulerloch cave wall inscription

birg : leub : selbrade

Structurally, this text seems to be a direct parallel to that of 8. Bad Krozingen A, if **birg** is taken to represent a nom. FN (see below for an alternative interpretation). The element *Birg-* ~ *Berg-* (PGmc **ƀerȝō* > ON *bjǫrg* "help, deliverance"; OE *hēafod-beorg* "head-shelter (i.e., helmet)"; OFris *here-berge*, OS *heri-berga*, OHG *her-berga* "inn") is a common deuterotheme, but only rarely occurs as a prototheme. In OHG, the element appears in the forms *-birg, pirc*, or with an anaptyctic vowel as *-birig, piric*; metathetic forms *-brig, -pric* are also attested. Nedoma (2004a:139) traces all of these to a PGmc **ƀerȝijō < *ƀerȝō* (see also Förstemann 1900:273, 346; Kaufmann 1968:58, 75-76). Elsewhere, **ƀerȝō* appears to be the direct etymon (e.g., OGo *Amalabergam* acc. (6th c.)), although in OE the form *-berg* alternates with *-burg* (e.g., *Ædilberga* ~ *Æðilburga* in mss. of Bede's *Historia Ecclesiastica*). The element may be present elsewhere in the runic corpus in 59. Oettingen **??iȷabrg**; 79. Weimar I **haribrig**.

Birg is morphologically rather odd, however: normally a monothematic name of this type would be inflected weak, i.e., **Birga* ~ **Berga* (Nedoma

2006b:351). The peculiar forms of the pers.ns. in the Kleines Schulerloch inscription lead Nedoma to suspect that the inscription is not genuine (see catalogue, Appendix 2).

Krause offers an alternative interpretation of **birg** as a verb, 2.sg.imp. *birg!* "help, aid!" to a reflex of PGmc *ƀerʒanan* (> Go *bairgan*, ON *bjarga*, OE *beorgan*, OS OHG *bergan* "to save, protect, keep") (Krause 1966:291).

If the inscription is genuine, and if either of these interpretations is correct, then **i** here represents a reflex of PGmc */e/.

selbrade is interpretable as a dat. dithematic MN *Selbrāde*, which has parallels in OHG *Selb(a)rat ~ Selbraat*. The prototheme is derived from PGmc *selƀaz/*selƀōn* (> Go *silba*, ON *sjálfr*, OE OFris OS *self*, OHG *selb* "self") (Nedoma 2004a:408), the deuterotheme from PGmc *rēđan/*rēđaz* (see 41. Igling-Unterigling **aunŗ?ḍ**). We have here **e** representing /e/ < */e/; and **a** representing /ā/ < */ē₁/.

47. Lauchheim I fibula

aoṇofada

This inscription has been discussed in §3.2.2; §3.3.1; §4.1. If Schwab's suggestion (1998a:420) that **fada** → *fa(ihi)da* 3.sg.pret. "made" (to PGmc *faixjanan*; see §3.2.2) is valid, then we have a medial /i/ < PGmc */i/ in the weak pret. suffix, which is not represented in the abbreviated form **fada**. We have no parallels which might point us towards an orthographic rule governing such an omission.

49. Liebenau bronze disc

ra…

Alternative reading: **ra?ẓɰi** (Düwel 1972:138).

In Düwel's interpretation of the inscription as a dithematic MN *Ra(u)zwī*, the deuterotheme is derived from PGmc *wīȝjanan/*wīxjanan* "consecrate" (see §3.3.2; §4.1). He translates the whole name "the spear-consecrated one" (1972:140-141). Like other pers.ns. with an element *wī-*, it could alternatively be connected with PGmc *wīxanan/*wīȝanan* "fight" (Looijenga 2003a:246). For further discussion, see 20. Eichstetten in §4.1.

50. Mertingen fibula

ieoḳ aun

If Düwel's speculative interpretation of **ieoḳ** as a reflex of PGmc *jeuk-* "fight, quarrel" is correct (§3.1.1), then **i** here represents initial /j-/. In defence of this hypothesis, Düwel (Babucke and Düwel 2001:169-170) notes the use of <i> for /j/ in OHG mss. (§2.5.1.1), and the epigraphical use of **u** for consonantal /w/ (§4.2.5).

51. München-Aubing I fibula

[I] **segalo**   [II] **sigila**

Both complexes are thought to represent weakly inflected pers.ns., a masc. *Segalo* and a fem. *Sigila*, both with a root *sig-* < PGmc *seȝez/*seȝaz* (> Go

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sigis, ON *sigr ~ sig*, OE *sige ~ sigor*, OFris *sī*, OS *sigi-*, OHG *sigu* (via a secondary *u*-stem variant) "victory") (Düwel 1998b:76; Nedoma 2004a:399-407, 409-410; Opitz 1987:172-174). The /-e-/ of *Segalo* may be a product of Romance influence (but see below), which Opitz (1987:174) regards as evidence that the maker of the inscription was a West Frankish or Langobardic immigrant. Düwel (1998b:77) suggests that the forms of the names *Segalo* and *Sigila* might reflect different dialects, the former WFrk or Langob, the latter Bav or Alam.

It occurs to me that the alternant *Sig-* can be accounted for as an umlaut variant conditioned by the /-i-/ of the following syllable (see §2.3.3.2). Conversely, if the proto-form is **siʒ-*, the root vowel may be lowered to /-e-/ by *a*-umlaut in **segalo** (though lowering of inherited /i/ before a non-high vowel is less consistent in OHG than is raising of /e/ before a high vowel – §2.3.3.1).

Segi- ~ Sigi- is a frequent prototheme in dithematic pers.ns., but there are no clear parallels for a form *Sega-*. Apparent examples are products of the Latin-influenced writing of Gmc **/i/ as <e> (Kaufmann 1968:311-312; see also comments on 12. Bezenye II **seg̃un**, above). Nedoma (2004a:403) argues that the form *Sega-* was absorbed by the more frequent *Segi-*. On the other hand, he does not accept Opitz' conjecture that Latin influence is responsible for the **-e-** of **segalo**; not least because it leaves unanswered the question of why one name should show **e** while the other has the same element spelled with **i**.

The treatment of *Segalo* as a hypocoristic form (accepted by both Düwel and Opitz) is problematic: the hypocoristic suffix is normally **/-il-/, not **/-al-/

(Nedoma 2004a:406-407). Later OHG sources do contain names in <-alo>/<-ala> (Düwel cites a *Segala* as early as the 6th century); but according to Nedoma these are shortened forms of dithematic names (e.g., *Dagalo* m. (10th c.) is analysable as *Dagal{}-o*, i.e., a dithematic name with a deuterotheme in /l-/). Nedoma concludes that *Segalo* is a name of this type (compare, e.g., OHG *Sigiliob* (Förstemann 1900:1328)).

sigila can be interpreted without difficulty as a hypocoristic FN *Sig-il-a*, with the stem discussed above. Looijenga offers an alternative treatment of the sequence as a noun related to OE *sigle, sigel, sigil, sigl* n. "brooch" (← Lat. *sigillum* "seal, sign") (2003a:247). Nedoma rejects this, arguing that the Lat. neut. ending /-um/ is not likely to be borrowed as fem. **-a**; and that the meaning "brooch" is not known outside England (Nedoma 2004a:409). On the first point, I note that there is an OHG *ō*-stem *insigila* "seal", probably based on *sigillum* and/or Lat. *insigne* n. "mark, token" (Köbler 1993). This implies that the transfer of gender is possible. Nedoma's semantic criticism is not insuperable, but it is significant; and, as indicated above, the interpretation as a FN in *Sigi-* < **seʒez/*seʒaz* suffers from no such problems.

If both sequences represent pers.ns. with the element *Sig-* ~ *Seg-*, the alternation in representation of the root vowels may be triggered by the height of the following vowel, irrespective of whether we reconstruct a proto-form **siʒ-* or **seʒ-*. The root vowel appears as **i** before a syllable with **-i-**, and **e**

before a syllable with **-a-**. The **-i-** of the second syllable of **sigila** belongs to a suffix < PGmc */-il-/.

53. Neudingen-Baar I fibula

[I] **(?)udị̣m** [II] **midu**   [III] **ḳlefị??**

If complexes I and II represent the same word (§4.1), **i** represents a stem-vowel derived either from PGmc */e/ via umlaut, if the word is connected to *međjaz* or *međjōn* "middle"; or from PGmc */ē₂/, if *mē₂đō* is the etymon (*mizđō* would produce a form like ***mirdu**, so it cannot underlie the present form unless we are to assume that medial /-r-/ has been omitted).

If complex III is **klefih** (one alternative reading suggested by Düwel 1990:8), then the final **ih** might be a (pseudo-?) consonant-shifted 1.sg.nom. pronoun "I". Using the more plausible reading **klefilþ**, Düwel (*ibid.*) proposes a haplographic interpretation **klef filþ*, with **filþ* possibly meaning "garment" (on the interpretation of **ḳlef**, see §3.2.2). Düwel does not give an etymology for *filþ*, but I suspect he has in mind a connection with PGmc **falđiz* m.(> ON *feldr* "cloak"; OE *fyld* "fold, volume"), and/or the related verb **falþanan* (> Go *falþan* "to fold"; ON *falda* "to cover one's head"; OE *fealdan*, OHG *faldan*, MLG *volden* "to fold up"). Nedoma (2004a:244) analyses **filþ** as **fill-iþ-*, an unattested derivative of PGmc **fellan* n. (> ON *fjáll*, OE OFris OS *fell*, OHG *fel* "skin"), again referring to the garment fastened by the fibula. He does not discuss the element */-iθ-/, but he seems to imply that it is an extension to the stem which is either meaningless or of obscure function.

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In a similar vein, Looijenga reads **filḏa** → *filþa* < **feltaz* (> OE *felt*, OHG *filz* "felt"; modG *Filz* "woollen garment, cloak") (Looijenga 2003a:247). She does not explain the supposed representation of inherited /t/ as **þ**.

54. Neudingen-Baar II wooden stave

lbi·imuba:hamale:bliḫguḫ:uraitruna

Throughout the literature, the sequence **lbi** is taken to be a contraction of *l(iub)ī* "affection, love" < PGmc **leuḇīn* (§3.1.1; compare also <u>79. Weimar I</u> **liubi**). If this is correct – and, as I indicate in the earlier discussion, I am not confident that it is – then **i** here represents the stem-formant /ī/ < PGmc **-īn/.

Scardigli (1986:353) suggests that **bi** could be treated as a haplogram, representing both the termination of *liubī* and the preposition *bi* "by, near" (see <u>40. Hüfingen III</u>). He does not develop the idea, and nowhere else in the literature is it commented on.

There is likewise widespread agreement that **imuba** is a weakly inflected nom. FN *Imuba* (§4.1). Looijenga (2003a:248) suggests a connection with *Irmin-* (PGmc **ermenaz/*ermunaz* > ON *jǫrmun-gandr* "great monster", *Jǫrmunr* (by-name of Óðinn); OE *eormen-cyn* "mankind"; OS *irmin-man* "man"; OHG *irmin-sūl* "tall column"). Nedoma uses a similar etymology, *Ermin- ~ Irmin- > Emen-, Em-, Im-*; the connection between *Irmin-* names and short forms in *Imm-* is supported by doublets like OHG *Immoni siue Irminfrido* (8th c.) (Förstemann 1900:949; Morlet 1968:84; Nedoma 2004a:348).

A connection with OHG *Imma, Emma* has been proposed (Düwel 1989a:45; 2002c:27; Opitz 1981:31; 1982:488), via a hypothetical dissimilation process /-mm-/ > /-mb-/. Nedoma (2004a:346) rejects this as an *ad hoc* postulate. He also rejects Scardigli's notion (Scardigli 1986:353-354; 1994:288) that we are dealing with a strongly-inflected (gen.) theriophoric FN *Imma* = modG *Imme* "bee"; this modern word is a reflex of OHG *imbi ~ impi*, OE *ymbe ~ imbe* "swarm (of bees)" (the meaning "bee" is not attested until late MHG (Kluge 2002)). Haubrichs (2004:87) suggests WGmc **imbi-* (with the meaning "multitude") (< PGmc **imƀiz*?) as the etymon for *Imuba*.

Nedoma instead analyses the name (together with similar forms recorded later, e.g., Langob. *Impa* (9th c.), OHG *Ymbo* m. (10th c.)) as an abbreviated dithematic name *Imub{}-a* from a full form like **Im-birg* (or similar; compare 51. München-Aubing I **segalo**, which Nedoma identifies as an abbreviated dithematic MN with a similar structure). The element *Im-* is relatively rare (appearing in, e.g., Batavian *Imerix* m. (1st century); WGmc *Immone* m. abl. (4th c.)) and its etymology is uncertain. Possible related words include OIc *ím* "dust, dirt, darkness"; OIc *ímr* (poet.) "wolf, giant" (Müller 1970:10).

If we are dealing with an etymon **ermenaz*, then **i-** represents a reflex of PGmc **/e/*. In all the other etymologies, it represents a reflex of **/i/*.

bliþguþ is uncontroversially interpreted as a dithematic FN *Blīþgu(n)þ* (§4.1), with a prototheme derived from PGmc **blīþ(j)az* (> Go *bleiþs* "kind-hearted, merciful"; ON *blíðr* "gentle, mild"; OE *blīðe* "joyful, glad, merry"; OS *blīthi* "shining, light"; OHG *blīdi* "merry, glad") (Düwel 2002c:28;

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Haubrichs 2004:79; Looijenga 2003a:248; Nedoma 2004a:242-243). The

element is well attested in OHG sources, and *Blīþgunþ* has a direct parallel

Plidcund (Förstemann 1900:313-316). We can be fairly confident, therefore,

that **i** here represents a reflex of PGmc */ī/.

55. Niederstotzingen strap end

[I] **bi̯gẉs(:)?liub**   [II] **u̯ẹ??d?ⁱᵍᵘ/du/ud?**

The only part of the text which can be interpreted with any confidence is

liub (§3.1.1). Opitz (1987:234) suggests that **big** might be an abbreviated form

of the verb "begin" (OHG *biginnan*; see Klingenberg's interpretation of 81.

Weimar III **bigina**).

56. Nordendorf I fibula

[A] [I] **logaþore**   [II] **wodan**   [III] **wigⁱ/ᵤþonar**   [B]

ạẉạḷeubwini?

The problematic termination of complex A.I has already been discussed

(§3.2.2; §4.1); the most popular (and in my view, the most plausible)

interpretations treat it as an inflectional ending < PGmc */-ai/. Kabell (1970:6-

8) suggests that the ending belongs to a nom.sg.masc. *n*-stem, and is derived

from PIE */-ēn-/ > ON /-e/ (e.g., *gume* vs. OHG *gomo*, OE *guma*). Traces of

the */-ēn-/ grade are found in parts of the masc. *n*-stem paradigm (Go gen.sg. /-

ins/, dat.sg. /-in/; OHG gen.dat.sg. /-en/ ~ /-in/; OS gen.dat.sg. /-en/; OE gen.pl.

/-ena/), as well as in the OE fem. *n*-stems (nom.sg. /-e/) (Prokosch 1939:249-

254). The *n*-stems will be discussed in more detail in §7.1 (see especially §7.1.1; §7.1.2.3).

Kabell's hypothesis lacks supporting evidence in the attested forms: the */-ēn-/ grade does not appear in the nom.sg.masc. in any of the WGmc dialects, nor in Gothic. ON /-e/ might seem to be a candidate, but according to Noreen (1923 §399), this is a reflex of PNorse */-ǣ/ (< */-an/ – see Krause 1971:125, and §7.1.1).

Complex III **wig^i/$_u$þonar** was also discussed in §4.1. The first **i** represents a reflex of */ī/, if we are dealing with a stem < PGmc *wīʒanan/*wīxanan* or *wīʒjanan/*wīxjanan*; or of */i/ if the etymon is *winʒ-*. If the generally preferred reading of ^{i}/$_u$ as **i** is correct, and if the underlying root is *wīʒj-/*wīxj-*, then this rune represents a syllabic reflex of /-j-/.

In complex IV, **wini** is believed to represent a reflex of PGmc *weniz* "friend" (§4.1), with the root-vowel */e/ > /i/ via PGmc umlaut and/or nasal conditioning (§2.3.3.2). The second **i** may represent any of several suffixes: nom.sg. (PGmc */-iz/ > OS OHG /-i/), acc.sg. (PGmc */-in/ > OS OHG /-i/), or dat.sg. (PGmc */-ai/ or */-ī/ > OS OHG /-e/; see §3.2.2).

57. Nordendorf II fibula

þ̣irl?ioel?

If the beginning of the inscription is **bir**, Arntz suggests that a MN **birtlio** → *Bir(h)tilo* might be present, with /h/ elided and /-il-/ transposed (presumably

in error). He reads the remaining runes **elŋ**, possibly representing a MN *Eling* (though Arntz allows that this is speculative) (Arntz and Zeiss 1939:305).

Opitz (1987:236) cites (without full reference) an interpretation of Henning: **birlni** = dat.sg. fem. **birilin* : OS OHG *birili* "basket, pot"; OE *byr(e)le* "cupbearer, butler" < PGmc **ƀerilaz* m., the OE form apparently via an intermediate **ƀurilaz* > **ƀurilōn*. **ƀerilaz* is itself derived from the verb **ƀeranan* (> Go *bairan*, ON *bera*, OE OS OHG *beran*, OFris *bera* "to bear, carry, give birth") (Orel 2003). Opitz posits a meaning "giver [fem.]". On the suffix **/-il-az/, see <u>15. Bülach **fridil̥**</u>.

Looijenga (2003a:251) is more confident about her reading and interpretation, dividing the text into three words **birln io elk**. The first of these is taken to be a nom. *n*-stem MN *Birl(i)n*, a diminutive based on OHG *bero* "bear". Looijenga refers to Gottschald (1982:100-101) but does not give any more detail on the construction of the name. Presumably it is composed of the stem *bir-* = *ber-* (PGmc **ƀerōn* m. > OS OHG *bero*) + the dim. suffix /-līn/. Gottschald does cite an OHG *Bierl(ein)* and MHG *Birling*, which would seem to support Looijenga's construction. The closest name recorded by Förstemann is OHG *Berila* f. (1900:261); Müller (1970:17) notes an ODan runic **birla**.[49]

In Looijenga's interpretation, **io** is *jo(h)* "and" (§4.1). Her treatment of **elk** is problematic: she states that it "should be read *elch* < Gmc **elha-* 'elk'.

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[49] We cannot read anything into the use of **i** in Müller's parallel, as the Younger Fuþarks have no **e**.

Presumably, the rune ᚲ had the value [χ], being a result of the OHG sound shift of *k > ch*." (2003a:251). This explanation is simply impossible: as Looijenga herself shows us, the proto-form *elxaz/*elxōn* does not contain PGmc */k/ but */x/ (modE *elk* is not phonologically regular, and appears to have been remodelled in ME under the influence of Lat. *alces* (OED)). It is therefore not subject to the Second Consonant Shift, and a transliteration **k** is not plausible.

Given the uncertainties of the reading, none of the above interpretations can be upheld with much confidence.

58. Oberflacht spoon

g̱ḇaᛉ/ᵢdul̩þafd

If the reading **g̱ḇa** is valid, this suggests a word from the PGmc root *ᴣeƀ-* "give". Klingenberg (1974:90-92; also Opitz 1987:123-126) treats **g** as a Begriffsrune "g(ift)", while at the same time **g̱ḇa** represents the noun < PGmc *ᴣeƀō* (> Go *giba*, ON *gjóf*, OE *gi(e)fu*, OFris *jeve*, OS OHG *geba* "gift"); or a 1.sg.pres. verb-form *giba* "I [sc. the spoon] give" (< PGmc *ᴣeƀō*).[50] On the further interpretation of **ḇa**, see §6.1.

Düwel (2002e:479) and Looijenga (2003a:252) also interpret **g̱ḇa** as a nom. noun *g(e)ba* "gift" (on the suffix, see §7.2.3.3).

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[50] Klingenberg is working on the assumptions that the dialect of the inscription is EGmc (compare Go *giba* 1.sg.pres., vs. OS OHG *gebu*); and that the function of the object is for dispensing the Eucharist (see Düwel 1994b:244).

If a connection with *ǯeƀ- is valid, we are dealing with an unrepresented root vowel < PGmc */e/.

59. Oettingen fibula

??i̯abrg

That **brg** should be expanded to *b(i)rg* via "Grønvik's law" (§2.5.2) seems to be generally accepted. There is a difference of opinion on whether this sequence represents a distinct word or the second element of a compound. Betz (1979:243-244) treats it as a 2.sg.imp. *birg* "protect!" (see <u>46. †Kleines Schulerloch **birg**</u>). Looijenga (2003a:252) and Nedoma (2004a:138-140), on the other hand, interpret the whole inscription as a dithematic FN (Looijenga, like Betz, reads the initial sequence as **auija** and interprets it as a reflex of PGmc *aujan* – §3.3.1).

On the name-element -*birg*, see <u>46. †Kleines Schulerloch **birg**</u>, above. It may also be present in <u>79. Weimar I **haribrig**</u>. The Schulerloch and Weimar examples both have a root-vowel represented **-i-**, which would seem to support the insertion of /-i-/ here. For this to be a regular development from PGmc */-e-/, we would have to infer a pre- or proto-form with a following syllable containing a high front vocalic (§2.3.3.2), such as *ƀerǯijō, posited by Nedoma. Although simplex *jō*-stem nouns in early OHG have a nom.sg. ending /-e/ ~ /-ea/ ~ /-ia/, dithematic FNs with *jō*-stem deuterothemes are normally zero-suffixed (see §7.2.2).

60. Osthofen fibula

go?:furad?ḥdẹọf̣ịle?

Krause (1966:285) reads **d?ḥ** as **dih**, which he identifies as the 2.sg.acc. pronoun *dih* < PGmc **þeke* (see 24. Freilaubersheim **þk**), invoking both *Spirantenschwächung* and the Second Consonant Shift (/k/ > /h/) (§2.4). This interpretation is widely accepted, in spite of the questionable reading and the assertion of consonant changes at an early date. Schwerdt (2000:221-222) argues that this is an example of "pseudo-Consonant Shift" (§2.4.1).

Krause's interpretation of **dẹọf̣ịle** as a borrowed form of Lat. *diabolus* "devil" is widely accepted. As noted in §3.1.1, the rendering of Lat /ia/ as **eo** is (more or less) plausible, as is **-i-** in the second syllable (compare OHG *tiufil, tiubil, diufil, diubil*), although taken together they produce an irregular form.

The ending **-e** poses further problems: Krause interprets it as a borrowing of the Latin voc. /-e/. To borrow the voc. rather than the nom. seems peculiar, however, and I am not aware of any OHG or OS parallels (*Theophile* in Tatian is not a satisfactory example – see below). If *deofile* is a genuine form, it ought on formal grounds to be dat.; but this would not be concordant with an acc. pronoun *dih*.

An alternative suggestion (Jungandreas 1972; also Looijenga 2003a:253), is that this sequence represents a pers.n., voc. to Lat *T(h)eophilus*, as it appears in Tatian's translation of Lk 1:3: *visum est et mihi,…ex ordine tibi scribere*

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optime Theophile (Vulg.).[51] Tatian preserves the Latin voc. form: *...thū*

bezzisto Theophile (Jungandreas 1972:84). To explain **d-** for Lat. *t(h)-*,

Jungandreas notes that OHG occasionally makes a similar substitution in

loanwords (e.g., Lat. *thesaurus, tunica, tractāre* → OHG *drëso, dunicha,*

drahtōn).

Neither of these interpretations can be ruled out entirely; but we should note

that in both of them, the form *deofile* is curious and unexpected.

61. Pforzen I buckle

[I] **aigil·andi·aï/ₗlrun?(…)** [II] **ḷṭahu·gasokun?**

Düwel's (1997c:282-283, 1999b:43-44) identification of *Aigil* as a short

form of a dithematic name in *Agila-* (compare 30. Griesheim **ą̇ģ̇iḷ̇aþruþ**)

receives little sympathy from Nedoma (2004a:163-165), as the proposed

alternation *A- ~ Ai-* is unmotivated and Pforzen **aigil** lacks the weak inflection

which names of this sort exhibit (→ ***aigila/-o**). Düwel mentions early

interpretations of the text which read **aigil:andi** as a haplographic *Aigila andi*

(a notion which Schwab (1999b:75) supports, interpreting *Aigila* as an EGmc

MN); but these are generally rejected because of the presence of a word-

separator after **l**. Strongly-inflected hypocoristic names do appear in later

sources, but only rarely in OHG (e.g., *Zuzil* m., 8th c.). In OS and OE they are

rather more frequent, but the examples Nedoma cites are from the 9th century

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[51] "It seemed good to me also, … to write to thee in order, most excellent Theophilus"

(Rheims-Douay tr.).

or later (Nedoma 2004a:163-164). Instead, Nedoma analyses *Aigil* as a
deverbal *nomen agentis* like <u>15. Bülach</u> **fridiḷ**, with **-il** → /-il-Ø/ < PGmc */-il-az/. On the etymology of the stem, see §3.2.1.

It is generally accepted that **andi** is the conjunction *andi* "and" (PGmc
*anđi > ON *en(n)*, OE OFris *and*, OS *endi*, MDu *enn*, OHG *anti ~ enti ~ inti*
"and"), coordinating the pers.ns. *Aigil* and *Ailrūn/Allrūn/Alurūn* (see §3.2.1;
§6.1).

ḷṭahu is the most problematic part of the inscription; its various
interpretations have been discussed in §4.1. If the reading **elahu** is correct
then we are probably dealing with a cognate of OHG *elahho* "elk" (< PGmc
*elxōn; compare <u>89. Wremen</u> **lgu-**). The only interpretation of this reading
which does not employ the "elk"-word is that of Schwab (1999b:64-67), who
suggests that it may be a compound *el(i)-ahu* dat.sg. "foreign water". The
element *eli-* is here a reflex of PGmc **aljaz* "other", with **e** representing an
umlaut product of an underlying /a/ (§6.1).

Alternatively, Schwab proposes that **elahu** could be a compound *ēl-ahu*
"eel-water" (PGmc **ēlaz* > ON *áll*, OE *ǣl*, OFris *ēl*, OS OHG *āl* "eel"), where
e represents a reflex of PGmc **/ē₁/* prior to its development into /ā/ (Schwab
1999b:67-68). In defence of this proposal, Schwab argues (incorrectly – see
§5.2.2.2) that the only runic inscription from the Continent which attests to this
change is the Thorsberg sword chape (KJ 20) **wajemariz**, which Krause
(1966:54; 1971:24) interprets as a compound with *-māriz* < PGmc **mērjaz*

"famous" (see also 77. Szabadbattyán **marŋ**). Nedoma (2004a:162;

2004b:347-348) rejects Schwab's conjecture as linguistically impossible.

Wagner (1995:104-105; 1999a:93-95) reads the "cross-hatching" at the end

of complex I as **aŋi**, which he takes together with **ltahu** to give a dat.

dithematic FN *Angiltāhu*, with a prototheme *Angil-* "Angle" (= OHG *Angil-*,

OE *Engle* < PGmc *anʒ(i)laz*). Förstemann (1900:107-119) cites a large

number of pers.ns. in *Angil-*, which have several possible etymologies: (i)

Ang-il- as an extension of the name-element *Ang-* (: OHG *ango* "hook, hinge"

< PGmc *anʒōn*); (ii) the ethnonym "Angle" < PGmc *anʒ(i)laz*; (iii) Lat.

angelus "angel"; (iv) an extension of the name-element *Ingvi-* (see 85. †Weser

I **(ŋ)?e**) (extensions of this type normally appear as *Ingal-*). Even if Wagner's

reading is correct (which is at best questionable), the etymology of the element

*aŋil- is uncertain (on the element *-tāhu*, see §4.1).

Nedoma (1999b:106-108, 2004a:161, 2004b:347), reads **ḷṭahu** as a single

word, which he interprets as a RN *(I)ltahu*, or perhaps *(A)ltahu*. The former is

a compound of a known RN (modG *Ilz*, a Bavarian tributary of the Danube;

there is also an *Ilz-bach* in Styria)[52] with the second element *-ahu* "water"

(§4.1). The initial /i-/ may be supplied by invocation of "Grønvik's law"

(§2.5.2); it is not necessary to postulate the presence of a bind-rune **il**, as

proposed by Eichner (1999:112-113) and Grønvik (2003:175-176).

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[52] On the possible origins of the element *Il-/Al-* "water, river"(?), see Bahlow (1985).

For our present purposes, I conclude simply that the reading **ḷṭahu** does not contain any rune which can represent a reflex of a PGmc front vocalic. If one is present, it must be inferred as an orthographically unrepresented element. Given the wide range of interpretations – none of which is altogether satisfactory – this cannot be considered a reliable example.

62. Pforzen II ivory ring

[I] **?lụ?ụlgisali[**   [II] **]?ẹ:aodliþ:urait:runa**

The legible portion of complex I, **gisali**, is interpreted as a MN derived from either PGmc *ʒīslaz* "hostage" or *ʒīslaz/*ʒīzlaz* "arrow, spear", both of which involve a root-vowel < PGmc */-ī-/. As the proto-forms show, these two etyma are difficult to distinguish from one another (Düwel 1999c:130; Nedoma 2004a:304-306). A similar element *gīs-* (probably related to *ʒīslaz* "arrow", though not directly derivable from it) may be present in 45. Kirchheim/Teck II **arụgis**; 67. Schretzheim I **arogịs**. In the present case, Haubrichs (2004:83) favours the "arrow"-word as the etymon.

The terminal **-i** may be the beginning of another word (in which case **gisal** is a zero-suffixed *Gīsal*). Nedoma prefers to interpret it as a suffix: **gisali** → *Gīsal-i*, a short form of a dithematic name with a hypocoristic suffix */-ija-/ (2004a:304, 2004b:341; likewise Düwel 1999c:130; Haubrichs *loc.cit.*).

In complex II, **aodliþ** is generally believed to be a dithematic FN *Aodli(n)þ* (on the prototheme, see §3.3.1). The deuterotheme is (so Düwel 1999c:131-132; 2002c:33; Nedoma 2004a:192-193) a fem. form of an adjective, to PGmc

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*lenþaz/*linþijaz (> OE *līð* "lithe, soft, gentle"; OS *līthi* "mild, merciful"; OHG *lindi* "mild, gentle, friendly"). Nedoma supports the reconstruction of a *jō*-stem by reference to WFrk names in *-lend-is, -lind-is*. Braune likewise states that FNs in OHG *-lind* behave like *jō*-stems (BR §210 Anm. 5); see further §7.2.2. According to Düwel (1999c:131), names with an adjective as a deuterotheme are normally feminine.

63. Pleidelsheim fibula

i̦i̦ha

Düwel (1999a:15), reading **inha**, mentions a similar form INHANI (gen.) on a Latin inscription (CIL XIII 3579); but he asserts that there is no connection between the two. Reichert (1987:446) classifies INHANI as non-Gmc. A Gmc name-element *In(n)-* is attested (e.g., OHG *Inno, Infrid, Inheri*), which Förstemann (1900:955) connects the with OE *inn* "house, lodging" ← *in(n)* adv. "within" < PGmc *enđ(ĕ̆)*.

Nedoma (2004a:349) tentatively suggests that a reading **eha** ← **i̦i̦ha** (ᛁ ᛁᚾᚠ ← ᛗᚾᚠ) might be possible, and that this might represent a fem. parallel to 19. Donzdorf **eho**. This idea is offered as nothing more than an attractive speculation.

64. †Rubring stone piece

[I] **ʔïndǫ?** [II] **(?)ṛiŋ[(…)** [III] **w(?)**

Steinhauser (1968a:5-9) reads the beginning of complex I as <u>ḳ</u>ïn → *kēn* =

OHG *kēn* ~ *kien* "torch, pine" → "lightning"(?), with the "yew-rune" standing

for a long /ē/ < PGmc */ē₂/. Nedoma dismisses this as implausible (2003:486).

In the few inscriptions in which this rune appears, it normally represents /i/ or

/ī/ (see §5.2.4).

In complex II, Steinhauser reads **iriŋ** → *Iring*, a MN attested in OHG

sources and in place-names (e.g., *Iringesperg* (1106) = modern-day

Eibetsberg) (Steinhauser 1968a:7). The name *Iring* ~ *Irinc* is frequent in OHG

sources, but the etymology of the stem *Ir-* is unclear (Förstemann 1900:967-

968).

The mark which Steinhauser reads as the initial **i** is a long vertical line

covering the height of complexes I and II. Nedoma expresses doubt about

whether this is a rune at all. If it is, there is no reason to assign it to complex II

rather than complex I. Steinhauser's claim that the double height of the sign is

connected somehow with the allegedly mythical figure of Iring is

unsubstantiated and has no parallels elsewhere in the runic tradition (Nedoma

2003:485).

65. †Rügen stone piece

^f/_a**gi**^u/_l

Arntz (1973b:7-8) interprets **giu** as *gi(b)u*, which I do not consider to be

phonologically plausible (see §4.1). No other interpretations are available.

67. Schretzheim I capsule

[I] **alaguþ:leuba:dęd̦un**   [II] **arogi̦sd**

In complex I, **dęd̦un** is invariably taken to represent *dĕdun* 3.pl.pret. "made" (§4.1; see also 37. Hoogebeintum **ded**, above). In the pl.pret. forms of the verb "do/make", OHG regularly has *tātun*, with a stem-vowel /ā/ < PGmc */ē₁/, while OS sources vary between a parallel *dādun* and *dedun* with a short vowel < PGmc */e/. This alternation in the preterite stem (*/-e-/ ~ */-ē₁-/) may already have been present in PGmc (Ringe 2006:158, 263). The view expressed in BR (§381) is that Schretzheim **e** represents short /e/; we cannot at this stage rule out the possibility of an archaic spelling of a reflex of */ē₁/, however (for further discussion, see §5.2.2.2).

The general view is that complex II **arogi̦s** represents a MN parallel to 45. Kirchheim/Teck II **aru̦gis** (see above) (Arntz and Zeiss 1939:338; Haubrichs 2004:77; Krause 1966:299; Nedoma 2004a:199). Accepting **arogi̦s** as a pers.n. leaves us with the stray **d** at the end. The most common method of disposal is as a Begriffsrune or as an abbreviation for *d(eda)* 3.sg.pret. "did, made", parallel to **dedun** in complex I (Arntz and Zeiss 1939:339; Krause 1966:299-300; Nedoma 2004a:172).

Another possibility is that **d** belongs to the name, **arogi̦sd** → *Arogast* (Arntz and Zeiss 1939:340; Looijenga 2003a:255). This strikes me as an *ad hoc* interpretation and not phonologically credible. Firstly and most importantly, the vowel alternation /i/ ~ /a/ is unmotivated and unsupported.

Secondly, no explanation is given for the use of **d** for final /-t/ (although there is a possible parallel in 81. Weimar III **isd**, which may be 3.sg.pres.ind. *ist* "is"). I suspect that the suggestion is based on a presumed devoicing of final /-d/, which might lead a carver to confuse **d** and **t** in final position. If we allow this point to stand, it might license an interpretation of **arogi̧sd** as **Arogist*; but there is still no justification for treating -*gist* as a variant of -*gast*.

Yet another possibility suggested by Arntz (Arntz and Zeiss 1939:343) is that **d** is an abbreviation for *(an)d(i)* "and", co-ordinating *Arogīs* and *Alagunþ* as the plural subject of *dĕdun*. Again, this has no parallels and cannot be substantiated.

I note in passing that no attempt has been made to interpret **i̧sd** here as *ist* 3.sg.pres. "is" (compare 81. Weimar III), presumably because there is no following material to act as a complement. On the other hand, the runological community seems quite happy to accept **de̞d̞un** and **d** as "made" without an overt object. An **i̧sd** interpretation would leave us with a word **arog* to account for – not that this would necessarily present any difficulty; we could, for instance, invoke haplography and expand the text to *Arog(īs) ist*.

68. Schretzheim II fibula

　[I] **siþwagadin**　　[II] **leubo**

Complex I is generally interpreted as either two words *si(n)þ wag(j?)a(n)dĭn*, or a compound of these two elements. In either case, **siþ** is connected to PGmc **senþaz* m. (> Go *sinþs* "time, instance"; ON *sinn* n. "time"; OE *sīð* "going, journey, travel"; OS *sīð* "way"; OHG *sind* "direction,

way"). If it is an independent word, it is taken to be acc.sg., the object of the participle or deverbal noun represented by **wagadin** (see §4.1). The termination **-in** has already been discussed, as its interpretation is linked to that of the stem. If it is a weak dat.sg. adjectival ending (Krause 1966: 1966:298; Koch 1977:164), **-i-** represents the final /-i-/ of the participial stem-formant (PGmc */-anđ-ja-/ ~ */-jō-/). The declension of the present participles in the Gmc dialects varies, but in OHG and OS they are regularly declined as *ja-/jō*-stems (Prokosch 1939:264), with dat.pl. /-ēm/ < PGmc */-aim/ (BR §§250, 256-257). In OHG mss., dat.pl. suffixes in <-n> predominate in the 9th century, but only <-m> appears in the 8th (BR §193 Anm. 7).

In Nedoma's interpretation (2004a:359, 411), the sequence represents a deverbal *īn*-stem noun and **-i-** therefore represents a long /ī/ < */ī/.

70. Schwangau fibula

    aeþi

In Looijenga's interpretation, this sequence may represent a *ja*-stem MN < PGmc **aiþijaz*, an adjectival derivative of **aiþō* "district" (§3.2.1). This interpretation is open to question, but no alternatives have been offered. If it is correct, **i** represents the suffix /-ĭ/ < PGmc */-ija-/ (see 35. Heilbronn-Böckingen I **arwi**).

71. Sievern-A bracteate

    ṛẉriḷu

On the generally-accepted interpretation of **ẉriḷu** as *wrītu* 1.sg.pres., see
§4.1. If this is correct, **i** here represents the vowel of the present stem, /ī/ <
PGmc */ī/.

72. Skodborg-B bracteate

aujaalawinaujaalawinaujaalawinjalawid

That **auja** represents either PNorse *auja* "luck" or a WGmc cognate **auwja*
(§3.3.1) is not controversial. The identification of the dialect as WGmc is
peculiar to Antonsen (1975:76-77).

The sequences **alawin** and **alawid** are without exception interpreted as
MNs, the first with a deuterotheme *-win* < PGmc **weniz* (see 56. Nordendorf I
ḷeubwini, in §4.1). The etymology of the deuterotheme represented by **-wid** is
less clear: **-i-** in this case may represent a reflex of PGmc */i/, */e/ or */ī/
(§4.1).

The **j** preceding **alawid** is usually regarded as either a Begriffsrune *j(āra)*
"year" → "good year, good harvest" (Antonsen 1975:77; Krause 1966:242;
1971:163; Looijenga 2003a:216; McKinnell et al. 2004:77; Nowak 2004:541);
as a fourth *auja* in abbreviated form (Krause, *ibid.*); or as the particle *ja(h)*
"and" (Stiles 1984:30; compare Looijenga's interpretation of 57. Nordendorf II
io).

73. Skonager III-C bracteate

  [I] **niuwila** [II] **lᛈ̣ụ**

  Complex I is generally accepted as a MN < PGmc *neuja-* with the
hypocoristic suffix */-il-/ (§3.1.1; §4.1). If Antonsen is correct in interpreting
w not as an error or epenthetic glide from /u/ to /i/ but as a product of
gemination, then **-i-** here might be seen as representing the reflex of not only
the suffix vowel /-i-/ but also */-j-/ in the stem-formant (i.e., */-j-i-/ > */-ī-/ >
*/-i-/).

74. Soest fibula

  [I] **rada:daþa**   [II] **atano** or **gatano**

  rada is variously treated in the literature as either a weakly inflected nom.
FN *Rāda* (Arntz and Zeiss 1939:348; Holthausen 1931:304; Krause 1966:280;
Nedoma 2004a:394-395); or as a formulaic "wish-word"cognate with OHG *rāt*
"counsel, advice, help" → "protection"(?) (Arntz and Zeiss 1939:348;
Klingenberg and Koch 1974:125; Opitz 1987:41). In either case, it is derived
from PGmc *rēđaz* "counsel" (see 41. Igling-Unterigling **aunṛ?ḍ**), with **a**
representing a reflex of */ē₁/. In the "formula-word" interpretation, Opitz
accounts for the terminal **-a** as a nom./acc.pl. *a*-stem inflectional suffix
(compare OHG /-a/, OS /-os/ ~ /-as/ ~ /-a/ < PGmc nom.pl. */-ōz/).

  Looijenga prefers to interpret **rada** as a verb-form, 3.sg.opt.pres. *rādē*, to
OHG *rātan,* OS *rādan* (< PGmc *rēđanan*), which she glosses not in the
normal way "to advise, counsel" (compare Holthausen 1921; Orel 2003) but as

"to guess, to read" ("Obviously, Datha should guess the name that was hidden in the rune-cross [sc. complex II]" (Looijenga 2003a:258)). These meanings are attested for OE *rǣdan* (BT), but not for the OHG or OS cognates (Köbler 1993; 2000). Looijenga's explanation of the final **-a** as a result of either vowel-harmony with the root-vowel /-ā-/ or end-rhyme with **daþa** is speculative, and she offers no justification for her unusual gloss.

All commentators agree that **daþa** is a weak nom. FN *Dăþa*, with the same stem as 24. Freilaubersheim **ḍaᚦïna**. If the stem-vowel is long, then **a** represents a reflex of */ē₁/.

75. Steindorf sax

?husị?alḍ??(?)

On the interpretation of **husị?alḍ** as a pers.n. with a prototheme *Hŭsi-*, see §4.1. It is unclear whether **ị** represents a reflex of thematic */-i-/, or */-j-/ in a stem-formant */-ja-/.

76. Stetten pin-head(?)

ạmelkuḍ ᚠ

Pieper interprets **ạmelkuḍ** as a dithematic FN *Amelku(n)d* (see §4.1). The first element is taken to be *Amal-*, the family name of the Ostrogothic kings, possibly attested in 9. Balingen **amịluḳ**; and/or 27. Gammertingen **aᵈ/ₘo**

(§6.1)). As in the case of Balingen, the vowel of the second syllable here

appears to be a product of anaptyxis.

77. Szabadbattyán buckle

marŋs?

marŋ is commonly interpreted as a WGmc MN *Māring*, with a stem *māri-*

< PGmc **mērjaz* (> Go *waila-mereis* "well-reputed, laudable"; ON *mærr*, OE

mǣre, OS OHG *māri* "famous, distinguished, great") (Arntz and Zeiss

1939:359; Kiss 1980:113-114; Krause 1966:311). Nedoma (2004a:379, 381-

383) also favours this etymology. **ŋ** is here interpreted as the patronymic

suffix /-ing/.

Grønvik (1985:181) suggests that the following **s** might also be part of this

name, *Mārings* being gen.sg. < *Māring(a)s ~ -(e)s*, with syncope of the suffix

vowel; in Grønvik's view, the /-es/ suffix of the OHG gen.sg. was later

restored analogically through the influence of the demonstrative pronoun *þes >*

des. Nedoma (2004a:379) objects that in fact the OHG *a*-stem gen.sg. /-es/ is

generally believed to be a regular reflex of PGmc */-eza/ < PIE */-éso/ (vs. */-

oso/ > PGmc */-aza/ > ON /-ar/); there is no supporting evidence for the

existence of a form with a syncopated vowel in the earlier stages of the

language.

A second possibility is that we are dealing with a name with a short stem-

vowel /a/ < */a/ (see §6.1).

78. †Trier serpentine object

[I] **wilsa**   [II] **wairwai**

[I] **wilĵa**   [II] **wairwai** (my alternative reading – see §4.1).

On Schneider's (1980) interpretation of complex I as a 2.sg.imp. verb-form *wil(li)so* "to long for" (or similar), with **i** → /i/ < PGmc */i/, see §4.1.

If my alternative reading **wilĵa** is plausible, we may be dealing with a weakly inflected pers.n. based on a *ja-* or *jō*-stem element. In this case, **ĵ** represents the stem-formant /-j-/.

79. Weimar I fibula

[I] **haribrig**[II] **hiɓa:**   [III] **liub(į):**   [IV] **leob·**

Complex I **haribrig** is believed throughout the literature to be a metathetic form of a dithematic FN *Haribirg* (attested in OHG *Heripirc* (9th c.); *Heripric* (10th c.)) (Arntz and Zeiss 1939:366; Nedoma 2004a:330). The etymology poses few difficulties: the first element is connected to PGmc **xariz/*xarjaz* m. (> Go *harjis*, ON *herr*, OE OFris *here*, OS *heri*, OHG *heri* n. "army") (see also 85. †Weser I **(ŋ)hari**; 87. †Weser III **ulu:hari**); the second to **ɓerʒō* f., possibly via a derived **ɓerʒijō*, which would account for the representation of **/e/* as **i** via umlaut (see 46. †Kleines Schulerloch **birg**). The first of the two **i**-runes represents a short /i/ < either PGmc */i/ or a syllabic reflex of */j/ (depending on which proto-form we posit for *Hari-*); the second is a reflex of PGmc */e/, the raising of which is regular if the proto-form is a *jō*-stem.

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Complex II **hiþa** is generally identified as a weakly inflected monothematic FN *Hiba*, the nearest literary parallels to which are OHG *Hibonis* m.gen. (8th c.); OS *Hibuko* m. (c.1000) (Nedoma 2004a:332). Both Arntz (Arntz and Zeiss 1939:367) and Krause (1966:288) identify OHG *Hibo* m. as a hypocoristic form of dithematic MNs like *Hildibert, Hildiberg, Hildibald* (see also Förstemann 1900:814, 818). The name-element *-hild* (< PGmc **xelđiz/*xelđjō* "battle") may be present in 11. Bezenye I **godahid**; and 26. Friedberg **þuruþhild**.

Nedoma supports the idea that **hiþa** is an abbreviated form of a dithematic name, noting that there is no known Gmc name-element *Hĭb-* (2004a:332-333). Abbreviations of this sort are normally built on a base consisting of the prototheme and the beginning of the deuterotheme (often reduced or elided), with a weak inflection added (compare Nedoma's analyses of 51. München-Aubing I **segalo**; and 54. Neudingen-Baar II **imuba**). If *Hiba* is a name of this sort, it would be what Nedoma calls a "progressive type", in which the base consists of clipped initial parts of both themes, i.e. *Hi{}b{}-a* ← *Hildiburg* etc. (Nedoma 2004a:334). Nedoma rejects Opitz' (1987:188-189) suggestion that *Hiba* is a hypocoristic form of *Haribirg*, on the grounds that the contraction of *Hari-* to *H{}i*, eliding the root-vowel and retaining the thematic vowel, is unparalleled (we would expect a form like ***haba**).

Looijenga's speculation that **hiba** might instead be "an alternative spelling for *hīwa* 'spouse'" (2003a:261) is groundless; Looijenga appears to be following Schwerdt's (incorrect) identification of a Verner's Law alternation

between /b/ and /w/ (see entries on 28. Geltorf II and 35. Heilbronn-Böckingen I in §4.1) (Looijenga 2003a:269; Schwerdt 2000:213).

Arntz suggests another alternative: no bottom stroke is visible on **þ**, so a reading **hira** is plausible. This could be a 3.sg. gen. or dat.fem. pronoun *hira* (OS OHG *ira* : OFris *hira*, OE *hire*).[53] To explain the initial /h-/, Arntz notes that Frankish sources often have *her* rather than the normal *er* for the 3.nom.sg.masc. pronoun, so perhaps a variant **hira* vs. *ira* is possible (Arntz and Zeiss 1939:366-367).

If the majority reading **hiba** is correct, and if the sequence represents a pers.n., it is unclear what name-elements underlie it. A prototheme *Hildi-* is certainly plausible, but we cannot be confident that it is present here.

If the end of complex III is correctly read as an **i-**rune, then we may be dealing with an *īn*-stem noun *liubī* "love, affection" (< PGmc **leuƀīn*) (see 54. Neudingen-Baar II **lbi**); or a nom. *ja*-stem MN *Liubi* (§3.1.1). In the former case, **-i** represents a reflex of PGmc **-ī*/, in the latter the stem-formant **-j-/*.

80. Weimar II fibula

[I] **si^g/$_n$ (…)**   [II] **bubo:**   [III] **hiba:**

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[53] The reconstruction of the anaphoric pronoun(s) in PGmc is fraught with difficulties, because such a variety of forms appears in the dialects (see Lehmann 2005-2007 §3.4.4; Ringe 2006:289).

The dominant view is that complex I contains a pers.n. in *Sig-* (see 51. München-Aubing I **segalo, sigila**) or *Sin(þ)-* (see 68. Schretzheim II **siþ-**); or, if read right to left, it could be a name ending with the element *-gīs* (see 45. Kirchheim/Teck II **aru̯gis**; 67. Schretzheim I **arogi̯s**) (Arntz and Zeiss 1939:369; Krause 1966:288; Nedoma 2004a:408-409; Opitz 1987:46). The reading is so uncertain, however, that we cannot consider either of these reliable.

Looijenga's (2003a:261) reading **sigib^l/_ad** → *Sigibald* (on the etymology of *-bald*, see 75. Steindorf **husi̯^b/_ald**) does not find any support elsewhere.

Complex III **hiba** is equivalent to 79. Weimar I **hiba̱**. Given that both witnesses are from the same grave, it is possible that if **hiba** represents a pers.n., both inscriptions refer to the same individual.

81. Weimar III buckle

[I] **ida:bi̱gina:hahwar**   [II] **:awimund:isd:l̤e̤oḇ**   [III] **idunⁱ/**.

In complex I, **ida** is interpreted as a weakly inflected FN (or MN?)[54] *Ida*, with parallels in several other runic inscriptions: 16. Charnay **id:dan** (masc.); 82. Weimar IV **ida**; and (in Jänichen's interpretation) 24. Freilaubersheim **i̱da**. Other possible witnesses are **i̱dons** (Leţcani spindle-whorl (L V.38), excluded from my corpus on geographical and linguistic grounds); and **IDIN** (Meldorf fibula, if the inscription is in Roman capitals; see, *inter alios*, Düwel and

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[54] Only Looijenga (2003a:261) suggests that this name may be masc. (see §7.1.2.1).

Gebühr 1981; Odenstedt 1983. For criticism of the Latin interpretation, see Antonsen 1986:337-338).

Nedoma analyses *Ida* as a short form of a dithematic name with the prototheme *Id(a?)-*, the etymology of which is not clear. He favours a connection with OIc *iðja* f. "activity, doing, business", *íð* f. "deed, work" (< PGmc *iðiz*), *iðinn* adj. "diligent" (2004a:341-342). De Vries (1961) identifies OE *idig* "busy, active" with the same root.

Arntz (Arntz and Zeiss 1939:373) identifies **bigina** as a FN with a stem *Bĭg-*, attested in OE *Biga*, OHG *Pigo, Bicco* and various dithematic names (e.g., OHG *Bighibert* (8th c.)). The etymology of this stem is unknown. Nedoma rejects a connection with Alam. *pīga* f. *ō*-stem, Bav. *pīgo* m. *n*-stem "heap, something piled up", on (unspecified) semantic grounds, notwithstanding its formal (i.e., phonological) plausibility (2004a:235).

Nedoma analyses the termination **-ina** as the feminising suffix (< PGmc */-īn(a)-/), followed by a weak nom.fem. inflectional suffix (§7.1.2) (Nedoma 2004a:234-236); compare the analysis of 24. Freilaubersheim **-ïna**.

Opitz briefly mentions Klingenberg's interpretation of **bigina** as 2.sg.imp. to the verb "begin" (PGmc *ƀi-ʒennanan* > OE OS *bi-ginnan*, OFris *be-ginna*, OHG *bi-ginnan*) (Klingenberg 1976c:370-371; Opitz 1987:110). That the sequence is connected with this verb I find plausible in itself, but the 2.sg.imp. is endingless throughout Gmc (Lehmann 2005-2007 §3.8; Prokosch 1939:215). If we are dealing with a verb-form here, it requires further explanation; we could, for example, speculate that following material (such as the /-nd-/ of a

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pres.part.) has been omitted. There is, of course, no principled way to test this unless the interpretation of the whole text requires such an explanation, and I see no reason to believe that this is the case.

These interpretations leave us uncertain about whether the first **i**-rune represents a reflex of PGmc */-i-/ or */-ī-/; but **-in-** probably contains /ī/ < */ī/.

hahwar is interpreted as a MN (on the prototheme, see §3.3.2; §6.1). Most commentators associate the deuterotheme with PGmc **waraz* "wary", but it could alternatively be a reflex of **wēraz* "true", with **a** → /ā/ < */ē₁/ (§4.1).

In complex II, **awimund** is understood to be a dithematic MN with the prototheme *Awi-* < PGmc **aujan* (§3.3.1), with **-i-** representing a syllabic reflex of PGmc */j/ in the stem-formant.

isd may be the 3.sg.pres. copula *ist* (PGmc **esti* > Go *ist*, ON *es*, OE *is*, OFris OS *is(t)*, OHG *ist*). This interpretation is favoured in much of the literature (Arntz and Zeiss 1939:374-375; Düwel 1994b:290; Looijenga 2003a:262; Nedoma 2004a:228). Arntz reads **isdir̥**, which he interprets as a haplographic *ist dir* "is to you" (the pronoun is 2.sg.dat. with *Spirantenschwächung* (§2.4.2); compare <u>60. Osthofen</u> **dih**, interpreted by Krause as *dih* acc.). In the literature, no comment is made on the use of **d** for /t/, which I find puzzling. The only other alleged example of this phenomenon is in Looijenga's interpretation of <u>67. Schretzheim I</u> **arogisd** as a MN *Arogast* (qv).

If the copula interpretation is correct, then **i** here represents a reflex of */e/, raised to */i/ by the final */-i/ of *esti prior to its apocopation.

Krause (1966:290) suggests that the final **d** is a Begriffsrune and the sequence **isd** represents a dithematic MN *Īsdag*. Klingenberg (1976c:369-371) and Opitz (1987:48, 192-194) develop this into a more elaborate mythological interpretation.

Complex III is believed to contain an oblique form of the pers.n. *Ida* (see above, and §4.1).

Looijenga seems to be alone in preferring to read the sign after **idun** as an **i**-rune rather than a paratextual mark. She suggests that *Iduni* might be a FN, but she does not attempt any detailed analysis (Looijenga 2003a:262).

82. Weimar IV bead

ᵇ/ᵥᵥiuᵇ/ᵥᵥ:ida:?e????a:hahwar:

ida and **hahwar** are generally interpreted as a FN *Ida* and a MN *Hăhwăr*, respectively. Both of these names appear on 81. Weimar III (see above). Since both inscriptions are from the same grave, they may refer to the same individuals.

83. Weingarten I fibula

[I] aˡⁱ/ₑrguþ:?(?)   [II] feha: writ?...ⁱ/₁a

Based on the majority reading **alirguþ** (Arntz and Jänichen 1957:127; Kiel;

Krause 1966:306; Nedoma 2004a:176-178; Opitz 1987:49, 200; Wagner

1994/95:164), complex I is interpreted as a dithematic FN with a prototheme

Alir-, identified with the "alder"-word, PGmc **alizō/*alisō* (see 31. Hailfingen

I **ali̠s̠rh** (Arntz' reading)). If this is correct, **i** here represents /i/ < */i/. If

aerguþ is the correct reading, then the digraph **ae** represents a reflex of the

diphthong */ai/ (§3.2.1). On the deuterotheme, see §4.1.

In complex II, **feha** has several possible interpretations (discussed in detail

in §3.2.2). The most popular is that **e** represents a monophthongal reflex of

PGmc */ai/. Nedoma (2004a:296-297) discusses several alternatives in which

e represents an underlying monophthong.

writ?...^{i}/₁**a** is believed to contain the present stem of the "write"-verb, in

which case **i** represents a reflex of */ī/ (see also 71. Sievern **wri̜u**). If the

reading **writila** is valid, then we have a second **i** representing the vowel of the

suffix */-il-/ (see §4.1).

84. Weingarten II fibula

da̧do

There seems to be little doubt in the literature that this inscription contains a

weakly inflected nom. MN *Dado*, *Dādo* or *Da(n)do* (the latter with an

unrepresented nasal (§2.5.2), or possibly with a bind-rune **an** (Opitz 1987:168;

Schwerdt 2000:236)). The same sequence, presumably also representing one of these names, appears on 6. Aschheim III.

The only dissenting voice is that of Schwab (1998a:396-397), who suggests that the **d**-runes might actually represent *chi*-crosses, and that **a** and **o** correspond to *alpha* and *ōmega*; in other words, the inscription is taken to be a Christian formula rather than a word in the vernacular (compare Schwab's interpretation of 27. Gammertingen **ado** (§6.1)).

The etymologies of these names remain uncertain. A short-stemmed *Dădo* could be a "lall-name" abbreviated from a dithematic name in *Daga-* (< PGmc *ðaȝaz* > Go *dags*, ON *dagr*, OE *dæg*, OFris *dei*, OS *dag*, OHG *tag* "day"). If the stem is long, a "lall-form" constructed from an element like *Rada-* (< PGmc *rēdaz*; see 41. Igling-Unterigling **aunṛ?ḍ**) is possible (Nedoma 2004a:268-269).

Krause (1966:306-307) and Nedoma (2004a:267-270) favour *Dādo* with a long stem-vowel, on the basis of parallels such as OHG *Taato*. Nedoma proposes an etymological connection with PGmc *ðēðiz* "deed" (see discussion of 24. Freilaubersheim **daþïna**); or perhaps a by-name formed from children's language, comparable to modE *Dad, Daddy*.

If the sequence represents *Da(n)do* (: OHG *Tanto*, OS *Dando*), this may also be explained as a "lall-name", with /-n-/ as an intrusive (dissimilatory) element < *Daddo* < *Dado* (Nedoma 2004a:270). On the possible semantic function of this type of infix, see Lühr (1988).

85. †Weser I bone

[I] **latam(ŋ)hari**   [II] **kunni(ŋ)?e**   [III] **hagal**

The favoured interpretation of **latam** is as 1.pl.pres.opt. or 1.pl.pres.ind. to a reflex of PGmc *lētanan* "let" (§3.2.2). While the identity of the inflectional ending is disputed, there do not appear to be any objections to the connection with *lētanan*, with **a** representing /ā/ < */ē₁/.

All commentators treat **hari** as nom./acc.sg. to a reflex of PGmc *xariz/*xarjaz* "army" (see 79. Weimar I **haribrig**), in which case, **i** represents either a reflex of the PGmc thematic vowel */i/, or a syllabic reflex of */j/. If the ⊠-like sign is not **ŋ**, we might be dealing with the common noun "army" (Düwel 2008:65; Holthausen 1931:304); or perhaps a monothematic (abbreviated?) pers.n. *Hari* (see below). Another possibility, not mentioned in the literature, is that **hari** is dat., with the terminal **-i** possibly representing a reflex of PGmc */-ai/ (§3.2.2).

If, as Pieper believes, the ⊠-like signs are **ŋ**-runes, the sequence **ŋhari** could represent a dithematic MN *Inghari*. Both elements are quite common; however, names with a prototheme *Ing-* usually (but not always) have a compositional vowel (e.g., *Ingobald, Ingaberta, Ingobrand, Inguhilt ~ Ingihilt*, vs. *Ing-Ø-bolda, Eng-Ø-brand, Hinc-Ø-freda*) (Förstemann 1900:959-967; see also entry on 87. †Weser III in §4.1).

Nedoma (2004a:328) regards the ⊠-signs as word-separators rather than **ŋ**-runes. He doubts that **hari** by itself is a pers.n., since a monothematic name of

this sort would be expected to have a weak inflection (compare OS *Herio* (9th c.); and in the Scandinavian runic corpus, Skåäng stone (KJ 85) **harija**; Vimose comb (KJ 26) **harja**). A strongly inflected *Hari* may underlie PNs like OHG *Harieshaim* (8th c.), OS *Heristorpe* (10th c.) (Förstemann 1900:763), but this need not be the case, according to Nedoma (the PNs could simply contain the first element of a dithematic name). He concludes that it is the common noun "army". I note that Nedoma elsewhere accepts an analysis of pers.ns. in **-i** as hypocorisms(?) with a suffix */-ija-/ (e.g., 35. Heilbronn-Böckingen I **arwi**). It is not clear to me why this should be inapplicable in the present case.

Complex II **kunni** is connected throughout the literature with the "kin"-word, PGmc **kunjan* (§4.1). In this case, **i** here represents a syllabic reflex of PGmc */j/.

The various interpretations of **?e**, all of which depend on the dubious transliteration of the Y-shaped sign as **w**, have been discussed in §4.1. I do not consider any of them reliable; but the most popular connect **ẉe** with PGmc **wai-* "woe" (i.e., they assume **e** to represent a monophthongal reflex of PGmc */ai/).

86. †Weser II bone

lokom : her

Holthausen (1931:305) and Pieper (1987:236) interpret **her** as a reflex of

PGmc *xē₂r* (> Go OS OE *hēr*, ON *hér*, OHG *hiar* "here").

In Ellmers' interpretation (1994:127), the sense of "here" is directional

("hither"). Nedoma (2004a:326) criticises this on formal grounds: the

directional adverb derived from *xē₂r* ought to appear as *hera* (as in OHG). I

note, however, that both OS and OHG have adverbial forms *hĕr* (Köbler

1993). These may be irregular or secondary developments, but they suggest

that we cannot rule out a similar interpretation of **her**. If we are dealing with a

reflex of */ē₂/, it shows no sign of diphthongisation (§2.3.3.5).

87. †Weser III bone

ulu:hari dede

ulu:hari is commonly interpreted as a dithematic MN with the second

element identical to 85. †Weser I **hari** (see above); though Nedoma regards

hari as an independent word in both cases (see §4.1).

dede is readily identifiable as 3.sg.pret. *dede* "did/made" (Holthausen

1931:305; Pieper 1987:236, 238; 1989:183-184). Pret. forms of the "do"-verb

are attested in a number of runic inscriptions: Oostum comb-case (L IX.3)

deda; 67. Schretzheim I **dẹḍun** (possibly also Amay comb (AZ 43; L IX.1)

ꞁeda; and 37. Hoogebeintum **(ded)**). See further §5.2.1.1; §5.2.2.2.

88. Wijnaldum B pendant

hiwi

If **hiwi** represents a pers.n. or common noun < PGmc *xīwan* "household, family" (§3.1.1), the first **i** represents /ī/ < PGmc */ī/. The terminal **-i** is problematic. As has been mentioned, the sequence may also be present on the Meldorf fibula. Düwel suggests that Meldorf **hiwi** could be an acc. or dat.sg. *i*-stem *hīwi* (presumably to an unattested *xīwiz*), and on semantic grounds he favours a dative of dedication, with the sense "for Hiwi" (Düwel and Gebühr 1981:172). In this case, the terminal **-i** represents a reflex of PGmc */-ai/ or */-ī/ (§3.2.2); if it is acc., on the other hand, then **-i** represents /-i/ < PGmc */-in/.

Looijenga applies a similar etymology to the Wijnaldum inscription, though she treats *hīwi* as a common noun rather than as a pers.n.; she assigns it dative case and translates "to the mater familias" (Looijenga 1996:99; 2003a:324).

Another possible interpretation is that *hīwi* represents a nom. *i*- (or *ja-/jō-*?) stem, if the apocope of final /-i/ after a long stem has not taken place. We have no clear parallels to support this hypothesis (§5.2.1.2). This interpretation is probably not applicable to Meldorf, which is dated to the 1st century, at a time when nom.sg. */-z/ is preserved throughout Gmc.

89. Wremen footstool

[I] **ksamella**   [II] **lguskaþi**

Düwel regards complex I as the product of a transposition error, and emends to **skamella**, presumed to be a loanword from LLat *scamellum, scamellus* "footstool, step, little bench" (→ OHG *scamal*, OS *fōtscamel*, OE

sceamol) (Düwel 1994d:15; Düwel in Schön et al. 2006:322; Looijenga 2003a:240).[55]

If this analysis is correct, **e** is to be expected for borrowed Lat. short /e/ = [ɛ] (Kent 1945:45).

Complex II is thought to represent a compound with a second element -*skaþi* (on the first element, and on Nedoma's suggestion that **-u-** represents a compositional vowel < PGmc */-i-/, see §4.1; §5.2.1.2). This element has several possible interpretations: (i) a verb-form, 2.sg.imp. *skaþi* < PGmc *skaþi, to *skaþjanan (> Go *skaþjan* "to injure, harm"; ON *skeðja*, OE *sceððan* "to scathe, to hurt"); (ii) a nom.sg. *i*-stem noun derived from this verb, either as a *nomen agentis* "harmer" or a *nomen actionis* "harming" (Düwel 1994d:15; also Marold in Schön et al. 2006:323). If we are dealing with an *i*-stem noun, it is not a direct reflex of a PGmc *i*-stem, according to Nedoma (Theune-Großkopf and Nedoma 2006:58-59): the superficially similar Go *skaþis* n. "injustice, harm" is in his view a secondary development from *skaþs (< PGmc *skaþaz, belonging to a class of neuter *ez/az*-stems, rather than to the *a*-declension), with analogical spread of gen.sg. /-is/ (compare the discussion on the etymology of PGmc **aʒez/*aʒan*, in the entry on 8. Bad Krozingen A in this chapter). Similarly, Nedoma argues, PGmc *skaþaz (*ez/az*-stem) may

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[55] On the meanings of *scamellum, -us* ("thing that can be stepped on"?), see Statham (1914:235).

have a variant *skaþiz*, reanalysed in the WGmc dialects as a short-syllable *i*-stem *skaþi*.

To these possibilities Marold adds another: *skaþi* could be a deverbal adjective (*ja-/jō*-stem?) "harmful, hunting" (Schön et al. 2006:326).

The sequence **skaþi** has a Scandinavian parallel (not mentioned in the literature on the Wremen inscription) on the Strøm whetstone (KJ 50). Krause (1966:112) analyses this as a 3.sg.pres.opt. verb-form "may [the stone] harm" (< PGmc *skaþjai*), not as an imperative or a noun. However, Krause reconstructs PNorse /-jē/ for the 3.sg.pres.opt. suffix of this class of verbs, which would lead us to expect a form ***skaþje** (Krause 1971:127)). A similar interpretation might be possible for the Wremen inscription (for possible examples of inflectional suffixes < **/-ai/* represented as **-i**, see §3.2.2.1), but it is rather difficult to make sense of in the context of the footstool and its imagery ("May [the hound?] harm the deer"?).

90. Wurmlingen spearhead

?:dorih

Düwel's principal reason for not treating the initial sign as a rune is that no credible reading has been produced (1981b:158). All attempts to read it as a **k**-rune have worked on the assumption – later shown to be invalid – that the following sign is an **i**. It would not be methodologically appropriate for me to accept this argument at face value: the fact that a reading does not produce a comprehensible text need not imply that the reading is incorrect. In several of our inscriptions, an initial **k** (or a sign believed to be **k**) has been interpreted as

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the 1.sg.nom. personal pronoun *ik* (<u>5. Aschheim II</u>; <u>28. Geltorf II</u>; <u>35. Heilbronn-Böckingen I</u>).

All commentators interpret **dorih** as a dithematic MN *Dŏrīh*, with a deuterotheme *-rīh* < *-rīk* (see <u>8. Bad Krozingen A</u> **agirike**). Given that we have no certain etymology for the element *Dŏr-* (§4.1), and that this item is the only generally-accepted runic witness to the Second Consonant Shift of /k/ > /x/ (§2.4.1), I am not entirely confident that the identification of **-rih** with the name-element *-rīh* is correct. A MN *Dori* : OHG *Duri, Dure* (Förstemann 1900:434) or **Dōri* is not in itself implausible, but in order to advance it here, we would need to find some explanation for the following **h**.

5.2 Summary

5.2.1 Reflexes of the short front vowels

5.2.1.1 Stressed syllables

Given the doubts about reconstruction of the short front vowels of PGmc (§2.2.1), we cannot afford to be overly dogmatic about whether we are dealing with a reflex of PGmc */i/ or */e/ in any particular case. If they are distinct phonemes, there is a strong tendency towards a complementary distribution conditioned by (or at least correlating with) the height of the following vowel: *[i] before a high vowel, *[e] before a non-high vowel.

Among runic sequences where we can be reasonably certain that we are dealing with an inherited [i] or [e] in a syllable carrying primary or secondary stress, the following conform to this umlaut pattern:

<u>**i** + high vowel:</u>

29. <u>Gomadingen</u> **iglu^g/$_n$**

51. <u>München-Aubing I</u> **sigila**

53. <u>Neudingen-Baar I</u> **udiṃ, midu**

56. <u>Nordendorf I</u> **wig^i/$_u$þonar, wini**

72. <u>Skodborg</u> **alawin** (with loss of the conditioning */-i/)

82. <u>Weimar III</u> **bi̯gina, idun**

<u>**e** + non-high vowel:</u>

46. [†]<u>Kleines Schulerloch</u> **selbrade**

51. <u>München-Aubing I</u> **segalo**

87. [†]<u>Weser III</u> **dede**

A further probable example of the first type is <u>54. Neudingen-Baar II</u> **imuba**, although the medial **-u-** represents an anaptyctic vowel in a base *Imba* (see entry in §4.1).

The alternation **segalo ~ sigila** for names(?) derived from the same root on München-Aubing I seems to provide support for an allophonic variation. We do, however, have a number of instances which would be irregular from this point of view:

e + high vowel

67. Schretzheim I **dẹḍun**

i + non-high vowel

16. Charnay **id dan**

81. Weimar III **ida**

82. Weimar IV **ida**

18. Dischingen I **wiᵍ/ₙka** is an uncertain case. The majority opinion posits an unrepresented medial /-i-/, giving a phonologically regular *Win(i)ka*.

Three of these apparent counter-examples represent the pers.n. *Id(d)a*. The evidence of the "do"-verb (Schretzheim I **dẹḍun**) is unclear, since the stem-vowel may be a long /ē/ < */ē₁/ (see §5.2.2.2).

We must also examine the possible effect of consonants (primarily consonant clusters) on the quality of a short front vowel. Do we have witnesses to the raising of PGmc */e/ > *[i] before a nasal (or specifically before a N+C cluster) (§2.3.3.2); or evidence for the lowering of inherited /i/ > [e] before /r/+C, as in OS (§2.3.3.1)?

In fact, the data seem to tell a more straightforward story: in every instance where we can confidently identify a short front vowel preceding a consonant cluster (including those where the first consonant is unrepresented), the vowel

is represented as **i**: 11. Bezenye I **godahid** → *-hi(l)d*; 26. Friedberg

þuruþhild; 46. †Kleines Schulerloch **birg**; 53. Neudingen-Baar I **fiḷþ**; 62.

Pforzen II **aodliþ** → *-li(n)þ*; 68. Schretzheim II **siþ** → *si(n)þ*; 79. Weimar I

haribrig → *-birg*; possibly also 81. Weimar III **isd**. The pers.ns. in *-birg, -*

hild, linþ are normally classified as *jō*-stems (see §7.2.2), making the

appearance of **i** here consistent with the umlaut pattern outlined above. As for

simple tautosyllabic nasals, the only place where we have a reflexes of PGmc

*/e/ preceding a nasal which is not followed by another consonant are in the

reflexes of *weniz* "friend" (18. Dischingen I **wi^g/$_n$ka** → *Win(i)ka*; 56.

Nordendorf I **?ḷeubwini** → *Leubwini/leub wini*; 72. Skodborg **alawin** →

Alawin). The spelling is consistently **i**, but it is not clear whether we should

attribute the raising of */e/ > *[i] to the nasal or to umlaut.

   This leaves **siþ** and **fiḷþ**. In the former case, **siþ** < PGmc *senþa-* is

consistent with the PGmc nasal-conditioned raising of */e/ > *[i]. In the latter,

however, neither the reading nor the etymology is certain.

   In all of these subsets of the data, **i** appears much more frequently than **e**. It

is conceivable that we may simply be dealing with a general preference for **i** in

orthographic representations of /i e/, regardless of their phonetic environment.

   Another orthographic feature to be discussed is the non-representation of a

high front vowel. Generally accepted in the literature are: 9. Balingen **dnlo** →

D(a?)n(i)lo; 16. Charnay **uþfnþai** → *u(n)þf(i)nþai*; 18. Dischingen I **wi^g/$_n$ka**

→ *Win(i)ka*; 24. Freilaubersheim **þk** → *þ(i)k*; 47. Lauchheim I **fada** →

fa(ihi)da; 59. Oettingen **brg** → *b(i)rg*.[56] Of these, only the Charnay and

Oettingen examples meet the criteria for "Grønvik's Law" (§2.5.2). Although

Dischingen contains a CT cluster **ŋk**, the expansion licensed by "Grønvik's

Law" would be /-ink-/, not /-nik-/.

Three of these unrepresented vowels (Balingen; Dischingen; Lauchheim)

involve unstressed syllables, and will be discussed further in §5.2.1.2.

Less certain, but possible, examples of an unrepresented /i/ or /ī/ are 22.

Erpfting **lda** → *(Hi)lda* (though this interpretation leaves us without a

satisfactory explanation for the omission of initial ***h-**); 29. Gomadingen

iglu^g/$_n$ → *Ig(i)lun/g/ng* (if the name-stem is the "hedgehog"-word); 58.

Oberflacht **ģba** → *g(i)ba*; 61. Pforzen I **ḷṭahu** → *(I)ltahu* (Nedoma's

suggestion, one of numerous interpretations of this sequence). Several

inscriptions have an initial sign which may be a **k-**rune and which may

represent the 1.sg.nom. pronoun *(i)k*: 5. Aschheim II; 12. Bezenye II; 35.

Heilbronn-Böckingen I; 90. Wurmlingen.

Two remaining cases for consideration are 28. Geltorf II **ģwu** → *g(i)bu*; and

31. Hailfingen I **ạḷịṣrḥ** → *Alisr(ī)h*. The proposed interpretation of Geltorf is

implausible (see entry in §4.1), and the Hailfingen example depends on Arntz'

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[56] I have excluded from this list those sequences with the **ŋ**-rune interpreted as /ing/ (16.

Charnay **kŋia** → *king(j)a*; 77. Szabadbattyán **marŋ** → *Mār(i)ng*; 85. †Weser I **(ŋ)hari** →

Inghari, **(ŋ)?e** → *Ingwe*(??)), since it is conventional to interpret this rune as standing for the

phonemic sequence /ing/, rather than just /ng/. The Charnay and Szabadbattyán examples have

the so-called "lantern" form, which may be a bind-rune **iŋ**.

highly speculative reading, which is not accepted elsewhere. Both of these, therefore, can be rejected.

5.2.1.2 Unstressed syllables

Reliable examples of an unstressed short front vowel are found in: 8. Bad Krozingen A **agirike**; 9. Balingen **amiḷu**; 10. Beuchte **buirso** → *Bŭriso*; 15. Bülach **fridil**; 30. Griesheim **aǧiḷaþruþ**; 51. München-Aubing I **sigila**; 61. Pforzen I **aigil, andi**; 73. Skonager III **niuwila**; 83. Weingarten I **a^{li}/ₑrguþ** (if **alir-** is the correct reading). In each case, the written form is **i**, representing a reflex of PGmc */i/ (at least, no reconstruction */e/ has been proposed for the proto-forms of any of the elements involved). If 20. Eichstetten **muni** is a pers.n., rather than a verb-form (§4.1), then it should be added to this list. Similarly, if 56. Nordendorf I **wini** and 88. Wijnaldum B **hiwi** are to be interpreted as nom. or acc.sg. *i*-stems, then their terminal **-i** represents a reflex of */-i/ (nom.sg. */-iz/, acc.sg. */-in/). On the interpretation of these sequences as datives, see §3.2.2.1; §5.2.2.4.

Several inscriptions have a word-final or stem-final **-i** which is variously identified in the literature as a reflex of */-i-/ or */-j-/: 75. Steindorf **husi-**; 79. Weimar I **hari-**; 85. †Weser I **hari**; 87. †Weser III **-hari**; 89. Wremen **skaþi**. The point of disagreement here is the declension of the underlying nominal: we may be dealing with an *i*-stem (*xŭsiz, *xariz, *skaþiz) or a (derived?) *ja*-stem (*xŭsjaz, *xarjaz, *skaþjaz) (see also §5.2.3). The etymology of the Steindorf name-element is more uncertain than the others (see entry in §4.1).

We have also several instances of terminal **-i** apparently representing a suffix < */-(i)ja-/: 7. Bad Ems **m̥adal̥i**; 35. Heilbronn-Böckingen I **arwi**; 62. Pforzen II **gisali**; 80. Weimar I **liub(i̥)** (Nedoma 2004a:212; see also §5.2.3). Presumably this suffix developed as */-ij-/ > */-ī/ (or */-j-/ > */-i/) following the deletion of thematic */-a-/ (as in, e.g., PGmc *xerđijaz* (Lehmann 2005-2007 §4.2.2)/*xerđjaz* (Orel 2003) > OS *hirdi*, OHG *hirti* "shepherd"). Long final */-ī/ is regularly shortened in OS, but preserved (to an extent) in OHG (§2.3.3.3). We cannot, therefore, be certain whether the vowels represented by these **-i** terminations are short or long.

Nedoma's explanation of the **u** in 89. Wremen **lguskaþi** as an unstressed [ə] < */-i-/ (in *alȝiz*) is not entirely satisfactory. The Westeremden forms adduced as parallels are both interpretable as Frisian *Murmelvokale* < PGmc */-a-/ (§4.1), while other alleged witnesses to the phenomenon, such as the Schweindorf solidus (L IX.8) **ᵇ/ᵥᵥeladu**, are ambiguous (see Düwel and Tempel 1968/1970:381-382). If Wremen **-u-** reflects a similar [ə] < PGmc */-i-/, it is a unique witness to this process.

Three inscriptions are believed to contain unrepresented short front vowels in unstressed syllables (see §5.2.1.1): 9. Balingen **dnlo** → *D(a?)n(i)lo*; 18. Dischingen I **wiᵍ/ₙka** → *Win(i)ka*; and 47. Lauchheim I **fada** → *fa(ihi)da*. The proposed expansions for Balingen and Dischingen involve hypocoristic suffixes in pers.ns. (respectively /-ilo/, /-ika/), although the identification of the

stem requires a further expansion in the former case and the acceptance of an uncertain reading in the latter.

The Lauchheim example is unlike the others in that it involves the omission not of a single segment but a longer sequence. I note that here, as in Düwel's suggestion that Erpfting **lda** → *(Hi)lda*, an unrepresented /h/ is being posited. If /h/ in the neighbourhood of /i/ is articulated with less friction than in other environments, then perhaps we might posit the existence of an allophone which speakers perceive as insignificant; or an orthographic rule by which **h** can be omitted. Against this speculation, we have evidence for overt **h** before **i** in Bezenye I **godahid**; Friedberg **þuruþhild**; Wijnaldum B **hiwi**.

5.2.2 Reflexes of the long front vowels

5.2.2.1 */ī/ in stressed syllables

Our most reliable evidence for reflexes of stressed */ī/ consists of the following: 8. Bad Krozingen A **agirike**; 20. Eichstetten **wiwo-** (all of the proposed interpretations point to a root in */-ī-/); 45. Kirchheim/Teck II **arųgis**; 54. Neudingen-Baar II **bliþguþ**; 62. Pforzen II **gisali**; 67. Schretzheim I **arogis**; 71. Sievern w̨riļu; 83. Weingarten I **writ?...ⁱ/ļa**; 88. Wijnaldum B **hiwi**; 90. Wurmlingen **dorih**.

In several places, we cannot be sure whether we are dealing with a reflex of */ī/ or short */i/: 15. Bülach **fridil**; 40. Hüfingen III **bį**; 56. Nordendorf I **wigⁱ/ᵤþonar**; 72. Skodborg **alawid**; 81. Weimar III **bįgina**. In all of these cases, the reflex of */ī/ is spelled **i**.

5.2.2.2 */ē₁/ in stressed syllables

Where we can be reasonably confident that we are dealing with a reflex of */ē₁/, it is consistently represented as **a**: 4. Arlon **rasuẉaṃụd**; 22. Erpfting **gabu**; 46. †Kleines Schulerloch **selbrade**; 74. Soest **rada**; 77. Szabadbattyán **marŋs**; 85. †Weser I **latam**. To this list we may add 41. Igling-Unterigling **aunṛ?ḍ**, if the reading **-rad** is correct.

The only possible instances of a reflex of */ē₁/ represented **e** are the preterites of the "do"-verb: 37. Hoogebeintum **ded**; 67. Schretzheim I **dẹḍun**; 87. †Weser III **dede**. The singular forms (Hoogebeintum and Weser III) are probably short, while the pl. **dẹḍun** may be long (see entries in §5.1). If so, it appears to be unique as a witness to /ē/ < */ē₁/ (or as an archaic spelling). The preference in the literature for a short vowel in Schretzheim **dẹḍun** may be based on the *a priori* supposition that a WGmc reflex of */ē₁/ must be spelled **a** (i.e., that a surface form /ē/ is impossible), which is open to question (see §2.3.3.4). Since we do not appear to have any parallels, however, it would not be appropriate to assert with any confidence that we are dealing with /ē/ < */ē₁/.

Several inscriptions contain **a-**runes which may represent either long /ā/ < */ē₁/ or short /a/ < */a/: 6. Aschheim III **dạḍo**; 24. Freilaubersheim **ḍaþïna**; 74. Soest **daþa**; 81. Weimar III **hahwar**; 82. Weimar IV **hahwar**; 84. Weingarten II **dạdo**. If the name-element present in **dạḍo, dạdo** (and perhaps also in **ḍaþïna, daþa**) is *Dād-* < PGmc *ðēðiz* "deed", this makes the interpretation of **e** as /ē/ in the verbal "do"-forms all the more unlikely.

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5.2.2.3 */ē₂/ in stressed syllables

The corpus contains three putative examples of a reflex of */ē₂/, none of them entirely reliable. The most plausible is 86. †Weser II **her** → *hēr* "here". 53. Neudingen-Baar I **udįṃ, midu** may contain a reflex of either */ē₂/ or */e/. Given that the written form is **i** rather than **e**, I am inclined to favour an interpretation as a short vowel. The reason for this is that the following **-u** gives us a plausible explanation for the raising of an inherited */e/ > [i]. The same cannot be said for the reflex of */ē₂/, which remains <e> in OHG prior to diphthongisation. Incipient diphthongisation cannot be invoked as an explanation for */ē₂/ → ***i**, as the first stage of the process in OHG is the lowering of the off-glide (> /ea/), with raising (> /iə/) a later development (§2.3.3.5).

The final example is 64. †Rubring **?ïn** → *kēn* "torch". The uncertainty of the reading, the inadequately addressed question of the mapping ï → */ē₂/, the doubtful authenticity of the object and the dubious nature of Steinhauser's interpretation make it extremely unreliable.

5.2.2.4 Long front vowels in unstressed syllables

Of the long front vowels, only */ī/ has reflexes attested in unstressed syllables. These fall into two categories: the suffix /-īna/ (< PGmc */-īn-ōn/) in FNs (24. Freilaubersheim **ḍaᚦïna**; 81. Weimar III **bįgina**); and the inflectional suffixes of *īn*-stem deverbal nouns (54. Neudingen-Baar II **lbi** → *l(iu)bī* (nom.); 44. Kirchheim/Teck I **(?)ḥ?alị** (nom.) (Looijenga's interpretation); 68. Schretzheim II **wagadin** (dat.) (Nedoma's interpretation);

79. Weimar I **liub(į)** (nom.)). We cannot be entirely confident about any of these: Neudingen-Baar II requires expansion; Kirchheim/Teck I and Weimar I are based on uncertain readings; and Schretzheim II has another interpretation as short /i/ < */j/ (§5.2.3).

Freilaubersheim **ḍaþ̣ïna** stands out as the only example of a reflex of */ī/ represented as anything other than **i**. On the value(s) of the "yew-rune", see §5.2.4.

We might also consider the sequences terminating in **-i** which can be interpreted as dat.sg. *i*-stems (see §3.2.2.1; §5.2.1.2): 56. Nordendorf I **wini**; 88. Wijnaldum B **hiwi**; 85. †Weser I **hari**; 87. †Weser III **-hari**; and perhaps also 20. Eichstetten **munį**. It is not entirely clear whether the PGmc dat.sg. suffix of the *i*-stems is */-ī/ or */-ai/: if the former is correct, then these sequences could contain **-i** → /-ĭ/ < PGmc */-ī/. However, since this reconstruction is not certain, and since all of these sequences can be interpreted as nom. or acc., with /-i/ < nom. */-iz/ or acc. */-in/ (§5.2.1.2), they cannot be considered reliable.

5.2.3 Reflexes of */j/

We have only two reasonably reliable examples of non-syllabic */j/ represented as **j**: 11. Bezenye I **uṇị̄ạ**; 72. Skodborg **auja**. Even these cases are problematic, the former because of uncertainties about the reading (although the interpretation is accepted throughout the literature); and the latter because its linguistic identity is in doubt – only Antonsen regards it as WGmc, on the

grounds that the MNs **alawin, alawid** have zero suffixes. Both items appear at sites outside the main area of the study.

Other possible (but less certain) witnesses are 59. Oettingen **??ija-**, if the reading **a̯u̯ija** is valid (§3.3.1); 72. Skodborg **j**, if this represents *auja* or the conjunction *ja(h)*; and 78. †Trier **wilj̇a** → *Wil(l)ja*, if my alternative reading is valid, and if the item is genuine.

The corpus contains several other **j**-runes, none of which has a convincing linguistic interpretation: 2. Aquincum **?lain** → **j̇lain** (Begriffsrune? Reading questionable); 3. †Arguel **zej** (Bizet's interpretation **zej kim** → *reikim* is implausible); 10. Beuchte **fuþarẓj** (Begriffsrune?); 16. Charnay **j** (in fuþark).

Possible examples of consonantal /j/ represented as **i** are 2. Aquincum **kŋia** and 50. Mertingen **ieoḳ**. If Looijenga's interpretation of 57. Nordendorf II **io** as *jŏ̆(h)* "and" is correct, then this would provide us with a third example.

Our most substantial evidence for the development of PGmc */j/, however, comes from those sequences with terminal **-i** representing a suffix */-(i)ja-/, in which the following /a/ has been deleted, resulting in the syllabication of */j/ (§2.3.3.6; §5.2.1.2): 3. †Arguel **arbi**; 7. Bad Ems **ṃadaḷi**; 35. Heilbronn-Böckingen I **arwi**; 62. Pforzen II **gisali**; 68. Schretzheim II **wagadin** (if this represents a participle declined like a *ja-/jō*-stem, as in OHG and OS); 70. Schwangau **aeþi**; 81. Weimar III **awimund**; 85. †Weser I **kunni**. A possible additional case is 12. Bezenye II **arsi-**, but its etymology is unknown.

Other examples of /i/ < */j/ appear in 24. Freilaubersheim go<u>l</u>ida; 56. Nordendorf I **wigⁱ/_u-** (if the reading **i** is correct, and if the underlying stem is *wī\u0292ja-/*wīxja-*, which is by no means certain).

We have several nouns or name-elements in **-i** which may be interpreted as *i*-stems (**i** → /i/ < */i/) or *ja*-stems (**i** → /i/ < */j/): 75. Steindorf **husi?alḍ**; 79. Weimar I **haribrig, liub(i)**; 85. †Weser I **hari**; 87. †Weser III **ulu:hari**; 89. Wremen **skaþi** (see §5.2.1.2).

All of these syllabic reflexes of */j/ (if they have been correctly identified as such) are represented as **i**; we have no evidence of lowering of /i/ > /e/ in unstressed position, as we find in the OHG *ja-* and *jō-*stem terminations and sometimes medially (§2.3.3.6).

5.2.4 The "yew-rune" ᚴ

This rune occurs in (at most) seven places in the corpus (compare Nedoma 2004a:167-168): 3. †Arguel **luïgo^w/_þ** (→ *liuhaþ*; Bizet's dubious interpretation); 16. Charnay **ï** (in fuþark), **ï/_ıia** (uninterpretable); 24. Freilaubersheim **ḍaþïna** (→ *Dăþīna*); 35. Heilbronn-Böckingen I **ïk** (Looijenga's reading); 56. Nordendorf I **leubwiniï** (→ *Leubwiniyi*. Reading and interpretation doubtful – §3.2.2); 61. Pforzen I **a^ï/_ılrun** (→ *Ailrūn*); 64. †Rubring **ḳïndọï** (→ *kē₂n dōē*; Schneider's questionable reading and dubious interpretation). Of these, only Freilaubersheim **ḍaþïna** and Pforzen I **a^ï/_ırun** can be considered reliable; and even the Pforzen witness is open to question. The assumption that the "yew-rune" represents /i/ or /ī/ is consistent with the widely-accepted interpretations of sequences containing the rune outside my

corpus: Caistor-by-Norwich bone **raïhan** → *raihan* "roe-deer" (see §3.2.1.1);

Loveden Hill urn **sïþabad** → *Sīþabad/Sīþæbad*, with a prototheme *Sīþ-* < pre-

OE **sinþ-* (Nedoma 2004a:434-438; Parsons 1999:47-48, 55-59); Nebenstedt

I-B bracteate (IK 128; KJ 133), **glïaugiz** → *Glī-augiz* "the bright-eyed one",

uïu → *wī(h/j)u* "I consecrate". The only other occurrence of the rune in a non-

fuþark sequence in Scandinavia is the By stone (KJ 71) **rmþ∫** (uninterpretable,

so Krause 1966:161).

　　Antonsen (1970:316-317; 1972:134; 1975:2-5; 2002:30-31) argues that the

original value of ∫ was PGmc **/ǣ/* (= **/ē₁/*), and he accordingly transliterates it

ǣ in the Nebenstedt example (*Glǣ-* < PGmc **ʒlǣ-* > OE *glǣr*, MLG *glār*

"amber, resin"; OIc *glǽsa* "to decorate with something shiny"). Whether or

not this analysis is correct at the inception of the fuþark, it does not appear to

hold for the Continental inscriptions: the attested reflexes of **/ē₁/* are all

represented as **a** (with the possible exception of the "do"-verb (see §5.2.2.2)).

In several English inscriptions (postdating the Anglo-Saxon runic reform and

so not belonging to the Older Fuþark tradition(s)), **ï** represents a fricative [ç],

or palatalised /g/ → [j]: Ruthwell Cross (8th c.) **alme∫ttig** → OE (Northumb.)

almehtig; Great Urswick stone (9th c.) **toro∫tredæ** → *Torohtredæ*; Thornhill

stone (9th c.) **ẹate∫nne** → *Eadþegne* (Page 1995:137; 1999:141). In our

witnesses, it is most unlikely that ∫ represents a consonant:[57] neither *[daθçna]

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[57] Grønvik (1987:124-126) assigns Nordendorf I ∫ the value [ç] and identifies it as the

enclitic conjunction "and" (: Go -*h*) → *Awa Leubwinih* "Awa and Leubwini". This enclitic is

not productive in any of the attested Gmc dialects except Go, and – as noted – the runological

nor *[açlrūn] is pronounceable without the insertion of an additional vowel.

Since [ç] remains an allophone of /h/ in OE, as in the other WGmc dialects, the

continued use of a distinct rune, rather than **h**, for this allophone seems odd; on

the other hand, it is no more curious than using the yew-rune for /i ī/, where

there is no suggestion that it represents anything phonetically distinct from the

sounds represented by **i**. On the hypothesis that the original value of the rune

was an allophone of PGmc */x/, see Beck (2003:79-81).

   If the interpretations of these sequences are correct, then it appears that in

the Continental runic tradition, as in Older Fuþark inscriptions elsewhere, the

"yew-rune" is functionally a free variant of **i** (see Page 1995:138-140; Parsons

1999:48). The choice of this rune does not appear to be motivated by the

phonetic environment: close parallels for **ḍaᵽïna** are 68. Schretzheim II

wagadin; and 81. Weimar III **bᵢgina**. For **aïlrun** we have **aigil** in the same

inscription; the corpus contains a number of examples of /ai/ represented as **ai**

(§3.2.1), but the only sequence **ail** is 42. †Kärlich **hailag**.

   These observations have no direct bearing on the various hypotheses

concerning the original value of ∫. In the two reliable cases where it appears,

we have good grounds for supposing that it represents a high front vowel. We

have no basis for arguing that the selection of **ï** is motivated by any phonetic or

phonological distinction – it does not represent a distinct allophone of /i/ or /ī/.

What, then, is the motivation for its selection? Why use a rare and

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evidence seems to suggest that the use of ∫ for a palatal consonant is a later, uniquely English,

development.

phonologically redundant rune when a more common and formally simpler one is available? This must remain – for the time being, at least – an open question.

5.3 Conclusions

The behaviour of the front vocalics attested in the inscriptions holds no great surprises for us, although several anomalies require further investigation. The short front vowels */i e/ show a strong tendency towards complementary distribution correlating with the height of the following vowel. Exceptions are the pers.ns. *Id(d)a* (Charnay **iddan**; Weimar III **ida**; Weimar IV **ida**) and *Agilaþrūþ* (Griesheim), with **i** before a non-high vowel; and Schretzheim II **siþ** → *si(n)þ* < PGmc *senþaz*, which suggests that the process of raising /e/ before a nasal+consonant cluster is operative (hardly surprising, since this process is commonly ascribed to PGmc (§2.2.1; §2.3.3.2)).

The reflexes of */ī/ appear as **i**, with the sole exception of Freilaubersheim **ḍaþ̈ïna**. Similarly, reflexes of */ē₁/ appear as **a** (presumably representing /ā/) except perhaps in the pret. of the "do"-verb. For */ē₂/, we have no entirely reliable evidence. If we are to trust †Weser II **her**, this would suggest that */ē₂/ > CRun /ē/. We have no indication that the diphthongisation of */ē₂/ is underway. This process in OHG belongs to a chain-shift of which the diphthongisation of /ō/ > /uo/ is also a part; the absence of any evidence for the latter (§4.2.3.1) is consistent with this view.

Where the front semivowel comes to occupy final position in a word or a compound-element following the deletion of following material (as in the *ja*- and *jō*-stems), it is consistently represented as **i**, which supports the conventional view that */j/ > syllabic /i/ (or /ī/?) under these conditions.

We have little evidence for inherited */j/ where it remains non-syllabic: if the examples in §5.2.3 are reliable, then there appears to be a variation **j** ~ **i**, with no obvious motivation. We cannot posit any phonotactic explanation like that proposed for the variation /w/ → **w** ~ **u** in the reflexes of PGmc *wrītanan* (§4.2.5).

It is conceivable that regional or local orthographic traditions may be involved (see Map 4): as noted earlier, the two reliable examples of **j** both lie outside the main study area, while one of the **i** examples (Mertingen **ieok̦**) lies within the Continental runic "heartland" around the upper Danube and upper Rhine. On the other hand, we have a possible witness to **j** (Oettingen) within the same area, and a possible **i**-spelling (Aquincum) far outside it.

The datings of these items vary too widely for any chronological distinctions to be drawn. Skodborg is probably somewhat earlier than the others, and Oettingen may be somewhat later; but it is not possible to be certain even of this (see §1.1.2, and catalogue entries).

6. The low vowels

It is likely that in the vast majority of cases, reflexes of PGmc */a/ will appear in the inscriptions as **a**. If this phoneme has a fronted allophone *[æ ɛ e], it is possible that it might appear as **e** (or perhaps **i, ï**?) (§2.3.4.2). Conversely, we might see **o** for expected **a** under those conditions where /a/ > /o/ (or a rounded allophone of /a/ → *[ɒ] → <o>) in OHG and/or OS (§2.3.4.1).

If allophones similar to those of PGmc */a/ posited by Antonsen (§2.2.1) exist in the language of the inscriptions, they may reveal themselves in transliteration as something other than **a** (e.g., *[æ] → **e**; *[ɑ] → **o**).

/ā/ < lPGmc */ā/ is unlikely to be represented as anything other than **a**, unless it is subject to *i*-umlaut like the apparently unique OS *êhtin* (§2.3.4.3).

6.1 Data

Included in this section are all inscriptions containing what may be a reflex of PGmc */a/. Also included are reflexes of */āx/ < */anx/, and possible examples of anaptyctic /a/.

Sequences terminating in **-a** or **-o** and interpreted as nominals belonging to the *n-* or *ō*-declensions will be discussed in §7. **a**-runes which can (more or less) reliably be identified as reflexes of /ā/ < PGmc */ē₁/, as monophthongal reflexes of */ai/, or as belonging to digraphs representing diphthongs have already been adressed in the relevant sections (respectively §4; §3.2.2; §3.2.1; §3.3.1).

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Also omitted are **a**-runes appearing in sequences for which we have no linguistic interpretation, e.g., 32. Hailfingen II **(a)????(?)**.

3. †**Arguel pebble**

[I] **arbitag** [II] **wodan**   [III] **luïgo^w/_þhaŋ**   [IV] **zej**   [V] **kim**

If this item is genuine, we have plausible examples of regular */a/ > /a/ → **a** in complex I **arbi** (→ *Arbi* < PGmc **arƀjan* "inheritance", if this etymology is valid; see §5.1) and complex II **wodan** (the theonym *Wōdan*; see §4.1). Bizet's connection of **tag** with PGmc **taxjanan* "take" is dubious (§5.1), but if allowable, it would give us a third example of regular /a/.

Bizet (1964:45) connects complex III **luïgo^w/_þ** with Go *liuhaþ* "light" (§3.1.1). If this is correct, then we may be dealing with a reflex of unstressed */a/ → **o**, but this is an EGmc phenomenon. I note that in Go, reflexes of PGmc */a/ are normally represented as <a> in all contexts (Wright 1954 §§91-121). Bizet (1964:52) does state that <o> for unstressed /a/ has parallels, but the only example he cites is Wulfilas' title *du Rumonim* ← Gk *προς Ρωμαιους*. As indicated in the earlier commentary, /a/ → **o** is one of several peculiar spellings upon which Bizet's interpretation depends.

5. Aschheim II fibula

ḳahi

On the interpretation of **ahi** as a pers.n. *Ahi*, see §5.1. As we have no satisfactory etymology, we cannot be certain whether or not we are dealing with a reflex of */a/.

6. Aschheim III fibula

ḍạḍo

If this sequence represents a pers.n. *Dado* or *Da(n)do*, as opposed to *Dādo* (§5.1), then **ạ** represents a regular reflex of PGmc */a/ (see also 84. Weingarten II **dạdo**).

7. Bad Ems fibula

[I] **]ṃadạḷi?**   [II] **ubadạ[**

That complex I **ṃadạḷi** is a pers.n. is generally accepted in the literature, but the etymology and morphology are disputed (see §5.1).

If either of the proposed interpretations connecting the name with PGmc *maþl-/*maðl-* is correct, then the two **a**-runes represent a regular reflex of PGmc */a/ and an anaptyctic vowel (§2.3.5), respectively.

The favoured interpretation of complex II **badạ** is that it is connected with OS *gibada* "consolation". On the etymology of this word, and on the alternative suggestion that it is connected with PGmc *ꝥaðwō* "battle", see §4.1. If either of these proposals is correct, the stem represented by **bad-** contains a regular reflex of PGmc */a/.

8. Bad Krozingen A fibula

 [I] **boba:leub**   [II] **agirike**

   agirike is interpreted throughout the literature as a dithematic MN. The

etymology of the prototheme *Agi-* is not certain, but all the alternatives assume

the initial **a-** to represent a reflex of */a/ (§5.1).

9. Balingen fibula

   ạ?ụẓḍnloamịlu?

   On Krause's interpretation of **ạ?ụẓ** as PNorse *ansuz* "god" (with **a →**

PNorse /a/ < PGmc */a/), see §4.1. I do not consider this reading reliable.

   ḍnlo is widely believed to represent a pers.n., which Arntz (Arntz and Zeiss

1939:130) and Krause (1966:303) identify as *D(a)n(i)lo*, with an unrepresented

/-a-/. Given that other expansions are possible, this assumption is not reliable.

On the etymology of the name-element *Dan-* and the alternatives, see §5.1.

   On the suggestion that **amịlu?** is connected with the royal name *Amal*, see

§4.1. If this interpretation is valid, initial **a-** presumably represents surface /a/,

although the etymology of the name is not certain.

   It is possible that **i** here represents a variant /i/ substituted for historical /a/

in unstressed position, though the motivation for this variation is not clear. On

the other hand, *Amil-* may be a "rhythmic variant" of *Amal-*; if so, /i/ is not a

reflex or allophone of */a/ but an independent alternant (Nedoma 2004a:181).

Haubrichs' interpretation of **-i̧l-** as the dim. suffix /-il-/ has been discussed in §5.1.

11. Bezenye I fibula

[I] **uṇi̧ạ**   [II] **godahid**

That complex II represents a dithematic FN *Gŏ̆dahi(l)d* is generally accepted (§4.1; §5.1). If the prototheme is *Goda-* < PGmc **ʒuđaz* "god" or *Gōda-* < PGmc **ʒōđaz* "good", **-a-** represents a thematic vowel < PGmc */a/. If the correct prototheme of the "god"-word is an *s*-stem **ʒuđz* (see entry in Orel 2003), the compositional vowel would have to be a secondary development. In OS and OHG compounds with the "god"-word, forms with and without compositional vowels are attested: e.g., OHG *gotelih* ~ *got-Ø-liih* "godly"; OS *god-Ø-kund* "godly" vs. *godobeddi* "cushion for holy objects" (Gallée 1910 (glossary); Holthausen 1967; Schützeichel 2006).

12. Bezenye II fibula

[I] **ʔarsiḅoda**   [II] **seǧun**

Despite the consensus that **arsiḅoda** represents a FN *Arsiboda*, the etymology of the prototheme is unknown (§5.1).

Arntz (Arntz and Zeiss 1939:329) and Krause (1966:309) treat the terminal **-a** of this complex as a weak nom.fem. suffix (§7.1.2.1). Nedoma. on the other hand, treats it as a gen.sg. *ō*-stem suffix /-ắ/ < PGmc */-ōz/ (§4.1).

If **seǥun** is an imported form of Lat. *signum* "sign", **-u-** probably represents an anaptyctic vowel (§4.1). This vowel is presumably /u/, but the attested OHG parallel is *segan*, with anaptyctic /a/. Given that OHG favours /a/ in general and /u/ only before /m/ (§2.3.5), it is possible that the selection of /u/ in **seǥun** → *segun* is motivated by an awareness of the Lat. terminal /-m/. Alternatively, the anaptyctic vowel here might be influenced by the /-u-/ of the Latin model. At any rate, there is no reason to suppose that **u** represents any modification of an underlying /a/.

13. Bopfingen fibula

mauo

The etymology of the noun or pers.n. represented by this sequence is uncertain (§3.2.2; §3.3.1; §4.1). If the proposed connections with PGmc *maʒuz* "boy, youth" or *maʒwjō* "girl" are correct, then we are dealing with a reflex of PGmc */a/. None of the proposed etymologies is without problems, so the value of this witness remains in doubt.

15. Bülach fibula

[I] f̣rifridil̦ [II] du̦ [III] (l̦f)tm̦?

As noted in §4.1, Krause (1966:307) suggests that **(f)t** may be an abbreviation for a verb *f(a)t(ō)* 2.sg.imp. "embrace, take", with the root-vowel not represented. If this is correct, it reflects a type of abbreviation similar to 9. Balingen **ḍnlo** → *D(a)n(i)lo*. This is a speculative expansion which depends

for its justification upon the doubtful reading of **m̥?** as **mik** → 1.sg.acc. *mik* (§5.1), and the need to supply a verb of which this pronoun could be the object.

16. Charnay fibula

[I] **fuþarkgwhnijïpzstbe̥m̥(?)** [II] **:uþfn̥þai:id** [III] **dan:l̥iano**

[IV] $^{ï}/_{l}$**ia** [V] **k̥ r**

Antonsen (1975:77) reads **faþai** rather than **fn̥þai** in complex II, and interprets it as *faþē*, dat.sg. to a reflex of PGmc *fađiz* "husband" (§3.2.1).

Although **l̥iano** is generally interpreted as a pers.n., its etymology is unknown (§3.2.1).

If Opitz' connection of **dan:l̥iano** with the prophet Daniel is correct, the **a** of **dan** is the stressed /a/ of a pers.n. *Danila* (see also 9. Balingen **d̥nlo**, above).

20. Eichstetten sheath fitting

(?)**?a?i** [chi-rho/**nþ**/**nw**] **mun̥iwiwo?(??)**

On Fischer's (doubtful) suggestion that the first part of this inscription contains a MN *Danil* (compare 9. Balingen **d̥nlo**), see §5.1.

24. Freilaubersheim fibula

[I] **boso:wraetruna:** [II] **þk·d̥aþïna:gol̥ida**

There is general agreement in the literature that **ḍaᵽïna** represents a FN *Dǎᵽīna*, with the root-vowel **-a-** representing either /ā/ < */ē₁/ (§5.1) or a short /a/.

Arntz (Arntz and Zeiss 1939:226-228) derives the stem from a PGmc *đaᵽ-l-* > MHG *tadel* "blame, rebuke", possibly connected with OBret *dadl*, OW *tadl* "assembly, dispute"; OIr *dál* "assembly". This etymology is accepted by Krause (1966:280), but emphatically rejected by Nedoma: MHG *tadel* is in fact a Low German form (: OHG *zādal* "lack, need"), with initial /t-/ < PGmc */t-/, not a product of Second Consonant Shift < */ð-/. Nedoma also rejects the connection of *tadel* with the Celtic "assembly"-word (Nedoma 2004a:278).

There are, as far as I am aware, no attested Gmc words traceable to a root *đaᵽ-* or *đēᵽ-* (> NWGmc *dāᵽ-*). Nedoma regards the etymology of this stem as obscure (*loc.cit.*).

25. Fréthun I sword pommel

h?e?(?)

In §5.1 I mentioned Fischer's suggestion (2007:72) that this inscription contains a name-element *Hlem-* < PGmc *xlammiz*. If this is correct, **e** represents a product of "primary" *i*-umlaut of */a/. As noted in the earlier discussion, however, Fischer's reading is speculative and this name-element is unattested.

27. Gammertingen capsule

[I] **aḍọ**   [II] **aᵈ/ₘo**

Complex I is seen by (almost) all commentators as a weakly inflected nom. MN *Ado*, attested in the 7th century (Arntz and Zeiss 1939:238), and found as a prototheme in various dithematic names as *Ado- ~ Ato-*. Parallels in Latin sources, and later OHG names with similar forms, may be connected with the element *Atho-, Atha-, Athal-* (Förstemann 1900:151-182). Haubrichs (2004:78; also Looijenga 2003a:242) identifies Gammertingen **ado** with PGmc *aþan/*aþaz*, as a short form of *aþalaz* (> Burg *aþals*, OE *æðele*, OHG *adal* "noble"), apparently as a product of *Spirantenschwächung* (§2.4.2). Against this hypothesis, Wagner argues that the element *Ad- ~ At-* must be derived not from *aþa-*, but from a distinct PGmc *aða-* (> OHG *ata-haft* "continuous, lasting") (Wagner 1989b).

If **ado** → *A(n)do* with an unrepresented nasal (Arntz and Zeiss 1939:239; Nedoma 2004a:141, 145-146), it is probably connected with PGmc *anðōn* (> ON *andi*, OS *ando* "breath"; OE *anda* "malice, envy, hatred"; OHG *anto* "zeal" (Haubrichs 2004:77; Nedoma 2004a:146; Orel 2003). A possible runic parallel is the Vimose buckle (KJ 24) **aadagas**[u]/**t**.

Schwab (1998a:396; 1999a:13, 21) suggests that the sequence represents a Christian apotropaic charm rather than a Gmc word, with **a** and **o** standing for Greek A and Ω, and the sign of the Cross (not a rune) between them (see also her interpretation of 6. Aschheim III **ḍạḍo**).

The second rune of complex II may be a malformed **d** (Arntz and Zeiss 1939:239; Krause 1966:304), in which case it has the same range of

interpretations as complex I. If we read **amo**, this could be another weakly

inflected MN, possibly related to the name-element *Amala-* (see 9. Balingen

amịlu? in §5.1).

28. Geltorf II-A bracteate

  ḷaḷg̊wu [swastika]

In von Grienberger's interpretation (§4.1), **al** represents the "formula-word"

alu. As I have already indicated, however, this interpretation cannot be

considered reliable.

30. Griesheim fibula

  [I] **ḳoḷo:**   [II] **ag̊iḷaþruþ**

Complex II is interpreted throughout the literature as a dithematic FN

Agilaþrūþ, with the prototheme based (according to Nedoma 2004a:149-150)

on *Agi-* (see 8. Bad Krozingen A **agirike**) followed by a meaningless suffix /-

la-/ (not dim. /-il-a/) (§5.1). In this case, the initial **a**-rune represents a reflex of

PGmc */a/. It is not clear whether the suffix is derived from PGmc or is a later

innovation; but in either event, there seems no reason to doubt that **a** here

represents /a/.

31. Hailfingen I sax

  alis̠rhlaþawihu (Arntz and Zeiss 1939:245-248).

In Arntz' speculative reading, **al<u>i</u>srh** represents a dithematic MN with the prototheme *Alis-*, which may be connected with PGmc **alizō/*alisō* "alder" (§5.1).

Arntz interprets **laþa** as *laþa* acc.sg., to a cognate of PNorse *laþu* "invitation, invocation" (< PGmc **laþō*). This "formula-word" is attested on several bracteates (perhaps including <u>73. Skonager III</u> **lþ<u>u</u>**); and possibly also on <u>33. †Hainspach</u> **lþ**. If this is correct, the first **a**-rune represents a reflex of PGmc */a/, the second the inflectional suffix /-ẵ/ < */-ōn/.

32. Hailfingen II fibula

[I] **(a)????(?)**   [II] **(?)da<u>a</u>n?**

On Jänichen's reading of complex II as **ada<u>au</u>na**, see §3.3.1. Opitz (1987:113) reads **daan<u>nl</u>** and interprets it as the name of the prophet Daniel (compare <u>9. Balingen</u> **d̥nlo**; <u>16. Charnay</u> **dan:l̥iano**).

If we read **da<u>a</u>n<u>a</u>** (see §5.1), this could represent a weakly inflected pers.n. *Dăna*, comparable to Balingen **d̥nlo** (see further §7.1.2.1). A digraphic spelling **a<u>a</u>** suggests a long /ā/ < */ē₁/, rather than short /a/.

33. †Hainspach pendant

lþ<u>sr</u> (Krause 1935c:122-123).

Krause (1935a:38; 1935c:123-125; 1937:468) proposes expanding **lþ** to *l(a)þ(a)* "invitation, invocation", with two instances of unrepresented /a/ (see

31. <u>Hailfingen I</u> **laþa**). The expansion of a suffix /-a/ is debatable: Krause translates the whole text as "invocation here", which implies that *laþa* is understood to be nominative; Krause appears to be working on the assumption that the analogical replacement of inherited nom. /-u/ with /-a/ has taken place, though he does not commit himself to identifying the language as pre-OHG, or even as WGmc. For further discussion of the nom.sg. *ō*-stem suffix, see §7.2.

34. Heide-B bracteate

alu

This sequence is readily identified as the "formula-word" *alu* "ale/magic/protection"(?). Its etymology and interpretations have been discussed in §4.1. Although several alternative etymologies exist, all assume that **a-** represents a reflex of PGmc */a/.

35. Heilbronn-Böckingen I belt fitting

(?)?arwi

Througout the literature, **arwi** is interpreted as a MN *Arwi*. Several etymologies have been proposed, all of which assume **a-** to represent a reflex of PGmc */a/ (§4.1).

36. Hitsum-A bracteate

[I] **fozo**   [II] **g?o^b/ₗa**

As mentioned in §4.1, Seebold (1996) reads complex II as **groba** → *grōba* "hole, pit", and identifies this form as a vriddhi-derivative of an underlying reflex of PGmc *ʒraƀ-*. If this is correct, **o** here represents /ō/ derived from /a/ by ablaut. It appears that this alternation can be assigned to PGmc, and we are in this case dealing with a reflex of PGmc */ō/, not a direct reflex of */a/.

On the interpretation of the terminal **-a** as either an *ō-* or an *n*-stem inflectional suffix, see §7.1.2.1; §7.2.3.3.

38. Hüfingen I *Kleinbrakteat*

    [I] **VVIT (????)**   [II] **alu**

Complex II can reliably be identified as the "formula-word" *alu* (see <u>34. Heide</u>).

42. †Kärlich fibula

    wodanị : hailag

The two words readily identifiable in this inscription (if it is genuine) are the theonym *Wōdan* (dat.sg. *Wōdani*?) < PGmc **wōđanaz* (see <u>3. †Arguel</u> in §4.1) and *hailag* "holy" < PGmc **xailaʒaz* (§3.2.1). In both cases, the **a** of the second syllable represents a reflex of PGmc */a/.

43. "Kent" fibula

    ik w?f?? gadu (Looijenga 2003a:244).

    [I] **gam(:)ụ**   [II] **iku**   [III] **ẉ?fa** (my transliteration).

If Looijenga's reading of complex I as **gadu** and the proposed connection with PGmc *ʒaðōn* "companion, spouse" are correct, we have here another regular reflex of PGmc */a/ → **a**. However, both the reading and interpretation are uncertain (§4.1).

44. Kirchheim/Teck I fibula

bạda(?)ḥ?aḷị

bạda appears to be parallel to 7. Bad Ems **badạ** (qv).

45. Kirchheim/Teck II fibula

arụgis

The etymology of the name represented here and in 67. Schretzheim I **arogịs** has been discussed in §4.1; §5.1. Whether the prototheme represented by **arụ-** ~ **aro-** is connected with PGmc *arōn* "eagle" or *arwaz* "ready" (see 35. Heilbronn-Böckingen I **arwi**), the initial **a-** represents a reflex of PGmc */a/.

47. Lauchheim I fibula

aoṇofada

As discussed in §3.2.2, **fada** is commonly interpreted as a name-element < PGmc *faþō* "mistress(?), aunt(?)", with the first **a** representing /a/ < PGmc */a/ (on the interpretation of the terminal **-a**, see §7.2.3.3). Alternatively, the

sequence may represent an abbreviated verb-form *fa(ihi)da* "made" (Nedoma 2004a:194; Schwab 1998a:420).

48. Lauchheim II comb

?dag

Schwab (1999a:20) reads **odag** → *ōdag* < PGmc **auđaȝaz/*auđiȝaz* "fortunate(?), happy(?)" (§3.3.2). As noted in the earlier discussion, I do not consider either this reading or the proposed monophthongisation of */au/ to be plausible.

If the first sign is non-runic, then the text is simply **dag**, which could be the "day"-word (PGmc **đaȝaz*; see 84. Weingarten II in §5.1) or a strongly inflected nom. MN *Dag*, with the same etymology.

All of these interpretations assume **a** to represent a reflex of PGmc */a/.

52. München-Aubing II fibula

ḅḍ

The only available interpretation of this sequence is Meli's suggestion (1988:120-121) that it might be a contraction of *b(a)d(a)* "consolation" (compare 7. Bad Ems **badạ**; 44. Kirchheim/Teck I **bạda**). Both Düwel (1998b:77-78) and Nedoma (2004a:399) regard this as an untestable speculation.

54. Neudingen-Baar II wooden stave

lbi·imuba:hamale:bliþguþ:uraitruna

While it is generally agreed that **hamale** represents a dat. MN (§3.2.2), the etymology of the stem *Hamal-* is uncertain. Scardigli (1986:354; 1994:288) treats it as a (nom.) technical term "strut", related to modG (dial.) *Hämele* n. "handcuff, band for tying the hands of infants to the edge of the cradle", and/or OIc *hamla* f. (→ OE *hamele*) "oar-loop". Nedoma rejects this on the grounds that modG *Hämele* is based on an OHG dim. construction in /-ilīn/, for which *hamale* is not a possible form (we would expect **hamilī*); moreover, the semantic shift "restricting band" → "strut, support" is at best questionable (Nedoma 2004a:242). De Vries (1961) derives OIc *hamla* from the verb *hemja* "to restrain" (PGmc **xam(m)janan*), but does not go into detail about the derivation. If **hamale** is derived from a proto-form **xaml-*, then the second **a** represents an anaptyctic vowel of the common WGmc type (§2.3.5).

In the view of Opitz (1981:30-31; 1982:488), *Hamale* is a hypocoristic form of a dithematic name in *Hama-* (: OE *hama* m. "clothing, skin, body"; OHG-OS *gūð-hamo* "battle-dress" (*Hildebrandlied* V.5)). Nedoma objects that *l*-suffixed forms of this type are constructed from the stem + **/-il-/*, not **/-al-/*; and these forms are weakly inflected, so /-e/ is not a possible ending.

Haubrichs (2004:85) connects the name to OHG *hamal* "wether" < *hamal* adj. "cropped, mutilated" (< PGmc **xamalaz*), which might have originated as a nickname "wether; castrated one" (the meaning could alternatively be "scarred, mutilated" in a more general sense). Nedoma is not averse to the etymon **xamalaz*, but he proposes that the meaning is "man with cropped hair" (compare, e.g., OFris *hēres-homelinge* f. "cutting-off of the hair")

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(Nedoma 2004a:322-323). In defence of this interpretation, Nedoma cites a

number of other Gmc pers.ns. which make reference to hair (e.g., WGmc

Strubilō f. (1ˢᵗ century) "the little tousle-haired one")[58] (Nedoma 1998b;

2004a:324).

If the connection with *xamalaz* is correct, then it appears that **a** in the

second syllable is not a case of anaptyxis but a regular reflex of PGmc */a/.

That **a** in the root is a reflex of */a/ is undisputed.

56. Nordendorf I fibula

[A] [I] **logaþore**   [II] **wodan**   [III] **wigⁱ/ᵤþonar**   [B]

aw̨aḷeubwini?

On the various interpretations of **logaþore**, see §4.1. Given the

uncertainties about the etymology and composition of this word, the history of

the vowel represented by **-a-** is not clear. It may be the thematic vowel of an

a-stem element (< PGmc *luȝ-a-* or *lōȝ-a-*).

There is no disagreement in the literature over the interpretation of complex

II as the theonym *Wōdan* (see 3. †Arguel **wodanį**), with **a** representing a reflex

of (unstressed) */a/.

That **þonar** in complex [A III] represents a reflex of PGmc *þunraz*

"thunder" and/or the identical theonym (§4.1) is generally accepted. The

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[58] "die kleine Strubbelhaarige"

medial **-a-** is in this case a product of the common WGmc anaptyxis (type 1 –

see §2.3.5).

58. Oberflacht spoon

ǥba˙/ᵢduḷþafd

In Klingenberg's interpretation (Klingenberg 1974), **ba** functions as a

haplogram: **ǥba** → *g(i)ba* "gift" (< PGmc *ʒeƀō) or 1.sg.pres. *g(i)ba* (to Go

giba vs. OS *geƀu*, OHG *gebu*) "I give" (§5.1); and **ba** → Go *ba* (< PGmc

*ƀā), nom./acc.pl.neut. to *bai* "both (bread and wine)".

Klingenberg (1974:88) divides **afd** into two words: **af** represents a

preposition *af* < PGmc *aƀa (> Go ON OS *af*, OE *æf ~ of*, OHG *aba* "from,

away from"); and **d** is an abbreviation for the dative object of this preposition,

perhaps a repetition of *dulþ* "festival" (< *đulþiz f.; see §4.1). To account for

the form of the preposition (*af*, rather than the form *ab* found in OHG),

Klingenberg (*ibid.*) and Opitz (1987:126) attribute the /-b-/ of OHG to the

operation of Verner's Law. Orel (2003), on the other hand, cites *aƀa as the

proto-form, the <-f-> in the majority of reflexes presumably representing a

fricative allophone of PGmc */β/.

Düwel (2002e:479) offers an alternative, but similar, rendering of the text as

g(eba) ba dulþa f(ri)d(u) "Gift for (religious) celebration. Peace". Here, **a** is

the inflectional suffix of *dulþ-*. No such inflection appears in the OHG *i*-stems

(BR §218); in Go, long-syllable masc. *i*-stems do take dat.sg. /-a/ (by analogy

with the *a*-stems), but the fem. *i*-stems retain a form <-ai> (= /ai/? See

discussion of <u>16. Charnay</u> **uþfņþai** in §3.2.1). A dat.sg. /-a/ is also attested for long-stemmed masculines (but not feminines) in OS (Holthausen 1921 §295).

Both of these interpretations suffer from phonological difficulties, and both of them rest on the assumption that the sequence is an abbreviated form of a longer text, the reconstruction of which can only be speculative. As an alternative (not advanced in the literature), it is conceivable that **afd** might represent an underlying form *aft* < PGmc *aftĕ* (> Go *afta* "behind"; ON OFris OS OLF *eft* "after"; OE *æft* ~ *eft* "behind, again"). The interpretation of <u>81. Weimar III</u> **isd** as *ist* "is" (see entry in §5.1) has gained wide acceptance, and provides us with a parallel for /t/ → **d**. However, the presence of *i*-umlaut in *eft* points to a pre-form in */-i/. If the product of "primary" *i*-umlaut has not been phonologised, then the conditioning vowel ought still to be present (in which case we might expect a form like ***afti** ~ ***afdi**). If, on the other hand, the mutated vowel has been phonologised, then we would expect it to be written **e**. A further problem is that no reflex of *aftĕ* is attested in OHG (Köbler 1993; Schützeichel 2006; Wells 1990).

According to Orel (2003), *i*-umlaut in ON *eft* is derived analogically from *eftir* (< PGmc *aft(e)raz*), rather than directly from a pre-form *afti*. A similar process cannot be operative in the Continental dialects, however, as the cognates of ON *eftir* do not have /-i-/ in the second syllable and do not undergo umlaut: OS *aftar*, OHG *after*. It is conceivable that a CRun form *aft* without an umlaut-conditioning vowel exists alongside the pre-forms of *eft*, as a parallel to pre-ON *aft* (and perhaps OE *æft*, if this represents an unmutated variant); but we have no supporting evidence for the existence of such a form.

59. Oettingen fibula

??iͭ̇abrg

If the reading **a̤ṳiͭ̇a-** is correct, and if this sequence represents a reflex of

PGmc *aujan* "luck" (§3.3.1), then the second **a**-rune represents the thematic

vowel. This reading is speculative, however.

60. Osthofen fibula

go?:furad?ḥḍe̤o̤f̣ịle?

If **fura** represents a preposition < PGmc *fura* "before" (§4.1), then **-a** is a

reflex of the final */-a/.

Arntz interprets **furad** as *furad-* < PGmc *fraþaz* "strong" (Arntz and Zeiss

1939:318-319), with **a** representing the root-vowel (again < */a/).

61. Pforzen I buckle

[I] **aigil·andi·aͥ/ͤlrun?(…)** [II] **ḷṭahu·gasokun?**

There is agreement throughout the literature that reflexes of PGmc */a/ are

represented by the **a**-runes of **andi** (→ *andi* "and" < PGmc *anđi*) (§5.1) and

gasokun (→ *gasōkun* 3.pl.pret. "scolded? /fought?/quarrelled?") (§4.1).

If **aͥ/ͤlrun** is correctly read **allrun/all(u)run** (Pieper 1999:30; Marold

2004:220-223), then this may represent a name in *All-* < PGmc *allaz* "all"

(see 67. Schretzheim I **alaguþ**; 72. Skodborg **alawin, alawid**); or *Alu-* (see

§4.1), which would make the name a true cognate of ON *Ǫlrún* (Marold 2004:227). The former would be morphologically odd: pers.ns. with this element normally retain a compositional vowel /-a-/ (occasionally /-o-/) (Förstemann 1900:51-55). Schwab (1999b:57) adduces a counter-example in Langob. *Altruda*, but it is not clear that this is a name in **alla-* rather than **alđa-* (> OE *eald*, OFris OS *ald*, OHG *alt* "old").

It is conceivable, as Schwab suggests (*ibid.*), that **a̧lrun** could be interpreted as *alrūn* = OHG *alrūn* > modG *Alraun* "mandrake" (which Kluge (2002) etymologises as **ala-* "all" + **rūn-* "whisper; secret"), perhaps intended with the literal meaning "mandrake" rather than as a pers.n..

Of the numerous interpretations of **ļṭahu** (§4.1), several warrant special consideration here. If the reading **elahu** is correct, and if this is to be connected with OHG *elah(h)o* "elk, deer" (< PGmc **elxōn*) (§5.1), then **a** represents an anaptyctic vowel; the context is appropriate for the general OHG anaptyxis (type 2) (§2.3.5).

One of the interpretations offered by Schwab (1999b:64-67) is that **elahu** is a compound *eli-ahu* "foreign water", with the element *eli-* < PGmc **aljaz* (> OHG *eli-* "strange, foreign, other" (in *elilenti* "foreign country") : Lat *alius* "other"). The proposal is that **e** represents a vowel derived from /a/ via *i*-umlaut (§2.3.4.2). In this interpretation, and that of Nedoma (§4.1, interpretation no. 3), **ahu** is connected with PGmc **axwō* "water, river, stream" and **a-** therefore represents /a/ < PGmc **/a/. **a** also represents a regular reflex of **/a/ in Seebold's interpretation (no. 4 in §4.1) that **ahu** → *ahu* inst.sg. to a reflex of PGmc **axuz* "caution".

Looijenga expands **ḷṭahu** to *(a)l tāhu* (with an underlying /a/ not represented orthographically). *Al* is here an endingless form of the adj. "all" (PGmc **allaz*; for the reflexes, see 67. Schretzheim I **alaguþ**). Both Looijenga and Wagner interpret **tahu** as a reflex of PGmc **tanxuz* "tough" (§4.1), with **a** representing /ā/ < PGmc */an/ (§2.2.2; §2.3.4.3).

Looijenga treats *tāhu* as an adverb and translates the whole text "A. and A. vigorously fought/condemned all" (2003a:255). If this were correct, however, *al* ought to have an overt (strong) acc.pl.masc. ending like OHG *al-e* (analogically derived from PGmc nom. **all-ai*; compare acc.pl. **all-anz* (Lehmann 2005-2007 §3.5.1; Ringe 2006:281)). The indeclinable adjectives in OHG only appear in nom. case (occasionally also acc.sg.) and in predicative use (BR §247).

62. Pforzen II ivory ring

[I] **ʔḷụʔụlgisali[**   [II] **]ʔẹ̣:aodliþ:urait:runa**

gisali may be connected with PGmc **ʒīslaz* "hostage" or **ʒīslaz/*ʒīzlaz* "arrow" (§5.1). In either case, the medial **-a-** represents a vowel attributable to the common WGmc anaptyxis (§2.3.5).

66. Saint-Dizier sword pommel

ạlu

There seems no reason to doubt that this inscription represents the "formula-word" *alu* (see 34. Heide).

67. Schretzheim I capsule

[I] **alaguþ:leuba:dẹḍun**   [II] **arogịsd**

Throughout the literature, **alaguþ** is interpreted as a dithematic FN with a prototheme < PGmc *allaz* (> Go *alls*, ON *allr*, OE *eall*, OFris *al(le)*, OS OHG *al* "all") (Arntz and Zeiss 1939:340-341; Krause 1966:299; Looijenga 2003a:255; Nedoma 2004a:173-175). If this is correct, then the two **a**-runes represent reflexes of */a/, respectively the root-vowel and the thematic vowel.

In complex II, **arogịs** is generally accepted as a MN equivalent to 45. Kirchheim/Teck II **arụgis** (qv), with **a** representing a reflex of PGmc */a/ in either of the competing etymologies (*arōn* "eagle" vs. *arwaz* "ready").

68. Schretzheim II fibula

[I] **siþwagadin**   [II] **leubo**

wagadin is variously interpreted as a participle or deverbal noun *wag(g)(j)a(n)dĭn*, based on PGmc *waȝjanan* "move" (§4.1). In all of the available interpretations, the first **a**-rune represents the root vowel /a/ < */a/. The second **a**-rune belongs to the participial suffix < PGmc */-anð-/, and is also therefore a reflex of */a/.

69. Schretzheim III spatha

(g)aba^u/_r

Interpretations involving the transliteration of the "rune-cross" as a **g**-rune include Looijenga's **gabar** → *Gabar*, a hypocoristic MN ← **Gabahari*, with a prototheme related to OHG *gaba* "gift" (a variant of *gëba*) (Looijenga 2003a:257). In this interpretation, the first **a**-rune apparently represents an /a/ developed secondarily (vs. regular /e/ < PGmc */e/), while the second represents the compositional vowel. A compositional <-a-> is quite common in OHG dithematic names in *Gib-/Geb-*, but it co-exists with other variants (compare, e.g., *Gebahard ~ Gebohard ~ Gebihart ~ Ghebehard* (Förstemann 1900:633)). The only dithematic name in *Gab-* which Förstemann cites is *Gabuard* (1900:562). Looijenga does not discuss the possibility that **gab-** could contain long /ā/ < */ē₁/ (compare 22. Erpfting **gabu** in §5.1).

Opitz (1987:40) favours Klingenberg's suggestion (Klingenberg and Koch 1974:128-129) that we should read either **gab** → *gab* 1./3.sg.pret. "gave" (with **a** → /a/ < PGmc */a/), or **gaba** → *gāba* "gift" (**a** → /ā/ < */ē₁/). Klingenberg's other proposed interpretations include: (i) **abar** → *Abar* (< PGmc **aƀraz* "strong"; see below); (ii) **gabar** → *ga(m)bar* = OHG *gambar* "powerful" (< PGmc **ȝamƀ(a)raz* (Köbler 1993)), perhaps a by-name or weapon-name.

Düwel (1981b:159-160; 1984:325; 1994b:268) suggests reading **arab** (without treating the cross as **g**), which might be an abbreviated form of a dithematic MN *Ara(n)b(erht)*, with a prototheme possibly connected with PGmc **arōn* "eagle" (see 45. Kirchheim/Teck II **arụgis** in §4.1). Nedoma also cautiously interprets the inscription as a pers.n., though he does not accept Düwel's expansion. The two most likely options in his view are **abar** → *Abar*

m. (PGmc *aƀraz* > Go *abrs* "strong, mighty"; ON *afr-endr at afli* "very strong, valiant"), with the second **a**-rune representing an anaptyctic vowel of the common WGmc type (§2.3.5); or **uaba** → *Wa(m)ba* m./f. (< PGmc *wamƀō* "belly, womb"; see §4.1) (Nedoma 2004a:198).

Schwab (1998a:376-378) suggests that **abar** is an abbreviation (with metathesis) of the Mediterranean magical formula *Abrasax/Abraxas*. A parallel text can be found on a 6th/7th-century cruciform amulet from Lausanne, which contains various permutations and abbreviations of the formula, including ABRA, ABRAC, ABAR. Nedoma (2004a:197) is sceptical, but the only objection he expresses is to the metathesis **abar** → *abra-*. While Schwab's connection of this inscription to Mediterranean magic is conjectural in itself, this transposition is not sufficient reason to rule it out: the corpus contains rune-sequences for which metathetic interpretations are widely accepted (e.g., 10. Beuchte **buirso** → *Bŭriso* (see entry in §4.1); 89. Wremen **ksamella** → *skamella* (see entry in §5.1)); and the Lausanne amulet itself contains a variant ABAR.

72. Skodborg-B bracteate

aujaalawinaujaalawinaujaalawinjalawid

That **auja** = *auja* "luck" < PGmc *aujan,* and that **alawin, alawid** represent pers.ns. in *Ala-* < PGmc *allaz* "all" (see 67. Schretzheim I **alaguþ**) is uncontroversial. These interpretations give us several clear witnesses to **a** → /a/ < PGmc */a/.

Stiles (1984:30) suggests that **jalawid** is a haplographic *ja(h) Alawīd* "and

Alawīd" (see §5.1).

73. Skonager III-C bracteate

[I] **niuwila** [II] **lᛈu**

Complex II **lᛈu** is identified in the literature as an abbreviated form of *laþu*

"invitation, invocation" (see 33. [†]Hainspach **lᛒ**; and §4.1). If this is correct, the

root-vowel /a/ has been omitted.

74. Soest fibula

[I] **rada:daþa**   [II] **atano** or **gatano**

In complex I, **daþa** is identified throughout the literature as a FN *Dăþa*,

with the same stem as 24. Freilaubersheim **ḍaᛒïna**. The quantity of the root-

vowel (/a/ < PGmc */a/ or /ā/ < PGmc */ē₁/) is uncertain; see §5.1.

The most widely accepted interpretation of complex II is as a nom. MN

At(t)ano, with the cross functioning as a "carrier", rather than as a **g**-rune

(Arntz and Zeiss 1939:348-349; Krause 1966:280; Nedoma 2004a:216-221;

Opitz 1987:40-41). This may be connected with an element *aþa-*, back-

formed from PGmc *aþalan* (> OHG *adal* "(noble) descent, lineage").

Nedoma explains the alternation *Aþano ~ Attano* as "hypocoristic

gemination" *Aþano → *Aþþano*, combined with despirantisation of */θ:/ →

/t:/ (a process on which he does not comment further) (2004a:218). He

maintains that the name has nothing to do with PGmc *attōn (> Go atta, ON atti, OFris aththa "father"; OHG atto "ancestor"), though it is not clear to me why this connection should be impossible.

Klingenberg treats the cross as **g**, but assigns it a Begriffsrune function "g(ift)". He accepts the interpretation of **atano** → At(t)ano (Klingenberg and Koch 1974:126).

Looijenga reads **gatano** (with the rune-cross functioning as a **g**-rune) and interprets it as a weak nom. MN Gatano, which she does not attempt to analyse (2003a:258). Nedoma (2004a:214) notes (and rejects) a similar reading by Meli (1988:147-148). A possible parallel is OHG Gatani f. (8th c.; Förstemann 1900:563), the etymology of which is uncertain. Kaufmann (1968:130) suggests a connection with OE gada, OS gi-gado "companion" (< PGmc *ʒaðōn; compare Looijenga's interpretation of 43. "Kent" **gadu** in §4.1); or with the ethnonym Gaut- (< PGmc *ʒautaz/*ʒautōn, with monophthongisation of */au/ > */ā/, vs. regular /ɔ̄/; see §2.3.1.4).

75. Steindorf sax

?husi̯?alḏ??(?)

On the suggestions that **-?alḏ** represents a name-element -bald (< PGmc *ƀalþaz/*ƀalðaz "bold") or -wald (< PGmc *walðanan "rule, wield"), see §4.1. In either case, **a** represents a reflex of */a/; however, I do not consider the reading of **?** as **b** or **w** reliable, and so the interpretation of the entire inscription remains in doubt.

76. Stetten pin-head(?)

ạmelkuḍ ſ

If **ạmelkuḍ** is a FN with the element *Amel- = Amal-* (§5.1), the initial **a** may represent a reflex of */a/. For discussion of the etymology, see 9. Balingen in §5.1.

77. Szabadbattyán buckle

marŋs?

The favoured interpretation of **marŋ** is as a MN *Māring* < PGmc **mērjaz* "famous" (§5.1). It is possible that the root-vowel is short /a/, and that we are dealing with a name-element *marha-* < PGmc **marxaz* (> ON *marr*, OE *mearh* "steed"; OHG *marah-stal* "stable") (Antonsen 1975:75; Arntz and Zeiss 1939:359; Kiss 1980:114; Krause 1966:311). In Antonsen's view, this may be understood as a by-name with a sense "descendant of Mar(h)s", or "horseman". Another possible etymon would be **mariz* (> Go *mari-saiws*, ON *marr*, OE *mere*, OHG *meri* "sea, lake"; OFris *mar* "pool, ditch") (Arntz and Zeiss 1939:359).

Nedoma raises a phonological objection to the connection with **marxaz*: there is no motivation for the deletion of medial /-h-/. If the dialect of the inscription is EGmc, the evidence of Biblical Gothic indicates that /-h-/ after a liquid is preserved (e.g., *filhan* "to conceal, bury"). The few instances in which /-h-/ is omitted are probably attributable to scribal error (Nedoma 2004a:385-386). The same is true of the WGmc dialects (e.g., PGmc **ferxwan*

> OE *feorh*, OFris *ferch*, OS OHG *ferah*); note that in the Continental dialects, an anaptyctic vowel usually develops (§2.3.5).

79. Weimar I fibula

[I] **haribrig** [II] **hiþa:** [III] **liub(į):** [IV] **leob·**

The interpretation of **haribrig** as a FN with a prototheme < PGmc **xariz/*xarjaz* "army" is uncontroversial (§5.1). In this case, **a** represents a reflex of **/a/*.

81. Weimar III buckle

[I] **ida:bįgina:hahwar** [II] **:awimund:isd:ḷẹoḅ** [III] **idunⁱ/:**

As mentioned in §3.3.2, **hahwar** is generally interpreted as a dithematic MN with a prototheme *Hāh-* < PGmc **xanxaz* (> PNorse *hahai* dat.sg. (Möjbro stone, KJ 99), OHG *hāh* "horse, courser") (Arntz and Zeiss 1939:373; Krause 1966:289; Nedoma 2004a:315-316).

Although Nedoma favours this etymology, a derivation from PGmc **xauxaz* "high" is also possible.

The deuterotheme **-war** is interpreted as either *-war* < PGmc **waraz* "wary" (**a** → /a/ < PGmc **/a/*); or *-wār* < **wēraz* "true" (**a** → /ā/ < **/ē$_1$/*) (§4.1; §5.1). The former seems to be the more popular.

82. Weimar IV bead

ᵇ/_wiuᵇ/_w:ida:?e????a:hahwar:

The name **hahwar** here is identical to that on 81. Weimar III.

83. Weingarten I fibula

[I] **a^{li}/_erguþ:?(?)**   [II] **feha: writ?...ⁱ/₁a**

The majority view is that complex I should be read **alirguþ**, representing a dithematic FN in *Alir-* < PGmc **alizō/*alisō* "alder" (§5.1). If this is so, then the initial **a** represents a regular /a/ < PGmc */a/. On the alternative reading **aerguþ**, see §3.2.1.

In the most popular interpretations of **feha**, **e** represents a monophthongal reflex of PGmc */ai/ (§3.2.2). In the earlier discussion, I mentioned Looijenga's identification of the sequence with OHG *feginōn* "to enjoy oneself" (< PGmc **faʒanōjanan/*faʒenōjanan*), with **e** representing an *i*-umlaut reflex of PGmc */a/. Since the rune can plausibly be explained in terms of monophthongisation of */ai/, or as a reflex of an underlying front vowel, I am not inclined to give Looijenga's interpretation much credence.

84. Weingarten II fibula

dạdo

While there is general agreement that this inscription, like 6. Aschheim III **dạḍo**, represents a weakly inflected MN *Dado, Da(n)do* or *Dādo*, we have no way of determining whether the root-vowel is long /ā/ < PGmc */ē$_1$/ or short /a/ < */a/ (§5.1).

85. †Weser I bone

[I] **latam(ŋ)hari**   [II] **kunni(ŋ)?e**   [III] **hagal**

latam is generally interpreted as a form of the verb < PGmc *lētanan* "let", the first **a**-rune representing /ā/ < PGmc */ē₁/ (§5.1). It may be interpreted as 1.pl.pres.ind. (**-am** → /-am/ < PGmc */-amaz/); or as an irregular 1.pl.opt. (**-am** → /-ām/, vs. regular /-ēm/ < PGmc */-aim(a) (Pieper 1987:234-235; see §3.2.2)). Although the latter interpretation is more widely accepted, I agree with Nedoma (2004a:326) that it is anomalous and that the former is more plausible, at least from a phonological perspective.

Throughout the literature, **hari** is connected with PGmc *xariz/*xarjaz* "army" (see 79. Weimar I **haribrig**).

Complex III **hagal** is interpreted throughout the literature as *hagal* "hail" (PGmc *xaȝlaz/*xaȝlan* > ON *hagl*, PNorse *hagala* (Kragehul spearshaft, KJ 27), OE *hæg(e)l ~ hagol*, OFris *heil*, OS OHG *hagal*). In this case, the first **a** is the root-vowel < PGmc */a/, and the second is a product of the common WGmc anaptyxis (§2.3.5). On anaptyxis in Kragehul **hagala** and other early Scandinavian inscriptions, see Krause (1971:82-85).

87. †Weser III bone

ulu:hari dede

If **ulu** represents the "owl"-word (PGmc *uwwalōn) (§4.1), we appear to have a compositional vowel written **-u-** where we would expect a phonological form /-a-/. Nedoma rejects Pieper's connection of **ulu** with *ūla-* because of this apparent discrepancy. No-one has suggested that **-u-** here represents an underlying /a/; Pieper seems content to overlook the issue.

Here, as in the case of †Weser I (above), **hari** is taken to represent a reflex of *xariz/*xarjaz.

89. Wremen footstool

[I] **ksamella**   [II] **lguskaþi**

If **ksamella** has been correctly identified as a loanword from Latin *scamella* "footstool, step" (§5.1), then we have a stem-vowel /a/ represented as **a**, but it is not derived directly from PGmc */a/.

The terminal **-a** is explained by Düwel (in Schön et al. 2006:322) as a direct import from Lat., rather than a Gmc inflectional suffix. Heine expands on this by identifying *scamella* as an example of the reinterpretation of a nom.pl.neut. *o*-stem as a nom.sg.fem. *ā*-stem (compare CLat. *opus* n., nom.pl. *opera* → LLat. *opera* f.(nom.sg.) "work") (Heine in Schön et al. 2006:322-323).

In the most popular interpretation of complex II (§4.1), **lgu** represents *(a)lgu-* < PGmc *alȝiz/*elxaz/*elxōn "elk, deer", with the initial vowel unrepresented. An alternative interpretation, with an unrepresented /a/ in a different position, is Looijenga's suggested connection with PGmc *laȝuz "lake, water". Both of these may involve an unrepresented reflex of */a/.

skaþi is connected in the literature with PGmc *skaþjanan* "hurt" (see §5.1 for the various analyses). In all of these interpretations, **a** represents the root-vowel < PGmc */a/.

6.2 Summary

It is plain that in the vast majority of cases where we can be reasonably confident that we are dealing with a reflex of PGmc */a/, it is consistently represented **a**.

We have several reliable examples of anaptyctic /a/: 7. Bad Ems **m̩adal̩i**; 56. Nordendorf I **þonar**; 62. Pforzen II **gisali**; 85. †Weser I **hagal**; possibly also 54. Neudingen-Baar II **hamale** (if based on a PGmc *xaml-). All of these belong to the common WGmc anaptyxis (type 1). If 61. Pforzen I **l̩t̩ahu** = **el̩ahu** → *elahu* "elk, deer", then this gives us an example of the OHG anaptyxis (type 2) (§2.3.5).

The only plausible example of /ā/ < PGmc */an/ before */x/ is 81, 82. Weimar III, IV **hahwar**; and even this is uncertain. More dubious is 61. Pforzen I **tahu**; the connection with *tanxuz* "tough" is only one of the numerous interpretations of the sequence.

The only possible cases of **e** for /a/ via *i*-umlaut are Pforzen **el̩ahu** and Weingarten **feha**, both of which we can reject with some confidence. The corpus contains abundant evidence for **a** in *i*-umlaut contexts: 5. Aschheim II

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ahi; 7. Bad Ems **m̩adal̩i**; 8. Bad Krozingen A **agirike**; 9. Balingen **ami̩lu**; 12. Bezenye II **arsiḅoda**; 24. Freilaubersheim **ḍaþ̣ïna**; 30. Griesheim **aǥil̩aþruþ**; 61. Pforzen I **andi**; 79. Weimar I **haribrig**; 85. †Weser I **hari**; 87. †Weser III **hari**; 89. Wremen **skaþi**. If the reading **alirguþ** is correct for 83. Weingarten I, this provides us with a further example.

The absence of an orthographic distinction between mutated and unmutated allophones of /a/ does not necessarily imply that *i*-mutation is not underway in CRun. A mutated *[æ] or *[ɛ] may exist, but if so, it is evidently perceived by the creators of inscriptions as underlyingly /a/. If the mutated vowel were phonologised, or if phonologisation were incipient, we might reasonably expect to see some variation between **a** and **e**.

The corpus contains several examples of a rune other than **a** which may represent an alternant of /a/: 3. †Arguel **luïgoᵂ/þ** (if interpretable as *liuhaþ*); 9. Balingen **ami̩lu**; 36. Hitsum **g?oᵇ/̩a**; 76. Stetten **ạmelkuḍ**; 87. †Weser III **ulu**. In none of these cases (except perhaps **luïgoᵂ/þ**, which is a dubious example) does the vowel clearly represent a direct reflex of */a/. The *Amil- ~ Amel-* name-element may simply be a "rhythmic variant" of *Amal-* (i.e., **i̩** and **e** represent /i/ and /e/, not derivable from /a/). If Hitsum **g?oᵇ/̩a** → *grōba*, the alternant results from a different ablaut grade of the root (i.e., < PGmc **ʒrōƀ-* ≠ **ʒraƀ-*). †Weser III **ulu** remains without a satisfactory explanation (see entry in §4.1).

We have several inscriptions possibly containing an /a/ which is not represented orthographically: 9. Balingen **ḍnlo** → *D(ă̆)n(i)lo*; 15. Bülach **(f)t** → *f(a)t(o)*; 33. †Hainspach **lḅ** → *l(a)þ(u/a)*, **sr** → *s(a)r*; 52. München-Aubing II **ḅḍ** → *b(a)d(a)*; 61. Pforzen I **l** → *(a)l*; 73. Skonager III **lḅụ** → *l(a)þu*; 89. Wremen **lgu** → *(a)lgu* or *l(a)gu*. All of these are speculative expansions (the Balingen, Skonager and Wremen examples being the most credible). There does not appear to be any pattern to the contexts that would enable us to construct an orthographic rule comparable to "Grønvik's law" for the non-representation of a high vowel (§2.5.2). We have two possible examples of initial /al-/ → **l-** (Pforzen I; Wremen); but the former is very uncertain.

Although the "formula-word" *laþa ~ laþu* is well attested in the bracteate corpus (Krause 1966:253-257), there are no parallels for the expansion of **lþ** → *laþ-*, proposed for Skonager. The reading of †Hainspach **lḅ** is questionable, even if the item is authentic. A similar form appears on the Sedschütz pot (AZ 5), excluded from my corpus because of its early date (3rd c.); but the inscription is obscure and may not be runic.

6.3 Conclusions

It seems clear that, as we would expect, reflexes of PGmc */a/ appear throughout the corpus as **a**. The alleged witnesses to a mutated /a/ → *[æ] ~ *[ɛ] → **e** are unreliable, while all of the other cases in which a vowel-rune other than **a** appears and where we might be dealing with a root in PGmc */a/, the variation can be explained as an alternation of the underlying vowel-

phonemes, rather than as any sound change relating to */a/ itself. We have no evidence for a reflex of */a/ being represented as **o**.

For the long vowel /ā/ < */anx/, our only witness is **hahwar**, with the vowel represented by **a**. Since this phoneme would be expected to merge with /ā/ < */ē₁/, which is consistently represented as **a** (§5.2.2.2), this is to be expected.

7. Two problems in morphophonology: the *n*- and *ō*-declensions

In the earlier analyses of the data (§§3-6), I explicitly avoided (or rather, postponed) dealing with certain nominal suffixes, as these present us with phonological problems which warrant separate treatment. Under consideration here are two sets of data: those sequences interpreted as weakly inflected pers.ns. or nouns (§7.1); and those having a bearing on the development of the nom.sg. suffix of the *ō*-stems (§7.2).

7.1 Weakly inflected names in -a, -o

7.1.1 The gender differentiation of weakly inflected names

The Continental runic corpus appears to contain a large number of pers.ns., many of which carry weak inflection. A common assumption about these names is that they correspond morphologically to the weak nouns of OHG and OS: in the nom. case, MNs terminate in /-o/ and FNs in /-a/, in contrast to Go (and perhaps PNorse) masc. /-a/, fem. /-ō/. In the following sections, I shall refer to the OHG type as pattern 1, and the Go type as pattern 2.[59]

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[59] OE and OFris masc. /-a/, fem. /-e/ appear to represent a third pattern (although one even more severely disrupted by analogy than the other two). Reference will be made to this pattern in the forthcoming discussion, but our chief concern is the explanation of surface forms in **-a, -o**, to which the OE/OFris pattern is of less relevance than the Go/PNorse and OHG types. OS

The distinction by gender is not traceable to PIE, in which the *n*-stems form a single class with no comparable gender variation. Bammesberger (1990:167) traces the /-a/ type (OHG *zunga* f., Go. *guma* m.) to PGmc */-ṓ/, and the /-ŏ̄/ type (OHG *gomo* m.; Go *tuggō* f.) to a trimoric ending, ePGmc */-ō̄/ < PIE */-ōn/ (on this subject, see also Lane 1963:157; Prokosch 1939:251; Ringe 2006:274-275). Orel (2003) reconstructs PGmc */-ōn/ for both types (**tunʒōn, *ʒumōn*), while Lehmann (2005-2007 §3.2.3) has **gumō, *tungōn*. Ringe (2006:280) has masc. **gumō̄* with a trimoric ending, and regards the nom. form of the feminines as unreconstructible. Antonsen (2003) argues that names in **-o** → /-ō/ in the earliest runic inscriptions may be of either gender, and that in the period c.200-400 the gender differentiation (with inherited /-ō/ only used for feminines and an innovative /-a/ for masculines) had not been fully established.

Whatever the origin of and motivation for this gender differentiation, pattern 1 is clearly established in OHG and OS (Bach 1952/3:1.1:103-105; BR §221). This does not, however, imply that we can be entirely confident that a weakly inflected pers.n. in the runic corpus is masc. if it terminates **-o** and fem. if it terminates **-a**.

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shows alternation /-a/ ~ /-e/ in the nom. feminines (with /-a/ predominating; Holthausen ascribes the /-e/ variant to "Anglo-Frisian" influence), while the oblique forms of both genders show considerable (analogical?) variation (Gallée 1910 §§330, 335; Holthausen 1921 §§307-308, 313-314; see also §7.1.2.3). In discussing pattern 1, therefore, I shall concentrate on OHG.

Even if we are satisfied that the distinction between masc. /-o/ and fem. /-a/ is stable in "inland" WGmc[60] names in the period of the inscriptions, we cannot safely assume that all the Gmc pers.ns. which we encounter in the study area are WGmc: the evidence of Latin inscriptions from the Rhine region suggests that EGmc name-forms were current in the 5th-6th centuries alongside WGmc ones. Names of both types may occur within the same inscription, and indeed within the same family. Haubrichs (2003; 2006) discusses the names on the "Remico stone" from Goddelau am Rhein (Kr. Groß-Gerau, Hessen), which bears the following memorial inscription:

HIC [Q]VIISCET IN PACE MATRO/NA N[O]MENE REMIC/O SIMVL CVM/ FILIS SV[I]S DVCCIONI ET DER/STO DADILO [CU]M FILIIS SIUIS/ TETULU POSUERUNT

"Here rests in peace the matron by the name of *Remico* together with her sons *Duccio* and *Derstus*. *Dadilo* and his/her sons placed the gravestone."

(After Haubrichs 2006:296, my translation).

The inscription clearly identifies *Remico* as a woman. Haubrichs connects the name with Go *rimis* n. "peace" (< PGmc **remez*) + dim. /-īkō/ f. (< PGmc **/-īkōn/*). *Derstus*, on the other hand, contains (so Haubrichs) a stem *Deuri-* < PGmc **đeurjaz* (> ON *dýrr* "dear, precious"; OE *dēore*, OFris *diure* "dear, expensive"; OS *diuri*, OHG *tiuri* "valuable, expensive"), which is attested as a

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name-element only in WGmc sources. If a woman with an etymologically and morphologically EGmc name had a son whose name had an identifiably WGmc stem, it appears that both types could co-exist.[61] That being the case, as Haubrichs points out (2003:236-237; 2006:297), we cannot be sure whether *Dadilo* is a MN in /-o/ (pattern 1) or a FN in /-ō/ (pattern 2). He identifies the element *Dad-* as a lall-stem (see entries for 6. Aschheim III **ḍạḍo**; 84. Weingarten II **dạdo** in §5.1)).

Haubrichs (2003:226, 229) dates the *Remico* inscription to the 5th or 6th century on palaeographic and iconographic grounds. A vase depicted on the stone has parallels datable within the period 450-563 (see also Boppert 1971:168-169). The location is close to the find-sites of several of our runic inscriptions with pers.ns. in **-o** and **-a**: within 50 miles of Goddelau we find weak pers.ns. in 24. Freilaubersheim **boso**, **ḍaῤïna**; 30. Griesheim **ḳoḷo**; and possibly 7. Bad Ems **-badạ**. It is conceivable, therefore, that any of these names might also follow pattern 2, regardless of whether the peoples in the area spoke WGmc or EGmc (or PNorse?) dialects at the time. In none of the runic inscriptions do we have any co-text like MATRONA to tell us explicitly the sex of a named individual.

The variation in naming traditions exemplified by the "Remico" stone may be a regional phenomenon restricted to the middle and lower Rhine, whereas

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[61] The name of Remico's other son, *Duccio*, is of Celtic origin (Haubrichs 2003:232-233; Reichert 1987).

most of our runic material comes from further south. It does, however, give us good reason to be cautious in assigning gender to pers.ns. in **-a** and **-o**. We might be able to draw inferences from the shape of the stem: if we can show that a particular name is formally and/or etymologically EGmc or WGmc, then perhaps we can infer the gender assignment from this (pattern 1 → **-a** fem., **-o** masc.; pattern 2 → **-a** masc., **-o** fem.). For example, if 67. Schreztheim I **leuba** and 68. Schretzheim II **leubo** were EGmc, we might expect them to show the merger of PGmc */i/ and */e/ (Wright 1954 §66), which ought to yield surface forms ***liuba, *liubo**. If it follows from the actual forms in **-eu-** that the names are WGmc, then perhaps we can conclude that **leuba** is fem. and **leubo** masc.. The "Remico" stone, however, gives us pause for thought: REMIC/O is clearly a FN in /-ŏ/, but the form of the stem appears to reflect a phonological distinction between /i/ and /e/, whereas a "regular" Gothic parallel would be *Rimico*. For that matter, the regular distribution of reflexes of PGmc */i/ and */e/ would lead us to expect a form *Rimico* in any Gmc dialect (§2.3.3.2; §5.2.1). It is likely that the form REMICO is an artefact of Latin phonology, with lowering of LLat. [ɪ] > [e] (Haubrichs 2003:230); compare 12. Bezenye II **seǥun** (§5.1). The presence of <I> in the suffix could perhaps be explained by appeal to analogy with the common masc. suffix *-icus* in Latin names (Haubrichs cites a parallel *Remicus*). Haubrichs notes alternations between <I> and <E> elsewhere in the inscription: [Q]VIISCET ← *quiescit*; NOMENE ← *nomine*; DVCCIONI ← *Duccione*; TETULU ← *titulu(m)* (2003:229; 2006:296). On Merovingian coins, the spellings <E> ~ <I> for reflexes of PGmc */i/ occur in approximately a 1:1 ratio, while */e/ is

consistently <E> (Felder 1978:16-20). It is reasonable to conclude that
REMICO represents a phonological form /rimĭkŏ/.

We cannot apply a similar explanation to forms like Schretzheim **leuba,
leubo**: in the first place, there is no reason to believe that the runic inscriptions
are being produced by people whose first language is non-Gmc, or that there is
interference from LLat phonology. Secondly, the merger of LLat /i/ and /e:/
cannot be invoked here, since neither of these phonemes is involved.[62]

With these points in mind, in the following sections I discuss the stock of
weakly inflected pers.ns. in the corpus. Note that for the purposes of this
discussion I am concerned only with the inflectional suffixes: I do not attempt
to distinguish between names with different structures (e.g., by-names vs.
abbreviated forms of dithematic names), nor to assign meanings to derivational
suffixes such as */-īn-/.

7.1.2 Weakly inflected pers.ns. in /-a/

The following are uncontroversially identified in the literature as weak
pers.ns. in /-a/: 8. Bad Krozingen A **boba**; 18. Dischingen I **wi^{g}/$_{n}$ka**; 24.
Freilaubersheim **ḍaþ̣ïna**; 51. München-Aubing I **sigila**; 54. Neudingen-Baar II
imuba; 56. Nordendorf I **ạw̨ạ**; 37. Schretzheim I **leuba**; 73. Skonager III
niuwila; 74. Soest **daþa**; 79. Weimar I **hiḅa**; 80. Weimar II **hiba**; 81. Weimar

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[62] The diphthong /eu/ is not productive in Latin: PIE */eu/ > PItal. > */ou/ > CLat. /u:/
(Kent 1945:92-93). Apart from the interjection *heu*, the few Latin words which do contain /eu/
= [ɛʊ] are either contractions or loanwords from Greek (Kent 1945:50).

III **ida, bi̱gina**; <u>82. Weimar IV</u> **ida**. Of these, only Skonager **niuwila** and

Weimar III-IV **ida** are anywhere in the literature identified as masculine

(respectively by Antonsen (1975:76; see §3.1.1) and Looijenga (2003a:261;

see §5.1)).

Various other sequences are interpreted by some commentators as pers.ns.

with a weak suffix /-a/:

7.1.2.1 Sequences possibly representing weak pers.ns. in /-a/

7. Bad Ems fibula

[I] **]ṃadạḷi?**   [II] **ubadạ[**

As noted in §4.1, Arntz (Arntz and Zeiss 1939:200) suggests that **uba** may

be a pers.n. *Uba*. He does not assign it a gender or offer any etymology for the

stem, however. This interpretation has not been taken up elsewhere in the

literature.

12. Bezenye II fibula

[I] **?arsiḇoda**   [II] **seǥun**

The preferred interpretation of complex I is as a dithematic FN *Arsiboda*.

Arntz and Krause both identify the suffix as weak fem. /-a/; Nedoma, on the

other hand, objects that dithematic names are declined strong, and analyses the

terminal **-a** here as a gen.sg. *ō*-stem suffix, /-ǎ/ < PGmc */-ōz/ (§4.1).

22. Erpfting fibula

lda·gabu

On Düwel's suggestion that **lda** might be an abbreviated form of a weakly inflected FN *Hilda*, see §5.1. This interpretation is speculative, as Düwel acknowledges.

23. Ferwerd comb case

?(?)ura

?ura is interpreted as a weak MN *Ura* (Arntz and Zeiss 1939:209; Looijenga 2003a:303-304) or *Mura* (Düwel and Tempel 1968/1970:371) (§4.1).

On Looijenga's suggestion that **ura** might represent a dat. *ō*-stem FN, see §7.2.3.1.

24. Freilaubersheim fibula

[I] **boso:wraetruna:**   [II] **þk·ḍaᶕïna:goḷida**

While most commentators treat **-ịda** as the pret. suffix of a verb *gōlida* (§4.1; §5.1), Jänichen (1951:227) proposes that it is an acc. FN *Ida* (compare 81. Weimar III, 82. Weimar IV **ida**). Nedoma (2004a:251) rejects this interpretation on the grounds that Jänichen's assignment of acc. case is implausible (*recte Idūn*; compare Weimar III **idun**).

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32. Hailfingen II fibula

[I] **(a)????(?)**   [II] **(?)daạn?**

If the final rune of complex II is **-a** (Jänichen 1962:156; Looijenga 2003a:266), then it is conceivable that a pers.n. in /-a/ is intended. I have earlier discussed this possibility (§3.3.1; §5.1; §6.1), although I note that it has not been raised in the literature: Jänichen reads **<u>auna</u>** and interprets it as a "formula-word" (which he does not discuss further), while Looijenga offers no interpretation of the sequence.

36. Hitsum-A bracteate

[I] **fozo**   [II] **g?o^b/ıa**

While Düwel (1970:286-287) suggests that complex II represents a weakly inflected FN *Glōla*, Looijenga (2003a:208) and Seebold (1996) prefer to interpret it as a common noun (*grōba* "grave"? "inscription"?; *ō*-stem) (§4.1; §7.2.3.3). I have no strong objections to any of these interpretations, although we must bear in mind that the reading is uncertain.

39. Hüfingen II *Kleinbrakteat*

(??? ?) ota

This sequence is universally identified with the "formula" **ota** found on Scandinavian bracteates (§4.1). Düwel suggests that **ota** may represent a byname for a god, expressing fearful qualities or powers (in the same way that

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Óðinn is referred to as *Yggr* < ON *yggr* "terrible, fearful"). If this is the case, the byname is presumably a PNorse weak masculine.

63. Pleidelṣheim fibula

iịha

If Nedoma's suggestion that the two staves transliterated **iị** here could be the staves of an **e**-rune, then the resulting **eha** could be a weak fem. parallel to 19. Donzdorf **eho** (§5.1). This is a tentative interpretation based on an uncertain reading, however.

74. Soest fibula

[I] **rada:daþa**   [II] **atano** or **gatano**

The interpretation of **rada** as a weakly inflected FN *Rāda* is widely accepted, though alternatives have been proposed (§5.1).

83. Weingarten I fibula

[I] **a^{li}/_erguþ:?(?)**   [II] **feha: writ?...ⁱ/_ıa**

On the various interpretations of **feha**, see §3.2.2; §5.1. Treating this sequence as a pers.n. has obvious appeal, as it provides us with a subject for the following verb *wrīt-*. While commentators disagree on the etymology of the stem, if the sequence is a name it is presumed to be a weakly inflected FN in /-a/.

Bammesberger (2002:120) reads the final squence of complex II as **writila** → *Wrītila*, a fem. *nomen agentis* "writer, carver". This could (so Bammesberger) be interpreted as an *ō*-stem or an *n*-stem (see §4.1).

7.1.2.2 Summary and discussion

Of these uncertain cases, Ferwerd **ura**, Soest **rada** and Weingarten I **feha** can plausibly be identified as weakly inflected pers.ns.. Because **ura** is associated with Frisian dialects, it has been classified as masculine (cf. OFris masc. /-a/, fem. /-e/). Where **rada** and **feha** are interpreted as names, they are assumed to be feminine (pattern 1).

7.1.2.3 Oblique forms

7.1.2.3.1 Gender assignment

We have three plausible oblique forms of an underlying weak pers.n. in /-a/: 4. Arlon **godun**; 16. Charnay **iddan**; and 81. Weimar III **idun**. Possible, but less reliable, cases are 17. Chéhéry **ditaṇ** and 29. Gomadingen **iglu**^{g}/$_n$.

godun and **idun** must be pattern 1 fem. forms in /-ūn/ < PGmc */-ōn-/ (§4.2.3.2), while **iddan** is generally taken to be a form of an EGmc masc. *Idda* (see Charnay entry in §5.1). *Iddan* can only be masc.: if the underlying name were fem., we would expect pattern 1 ***id(d)un**, or pattern 2 ***id(d)on** (to **Id(d)ō*).

For a pattern 2 masculine, acc. **-an**, gen./dat. **-in** would be regular; for pattern 1, the forms should be acc. ***-on** (: Frk /-on/) or ***-un** (: UG /-un), gen./dat. ***-en/*-in**. Antonsen (1975:77) treats **iddan** as WGmc, in which regard he is at odds with the rest of the runological community (note that

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Antonsen's interpretation of Charnay **ḷiano** as a WGmc weak FN in /-ō/ (i.e., pattern 2) is also unusual – see §7.1.3).[63] For further discussion of case, see §7.1.2.3.2, below.

The reading **ditaṇ** on Chéhéry is uncertain, and Fischer (1999) makes no serious attempt to explain his identification of a name *Dita* with forms like 24. Freilaubersheim **ḍaṖïna**; 74. Soest **daþa**; and/or 83. Weingarten I **dạdo** (see entry in §5.1). Nevertheless, if the reading is correct, I see no reason to reject out of hand the possibility that **ditaṇ** represents an oblique form of a weak MN *Dito/-a*, although it has only one possible parallel (OHG *Titza* f.), and the etymology is obscure.

If the Gomadingen sequence is to be read **iglun**, this may be an oblique form of a FN *Igla/I(n)gla* (§4.1; §5.1). As noted in earlier discussions, the preferred interpretation is *Iglung/I(n)glung*, i.e., a MN with the patronymic suffix /-ung/.

A further example worth considering is 9. Balingen **amịlu**. Where **-u** is interpreted as being word-final (see §4.1), it is identified as an *ō*-stem suffix (§7.2.1). The name *Amilu* presents us with structural problems: if **-il-** represents the dim. suffix /-il-/, we would expect a weak inflection (see entry in §5.1; but compare Nedoma's analyses of 15. Bülach **fridiḷ** and 61. Pforzen I **aigil**, where **-il-** represents the nominalising suffix /-il-/, which does not require a weak inflection). An interpretation as an oblique fem. *Amilūn* might be

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[63] Braune (BR §221 Anm. 3) notes that acc.sg. <-an> occasionally appears in OHG sources, but he attributes this variant to Norse influence.

permissible if we assume that the final /-n/ has been omitted (the sign following **u**, which Krause reads as **ḳ**, cannot plausibly be read as **n**). This does not conform to the orthographic "rule" for non-representation of a nasal before a homorganic obstruent (§2.5.2), and **godun, idun** suggest that representation of final /-n/ is normal. We cannot rule out the possibility of erroneous or idiosyncratic orthography: the preceding **ḍnlo** is generally interpreted as a weakly inflected MN with the vowels omitted, a type of contraction for which there are no convincing parallels (§5.1; §6.2. See also my comments on 61. Pforzen I **ḷṭahu** in §7.1.3.3). This hypothesis is not testable; but in any of the available analyses (patronymic; $\bar{o}$-stem; *n*-stem), the surface form presents us with difficulties for which we have no straightforward solution.

7.1.2.3.2 Case assignment

These oblique forms are assigned case as part of the syntactic analysis of the texts to which they belong. Arlon **godun** is interpreted throughout the literature as a dative of dedication: "(The capsule is) for Gŏda" (Arntz and Zeiss 1939:435; Krause 1966:286; Looijenga 2003a:227; McKinnell et al. 2004:63; Nedoma 2004a:307; Opitz 1987:175-176).

Weimar **idun** is also interpretable as a dative, forming part of a clause with the preceding material: **awimund:isd:ḷẹoḅ idun** → *Awimund ist leob Idūn* "Awimund is dear to Ida" (Krause 1966:290; Nedoma 2004a:228), or *Awimund Isd(ag) leob Idūn* "Awimund (and) Is(dag) (wish something) dear for Ida" (Krause, *loc.cit.*). Alternatively, Arntz suggests that it could stand alone as a genitive: "Ida's (buckle)" (Arntz and Zeiss 1939:375).

In the dominant interpretation of Charnay, **iddan** is acc., representing the object of the verb *u(n)þf(i)nþai* "may… discover" (Krause 1966:22). Antonsen (1975:77) reads **uþfaþai:id dan** → *u(n)þ faþai Iddan* "To (my) husband Idda", with *Iddan* a dative of dedication like **godun**.

Fischer (1999:13; Fischer and Lémant 2003:251) identifies Chéhéry **ditaṇ** as dat., without further explanation; I suspect that he regards it as another dative of dedication. As for Gomadingen **iglu^g/_n**, if it does represent a FN in /-ūn/, it is open to the same range of interpretations as **godun**. It is the only legible part of the inscription, so there is no recoverable co-text to assist us in interpretation.

In attempting to assign case, we must beware of the assumption that all of the oblique cases are formally identical. Although this appears to be true for the feminines (pattern 1: OHG *zungūn*; pattern 2: Go *tuggōn* (but gen.sg. *tuggōns*), PNorse *tungōn* (possibly gen.sg. *-ōnn*)), the masculines have Go /-an/, OHG /-on/ in acc., vs. Go /-in/, OHG /-en/ in gen. and dat. (BR §221; Lehmann 2005-2007 §3.2.3; Wright 1954 §207). PNorse appears to generalise the /-an/ form throughout the singular paradigm (Krause 1971:119, 125; Nielsen 2000:155). In OS, as in OHG, /-en/ forms appear only in gen./dat.sg., but here they alternate with /-an/ ~ /-on/, and /-on/ appears to be the preferred form (Bammesberger 1990:164; Gallée 1910 §350; Holthausen 1921 §308). Prokosch evidently believes the situation in Go (and OHG) to hold for PGmc,

and this view is reflected in the reconstructions of Bammesberger (1990:165), Lehmann (*loc.cit.*) and Ringe (2006:268).[64]

If these patterns hold true for the dialects of our inscriptions, then they take us no further with **godun** and **idun**, which could be in any of the oblique cases. With **iddan**, however, we can make a little more progress: if it conforms to pattern 1 (OHG) or pattern 2 (Go), the evidence of the attested dialects favours its interpretation as acc.: if it were dat., as Antonsen suggests, we would expect a form ***idden ~ *iddin**. A dat. **-an** is possible if the name is PNorse, but this is not what Antonsen claims: his dative interpretation is based on the hypothesis that the PGmc dat.sg. varies between */-an-i/ ~ */-en-i/. Here he disagrees with the handbooks (cited above), which reconstruct only */-en-i/. While it is not my intention to attack or defend a particular model of PGmc, the majority opinion does support the interpretation of **iddan** as acc., and as conforming to pattern 2 (cf. Go /-an/) rather than pattern 1 (OHG /-on/).

7.1.3 Weakly inflected pers.ns. in /-ṓ/

The following sequences are interpreted throughout the literature as pers.ns. of this type: 4. Arlon **(?)uḷọ, woᚦro**; 6. Aschheim III **dạḍo**; 9. Balingen **ḍnlo**; 10. Beuchte **buirso**; 14. Borgharen **bobo**; 16. Charnay **ḷiano**; 24. Freilaubersheim **boso**; 27. Gammertingen **adọ, a^d/$_m$o**; 30. Griesheim **ḳoḷo**; 51. München-Aubing I **segalo**; 68. Schretzheim II **leubo**; 74. Soest **(g)atano**; 80. Weimar II **bubo**; 84. Weingarten II **dạdo**.

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[64] Bammesberger and Lehmann reconstruct */-en-/ for the thematic element in the gen./dat.sg., while Ringe has */-in-/ (< ePGmc */-en-/ – see §2.2.1).

The only one of these names commonly interpreted as a FN is Charnay **ḷiano** → *Lianō* (pattern 2). Antonsen identifies it as linguistically WGmc (but still conforming to pattern 2), and treats Beuchte **buirso** → *Burisō* (which everyone else regards as masc.) in the same way (1975:77-78). None of the other Continental pers.ns. in **-o** are included in Antonsen's study. Note that Antonsen's argument about weak names in /-ō/ being of either gender (Antonsen 2003; see also my comments in §7.1.1) is applicable only to the period of the earliest runic inscriptions; he explicitly excludes Beuchte from his discussion (2003:18).

We have several more sequences which may be interpretable as weak pers.ns. in /-ŏ/:

7.1.3.1 Sequences possibly representing weak pers.ns. in -o

1. Aalen neckring

noru

Alongside the preferred analyses of this name as a *u*- or *ō*-stem, Düwel (2000b:22) suggests that it might be a weak nom. MN *Noro*, with **-u** representing an alternate form of the inflectional suffix /-o/. As parallels, he notes alternate OHG forms in <-o> where <-u> is regular (e.g., *do* for regular *du*); and <u> ~ <o> in final syllables created by syllabication of /w/ in, e.g., OHG *horo* ~ *horu* n. "mud, dirt" (< PGmc **xurxwan*) (§2.3.2.4). I am not aware of any comparable <-u> forms for weak masculines, however. We do not appear to have any parallels in the runic corpus; our other nominals in **-u**

are all normally interpreted as *ō*-stems, although not without some difficulties (§7.2.1).

13. Bopfingen fibula

    mauo

On the various interpretations of this sequence, see §3.2.2; §3.3.1; §4.1. The preferred view is that it represents a weak MN *Mau(w)o*. Looijenga (2003a:231) analyses it as a dat.sg. *ō*-stem noun.

19. Donzdorf fibula

    eho

Düwel (Düwel and Roth 1977:413) interprets this inscription as a pattern 1 *n*-stem MN *Eho* (on the etymology, see §5.1), while Peterson (1994:145) treats it as a PNorse *ō*-stem FN (§7.2.4). Nedoma (2004a:290-291) insists that the name must be weakly inflected, though it could be of either gender (i.e., a pattern 1 masc. in /-o/, or a pattern 2 fem. in /-ō/).

Although the external evidence favours a Scandinavian provenance, a weakly inflected (pattern 1) MN *Eho* is phonologically plausible; Düwel (*loc.cit.*) believes the name to belong to a Jutish individual.

20. Eichstetten sheath fitting

    ?a?i [chi-rho/**nᚦ**/**nw**] **munịwiwo?(??)**

Both the reading and the interpretation of **wiwo?(??)** are uncertain, but one view connects it with names like **wiwio, wiwaz, wiwila**, attested in Scandinavian inscriptions (see entry in §4.1). My suggestion that **wiwo** by itself might represent a pers.n. in /-o/ is speculative.

36. Hitsum-A bracteate

[I] **fozo**   [II] **g?oᵇ/₁a**

Düwel (1970:285) and Seebold (1996:195) both suggest that **fozo** represents a weakly inflected pers.n., but are noncommittal about the gender (§4.1). For external reasons, Krause (1971:150) regards it as a PNorse FN in /-ō/. Looijenga (2003a:208) suggests that the name may alternatively be an *ō*-stem (§7.2.4).

47. Lauchheim I fibula

aoṇofada

While the majority opinion seems to favour the interpretation of this inscription as a dithematic pers.n., Nedoma (2004a:194) suggests that **aoṇo** is a weakly inflected (pattern 1) MN *Aono* (for more detail, see §3.3.1; §4.1).

7.1.3.2 Summary and discussion

Of the examples discussed above, the following can be interpreted with reasonable confidence as weakly inflected pers.ns. in /-ŏ/: 13. Bopfingen **mauo**; 19. Donzdorf **eho**; 36. Hitsum **fozo**; 47. Lauchheim I **aoṇo**. The proposed identification of **mauo, eho** and **fozo** as *ō*-stems is unconvincing

(§7.2.4). For both **eho** and **fozo**, there are doubts about gender and about whether the name should be classified as Continental (i.e., WGmc – pattern 1) or Scandinavian (PNorse – pattern 2).

I have omitted three compounds or dithematic names with a possible *n*-stem prototheme: <u>45. Kirchheim/Teck II</u> **aru̜gis**; <u>67. Schretzheim I</u> **arogi̜s**; <u>89. Wremen</u> **lguskaþi**. If we are dealing here with protothemes < PGmc **arōn* "eagle" and **elxōn* "elk, deer", then **u** and **o** may represent the thematic vowel. However, in all three cases we have alternative interpretations which are at least as plausible (see §4.2.1.2; §5.2.1.2).

7.1.3.3 Oblique forms

The only sequence which has plausibly been interpreted as an oblique form of a weakly inflected nominal in /-ŏ̄/ is <u>61. Pforzen I</u> **lṭahu** → **elahu** → *elahu(n)* acc.pl.masc. "deer, elk", or else an oblique form of a related pers.n. *Elahun* masc. / *Elahūn* fem. (§4.1, interpretation 1). If we accept the omission of /-n/, which is irregular but not inconceivable (see my comments on <u>9. Balingen</u> **ami̜lu** in §7.1.2.3), a masc. acc.sg. or acc.pl. /-un/ is a possible form (and is the norm in UG, vs. Frk /-on/); as is an oblique FN in /-ūn/ (again, parallel to Balingen **ami̜lu**). If this interpretation can be applied to **elahu**, it follows that **ami̜lu** might also be an acc. MN (or acc.pl. "Amals"??). No-one has made any suggestion of this sort, and it is not clear what it might mean; **elahu**, by contrast, can easily be interpreted as the object of the verb **gasokun** → *gasōkun* "quarrelled?, fought?" (see §4.1).

These interpretations do require us to invoke an orthographic omission for which we do not have strong evidence. Given the controversy surrounding both the transliteration and the linguistic interpretation of the Pforzen example, we must treat it with caution.

7.1.4 Overview of the weakly inflected pers.ns.

While I see no grounds for challenging the view that many of the sequences in **-a** and **-o** represent weakly inflected pers.ns., the assignment of gender is not directly testable. The only examples which can be assigned gender with certainty are the oblique forms: on formal grounds, **godun** and **idun** can only be fem. (pattern 1), while **iddan** can only be masc. (pattern 2).

The only possible co-textual evidence for gender assignment is in Charnay **uþfṇþai:id dan**: if Antonsen's reading and interpretation (**faþai** → *faþē* dat. "(to my) husband") are correct, then *Iddan* is syntactically parallel with *faþē* and the assignment of masc. gender would be supported both grammatically and semantically (although this support is in a sense redundant, since we have already established that **iddan** is not a plausible fem. form). However, this analysis is incompatible with my argument that the form **-an** points to acc. case, rather than dat. (§7.1.2.3.2).

The evidence adduced by Haubrichs from Latin inscriptions indicates that pers.ns. are known in the middle Rhine region which conform to pattern 2 (masc. /-a/, fem. /-ō/), rather than to pattern 1 (fem. /-a/, masc. /-o/). It is not unreasonable to expect that "home-grown" pers.ns. in the inscriptions will

follow pattern 1, since this is regular for OHG, but we cannot rule out

absolutely the possibility that pattern 2 is present in some cases.

We might be able to progress a little further if we have phonological

grounds for believing that particular name-stems must be WGmc. This

appears to hold true for Schretzheim I **leuba** and Schretzheim II **leubo** ($\neq$

EGmc ***liub-**), as discussed in §7.1.1. Any name which contains /ā/ < */ē₁/

cannot be EGmc, although it could be a PNorse form with /ā/ in the stem and a

suffix conforming to pattern 2. Soest **rada** is the only one of our names which

(probably) falls into this category. For the majority of the weak pers.ns., an

interpretation and gender assignment contrary to the conventional one is at

least hypothetically possible.

7.2 Runic sequences in -u, -Ø, -a, -o interpreted as nom. *ō*-stems

Opinions in the literature differ on the morphology of the nom.sg. *ō*-stems

in the inscriptions. PGmc word-final */-ō/ regularly develops into NWGmc */-

ū/ > pre-OHG(?) */-u/ (see §2.3.2.3). A suffix /-u/ appears occasionally in

early OHG sources after a short stem, while long stems normally have a zero

suffix (i.e., the inherited */-u/ is apocopated). The norm in OHG, however, is a

nom. suffix /-a/, analogically derived from acc.sg. /-a/ < */-ā/ < PGmc */-ōn/.

Analogical /-a/ forms predominate after both short and long stems (**gebu* →

geba; **rūnu* > *rūn-Ø* → *rūna*), although zero-suffixed forms survive in some

words – especially in FNs (e.g., *-liub, -rūn, -wīh*, alongside *-berga, -geba*)

(BR §207 Anm. 2). The same type of analogy is found in OS, with only

occasional traces of the older /-u/ and -Ø endings (Gallée 1910 §307 Anm. 1;

Holthausen 1921 §283 Anm. 2).

Because the analogical spread of acc.sg. /-a/ appears to be underway even in

early OHG, we cannot be sure what stage the process has reached in CRun.

We might reasonably expect a nom.sg. *ō*-stem to have a termination **-u** (short

stem; perhaps also long stem) (§7.2.1) or -Ø (long stem) (§7.2.2); but we

cannot rule out the possibility that analogical **-a** may co-exist with these forms

(§7.2.3). On this point I am allowing for a greater degree of irregularity than

does Nedoma (2004a, *passim*), who infers from the forms in **-u** that the

analogical spread of /-a/ has not begun in the dialect(s) of the Continental

inscriptions.

An additional consideration is that a reflex of */-ō/ might be represented as **-o**. Several of the pers.ns. in **-o** have been interpreted as nom. *ō*-stems (§7.2.4).

7.2.1 Sequences in -u

The following are identifiable as nominals in /-ŭ/ → **-u**: 1. Aalen **noru**; 9. Balingen **amịlu**; 22. Erpfting **gabu**; 43. "Kent" **ga^d/$_m$u**; 53. Neudingen-Baar I **midu** (all of these have been discussed in §4.1). On the hypothesis that **amịlu** is a weak FN in /-ūn/, see §7.1.2.3.

Nedoma regards **amịlu** and **noru** as *ō*-stem FNs *Amilu, Nōru* (1999a:12-13; 2004a:188, 392). He allows that **noru** could be either nom. (/-ŭ/ < PGmc */-ō/) or dat. (/-ŭ/ < PGmc inst.sg. */-ō/ (see entry in §4.1)), with a preserved suffix after a long stem. In dealing with **amịlu**, he takes the contrary position

and assigns it dat. case, rather than nom., on the grounds that the disyllabic stem ought to have a zero-suffix in nom. (***amil**). The reason for this apparent contradiction is chronological: the Aalen witness is comparatively early (5th c.), whereas in the 6th century we have some evidence that apocope has taken place after a long stem (61. Pforzen I **a$^{\ddot{\text{i}}}$/ₗlrun** → *Ailrūn-Ø* – see §7.2.2).

Given that both of these case endings derive from an identical proto-form */-ō/, we might wonder why only the nom. should be subject to prosodically-conditioned apocope. Nedoma (2000:27) argues that in the dat., the overt suffix of the short stems is analogically generalised; but this begs the question of why the same analogy should not affect the nominative.

Both of these sequences have alternative interpretations: **noru** could be a nom. *u*-stem (in /-u/ < */-uz/); or perhaps a weakly inflected nom., with **-u** a variant of the more common **-o** (§7.1.3.1). As noted in §4.1, a problem for the *u*-stem analysis is that nom.sg. /-u/ is apocopated after a long stem in OHG and OS, a process which Braune ascribes to the common WGmc stage (BR §220b). We do not, as far as I am aware, have any parallels in the runic corpus against which to test the hypothesis that this apocope has taken place.

Düwel (2003c:13-16) interprets Erpfting **gabu** as dat.sg., with the sense "as a gift" (§4.1; §5.1). This form could be nom.sg., if the apocope described above has not been carried through; the available datings suggest that the Erpfting inscription is somewhat earlier than Balingen **ami̯lu** and Pforzen I **a$^{\ddot{\text{i}}}$/ₗlrun** (see catalogue).

Looijenga's (2003a:244) interpretation of "Kent" **gadu** as a nom./dat. *ō*-stem noun "wife" is morphologically questionable, even if the reading is correct (§4.1).

The identity of the suffix of Neudingen-Baar I **midu** is left rather vague in the literature. Nedoma (2004a:244) mentions (without further comment) Meineke's suggestion that the sequence represents abl.(!)sg. (in locative function) *mid(d)u* "in the middle". The attested "middle"-words all seem to support a proto-form in */-j-/ (PGmc *međj-* > WGmc *middj-*), which is not represented here. If we are dealing with a reflex of PGmc *mē₂đō* "reward" (§4.1; §5.1), then the termination **-u** could be dat.sg. or nom.sg. with retention of the suffix after a long stem, as discussed above.

We have reasonable grounds for accepting the identification of **noru, amįlu** and **gabu** as *ō*-stems (the first two being FNs), while **ga^d/ₘu** and **midu** are more uncertain cases. As with the weakly inflected pers.ns. (§7.1), we have no co-textual clues to help us with case-assignment. Formally, all three reliable examples can plausibly be datives; whether or not they can be nominative depends on whether or not we believe /u/-apocope not only to have taken place (a hypothesis supported by the presence of zero-suffixed forms – §7.2.2), but to be sufficiently well-established that forms with archaic **-u** can be excluded. In my view, we simply do not have sufficient evidence to form a firm conclusion on this point, and I maintain that any or all of our three examples may plausibly be nominative.

7.2.2 Sequences in -Ø

The only reliable example of a "pure" *ō*-stem with a nom. zero-suffix is <u>61. Pforzen I</u> **aⁱ/ₗlrun**. In the view of Nedoma (2004a:188) and Wagner (1995:106), this example demonstrates that apocope of nom. /-u/ < */-ō/ has taken place in the period of the inscriptions, and that the analogical spread of acc.sg. /-a/ has not. On the other hand, OHG ms. sources show variation between *-rūna* and *-rūn-Ø* (Förstemann 1900:1284). According to Düwel (1997c:283), the zero-suffixed forms tend to be later (this is not apparent from Förstemann's list of witnesses), and he concludes that for a 6th-century inscription /-a/ would be expected. On this point, I would suggest that early *ō*-stem names recorded with a final <-a> in Latin sources may well reflect the application of Lat. *ā*-stem suffixes, just as *a*-stem MNs often appear with Lat. and Gk. *o*-stem suffixes, e.g., PGmc **-ƀalđaz* "bold" : *Baldus, Θευδί-βαλδος* (Förstemann 1900:235, 1417).

To strengthen the case for apocope, we can refer to the substantial number of plausible *jō*-stem FNs with zero-suffixes: <u>11. Bezenye I</u> **godahid**; <u>26. Friedberg</u> **þuruþhild**; <u>30. Griesheim</u> **ạg̣iḷaþruþ**; <u>54. Neudingen-Baar II</u> **bliþguþ**; <u>59. Oettingen</u> **??iḷabrg**; <u>62. Pforzen II</u> **aodliþ**; <u>67. Schretzheim I</u> **alaguþ**; <u>79. Weimar I</u> **haribrig**; <u>83. Weingarten I</u> **a^{li}/ₑrguþ**. In OHG from the 9th century on, the majority of *jō*-stem nouns have nom.sg. /-a/, analogically taken from the "pure" *ō*-stems; but in early sources we find spellings <-e, ea, -ia>. On the other hand, it appears to be the norm for FNs belonging to this declension (e.g., names in *-hilt, -gund, -lind*) to have a zero-suffix in nom. (BR

§§209-210). Forms without an overt nom. suffix also appear occasionally in OS (Gallée 1910 §309 Anm. 2).

7.2.3 Sequences in -a

7.2.3.1 Co-textual evidence for the assignment of oblique case

Where sequences in **-a** are interpreted as *ō*-stem nouns or FNs, they are for the most part assigned acc. case, often solely on the strength of the **-a** termination (note, however, Nedoma's interpretation of 12. Bezenye II **arsiḅoda** as gen. (§4.1)). In a few inscriptions the assignment of case has some co-textual support: the three *wrait rūnă* inscriptions (24. Freilaubersheim; 54. Neudingen-Baar II; 62. Pforzen II) are the only clear-cut examples (though here we may be dealing with acc.pl. /-ā/ < PGmc **/-ōz/,* rather than acc.sg. /-a/ < **/-ōn/),[65] but several others are worthy of consideration.

7. Bad Ems fibula

    [I] **]ṃadaḷi?**   [II] **ubadạ[**

Opitz expands **ubadạ** to a prepositional phrase *u(m)(bi/ba) bada* "for the sake of consolation" (§4.1). In both OHG and OS, *umbi* consistently governs the accusative (Holthausen 1921 §507; Schrodt 2004:45-46; Schützeichel 2006). The co-textual support for the assignment of acc. case is therefore

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[65] Krause (1966:284) observes that in PNorse parallels for the formula "NN writes/wrote runes", there is variation between the use of sg. *rūnō* and pl. *rūnōz ~ rūnaz.*

dependent on Opitz' hypothetical expansion of the text. This interpretation is peculiar to Opitz, the majority opinion favouring the treatment of *u(mba/mbi)-* as a prefix.

23. Ferwerd comb case

?(?)ura

Looijenga reads the beginning of the inscription as **me** → *mē* (§5.1), and suggests that **ura** may represent an *ō*-stem FN syntactically parallel with the pronoun (i.e., dat.; see §4.1). Here, the co-text supporting the assignment of case is based on a questionable reading of the text.

31. Hailfingen I sax

alisrhlaþawihu (Arntz and Zeiss 1939:245-248).

Arntz interprets **laþawihu** as *laþa wīhu* "I consecrate the invitation" (§4.1; §5.1; §6.1). The "formula-word" *laþa* is identifiable as an *ō*-stem, here interpreted as the object of *wīhu* (i.e., as acc.). As I have noted in the earlier discussions, Arntz' reading is highly speculative and cannot be considered reliable.

50. Mertingen fibula

ieoķ aun

Among the interpretations suggested by Düwel (§3.1.1) is that **ieoķ** + **a** could be an *ō*-stem noun *jeoka* < PGmc **jeukō* "fight"; he does not comment

explicitly on case, but implies that it is nominative. Düwel acknowledges that

his interpretations are speculative.

67. Schretzheim I capsule

[I] **alaguþ:leuba:dẹḍun**   [II] **arogị̈sd**

The most common interpretation is *Alagu(n)þ (andi) Leuba dĕdun*

"Alagunþ and Leuba made (the capsule? the inscription?)" (Krause 1966:299;

Nedoma 2004a:172). **leuba** is here interpreted as a weak nom. FN (or by-

name "dear one") (§3.1.1; §7.1.2). An alternative is to treat *leuba* as the object

of *dĕdun*, an acc.sg.fem. adjective referring to the owner, or to the object

(*Arogīs (andi) Alagu(n)þ leuba dĕdun* "Arogīs and Alagunþ made something

lovely/made (the owner of the capsule) a fortunate woman"); or a nom.sg.fem.

modifier to **alaguþ** (*Arogīs (andi) Alagu(n)þ leuba dĕdun* "Arogīs and dear

Alagunþ made (the capsule?)" (see Schwab 1998a:417; I have slightly adapted

Schwab's translations).

83. Weingarten I fibula

[I] **a^{li}/$_e$rguþ:?(?)**   [II] **feha: writ?...^{i}/$_{\mid}$a**

In Schwab's interpretation, **feha** is a substantivised acc.sg.fem. adjective

fēha "the colourful thing (i.e., rune)", with acc. case being assigned on the

assumption that it is the object of *writ-* (§3.2.2; §4.1; §5.1). The majority

opinion, however, is that it represents a weakly inflected nom. FN (§7.1.2.1).

7.2.3.2 Summary of co-textual evidence

All of the case-assignments discussed above are based on uncertain readings and/or uncertain interpretations. In the Ferwerd and Hailfingen examples, the transliteration of the co-text is speculative. For Bad Ems, the reading itself is not disputed, and the expansion of the text **ubadą** → *u(mbi/mba)-bada* is widely accepted; but the case assignment depends on Opitz' treatment of the sequence as two words (preposition + object) rather than a single word (prefix + base).

The interpretation of Weingarten I **feha** as the object of *wrīt-* is plausible, but no more so than its interpretation as the subject of the same verb. The closest parallel in the corpus is 71. Sievern **rẉriḷu** → *r(ūną̆) wrītu* "I write runes", with a preverbal object, and the subject supplied by the verbal inflection. If the dialect of the Sievern bracteate inscription is PNorse, as seems likely, its usefulness as supporting evidence is diminished.

67. Schretzheim I **alaguþ:leuba:dẹḍun** appears to have a finite verb, but its relationship to the nominals is ambiguous. While Schwab's variations cannot be ruled out, the separation of the co-ordinate subjects *Alagu(n)þ, Arogīs* strikes me as odd, in contrast to Krause's interpretation, which makes of complex I a subject-verb clause with a covert object.

7.2.3.3 Putative nom.sg. ō-stems in -a

Nom. *ō*-stem interpretations have been proposed for the following sequences in **-a**: 7. Bad Ems **ubadą** → *U{}bada* (Looijenga 2003a:228) or *bada* "consolation"; 36. Hitsum **g?oᵇ/₁a** → **groba** → *grōba* "grave" or "that

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which belongs to the grave" (Looijenga 2003a:208; Seebold 1996:196); <u>44.</u> <u>Kirchheim/Teck I</u> **bạda** → *Bada* FN (Looijenga 2003a:245) or *bada* "consolation"; <u>47. Lauchheim I</u> **aoṇofada** → *Aononfada* FN (Bammesberger 1999c:203; Düwel 1997b:19; Haubrichs 2004:78); <u>58. Oberflacht</u> **ǥḅa** → *g(e)ba* "gift" (Düwel 2002e:479; Looijenga 2003a:252); <u>83. Weingarten I</u> **writ?...ⁱ/₁a** → **writila** → *Wrītila* FN (Bammesberger 2002:120).

For none of these sequences do we have clear co-textual indicators of case. In the Weingarten example, the material immediately following **writ** is illegible, so the reading **writila** must be treated with caution (§4.1). Even if it is correct, *Wrītila* could be weakly inflected (§7.1.2.1).

The same applies to Kirchheim/Teck I **bạda** – if it is a pers.n., it could just as easily be a weakly inflected name in /-a/ as an *ō*-stem. If it is an *ō*-stem (whether a pers.n. or common noun), we cannot assign it a case with any confidence, as the co-text is illegible (§5.1).

Perhaps our most promising candidate is Lauchheim I **aoṇofada**: if this represents a dithematic *ō*-stem name, it constitutes the whole text, and the absence of co-text might be taken to support the assignment of nom. case; although it is also possible that we might be dealing with a genitive *Aonofadā* "(This is) Aonofada's (fibula)". On the other hand, the sequence can plausibly be divided into two words, with **fada** possibly an abbreviated verb-form *fa(ihi)da* "made" (§3.2.2).

None of the sequences under consideration here can be identified with certainty as an *ō*-stem nominal. Where an *ō*-stem interpretation is the preferred one (as is the case for Kirchheim/Teck **bạda** and Oberflacht **ǥḅa**, and perhaps

also Lauchheim **aoŋofada**), we have no strong grounds for assigning nominative case. In consideration of the available data, the possibility that *ō*-stems in the dialects of the inscriptions can have analogical nom.sg. /-a/ alongside the historically regular /-u/ and -Ø cannot be ruled out; but we have no satisfactory positive evidence for it.

7.2.4 Sequences in -o

Three sequences in **-o** have been identified as possible nom. *ō*-stem FNs: 10. Beuchte **buirso**; 19. Donzdorf **eho**; 36. Hitsum **fozo**. The *ō*-stem interpretations of **buirso** and **fozo** are unique to Looijenga (see entries in §4.1), and she offers them only as an alternative to the majority view that these names are weakly inflected (§7.1.3). In the case of **eho**, Peterson and Meli share Looijenga's view (§5.1). Nedoma, however, argues that *Eho* cannot be an *ō*-stem, as the method of feminising a PIE *o*-stem by transfer to the *ā*-declension (e.g., Lat *equus* m. → *equa* f. "mare") is not productive in Gmc (2004a:290). There are no known reflexes of a PGmc **exwō* "mare" in any of the Gmc dialects.

Looijenga identifies **eho** and **fozo** as Scandinavian, although in PNorse – as in the WGmc dialects – the nom.sg. *ō*-stem suffix is regularly /-u/ (apocopated in OIc) (Krause 1971:124; Syrett 1994:60-61). Syrett acknowledges that the epigraphical evidence is far from conclusive, but where we can plausibly identify a PNorse nom.sg. *ō*-stem (notably in adjectives: Opedal **lịubu, minu**), the suffix is represented as **-u**. There are, as far as I am aware, no parallels for the representation of this suffix as **-o**. All of the sequences under consideration

here can be interpreted unproblematically as weak nom. pers.ns. in /-ŏ/, and I see no reason to accept their interpretation as eccentric *ō*-stems.

7.2.5 Conclusions on the nom.sg. *ō*-stem suffix(es)

Given the limited evidence available, we can be reasonably confident that long-syllable *ō*-stems can have a zero-suffix in the nominative. The presence of zero-suffixed forms does not in itself rule out the possibility of contemporary forms with an archaic /-u/ or innovative, analogical /-a/: the zero ending appears stable for OHG FNs even after /-a/ becomes ubiquitous in the *ō*- and *jō*-stem common nouns; and archaic forms in /-u/ also appear in OHG mss.. If it is possible for /-u/, -Ø and /-a/ to co-exist in early OHG, then we must allow for the possibility that the same may be true in the runic inscriptions.

Although we have three credible examples of *ō*-stems in **-u**, all three can plausibly be interpreted as dat., rather than nom.. It is worth noting that **noru**, **gabu** and **amịlu** all have long stems (a disyllabic stem in the latter case), and so are suitable candidates for apocope. In the case of **noru**, a chronological argument can be employed to explain the retention of nom. /-u/; but this is not so for the other two. It seems reasonable to infer that either (i) **gabu** and **amịlu** represent datives, in which apocope does not occur; or (ii) apocopated and unapocopated (orthographic, if not phonological) forms co-exist in the "runic" period. There is no evidence for a chronological or geographical distinction between the two, and the alternation cannot be explained simply in terms of syllable length.

The case for or against the analogical extension of acc.sg. /-a/ to the nominative remains unproven. We do not have convincing evidence for analogical forms, and in none of the cases discussed in §7.2.3.3 can we be sure that we are dealing with an *ō*-stem at all. On the other hand, in none of these cases can a nom. *ō*-stem interpretation with the analogous /-a/ suffix be ruled out.

I note that in three of the five **-a** sequences (Kirchheim/Teck I **bạda**; Lauchheim **-fada**; Oberflacht ** g̣ḅa**), if the interpretations are valid, the /-a/ suffix follows a short stem. It might be worth hypothesising that in CRun, the analogical suffix appears after short syllables (displacing /-u/), while the zero-suffix (and/or /-u/) persists after long stem-syllables. Then again, all of our zero-suffixed and /-u/ suffixed *ō*-stems are pers.ns., which appear to be conservative in their morphology, while three of the five **-a** sequences (**g?o^b/ₗa, bạda, g̣ḅa**) can be interpreted as *ō*-stem common nouns. If we were to dispose of the other **-a** sequences (**fada, writ?...^i/ₗa**) by interpreting them as weak pers.ns. (or, in the case of Weingarten, by rejecting the questionable reading **writila**), then we could speculate that the analogy has taken place in the common nouns but not in pers.ns.. In the absence of any sequences which we can positively identify as nom.sg. *ō*-stem common nouns, however, these comments can be no more than hypothetical. Even for the pers.ns., only the zero-suffixed forms can positively be assigned nom. case.

8. Conclusions

8.1 Overview of sound changes

8.1.1 Chronological division

Now that we have considered the evidence, we can organise the sound changes listed in §2.3.6 chronologically, relative to the dialects attested in the inscriptions:

<u>Stage 1:</u>

Sound changes conventionally treated as belonging to lPGmc or common NWGmc, and for which we have corroborating evidence:

- phonologisation of the umlaut variants /iu eo/ following loss of nonroot final /e a/ (although the evidence in the corpus is not entirely clear, and the variants are still largely in complementary distribution);

- monophthongisation of unstressed */ai au/ (we have no data for unstressed */au/);

- phonologisation of /u o/ (although the resultant phonemes are still largely in complementary distribution);

- raising of unstressed final */-ō/ > /-ū/;

- syllabication of final */j w/;

- umlaut effects on */i e/ (in the corpus we have no evidence for the lowering of */i/);

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- raising of */e/ before a tautosyllabic nasal or N+C cluster (only one witness not attributable to umlaut);

- */ē₁/ > /ā/;

- */anx/ > */āx/ (one witness only);

- anaptyxis 1 (CR > CVR; RC > RVC).

Stage 2:

Sound changes which may be in progress during the "runic" period, and for which there is some evidence (albeit ambiguous) in the epigraphical corpus:

- UG consonant conditioning of /eu/ (only one plausible example);

- monophthongisation of stressed */ai au/, whether conditioned as in OHG or unconditioned as in OS;

- shortening of unstressed final vowels;

- apocope of */-u/ after a long syllable (in the nom. *ō*-stem nouns);

- syllabication of interconsonantal */w/ (at least in the context C#_/r/, or perhaps only in the verb *wrītan*);

- anaptyxis 2 (liquid+/h w/ > liquid+V+/h w/).

Stage 3:

Sound changes known to take place in OHG and/or OS, but for which there is no evidence in the runic record:

- consonant-conditioned changes in height of /i e/ (other than the one mentioned in stage 1);

- diphthongisation of */ē₂/ and */ō/;

- "primary" *i*-umlaut of */a/;

- OS consonant-conditioned */a/ > /e/;

- consonant-conditioned */a/ > /o/;

- assimilation of medial */a/ by neighbouring vowels;

- anaptyxis 3 (UG: /r/+labial/velar > /r/+V+labial/velar).

While an absence of evidence does not necessarily mean that some of these processes are not active at a subphonemic level, it does suggest that they are not perceived as significant by carvers (insofar as they do not warrant orthographic representation).

8.1.2 Typological division

We can group together types of sound change affecting the vocalics as follows:

1. vertical changes driven by umlaut (or at any rate, correlating with the height of the following vowel). These affect PGmc */i e u/ but apparently not */a/ or the long monophthongs (compare the late OHG/MHG development of *i*-umlaut, which does affect the long vowels). Among the diphthongs, vertical umlaut (probably) affects */eu/, but not */ai au/ (our **ae** and **ao** spellings do not correlate with the height of the following vowel). We need to bear in mind that these umlauts are not necessarily unified – it is entirely possible, for

example, that the raising of */e/ conditioned by /i ī j/ and that

conditioned by /u ū w/ are separate processes.

2. vertical changes conditioned by (or at least correlating with) the

place of articulation of the following consonant. These affect all the

diphthongs (*/eu/ only in UG, and the evidence for this in the corpus

is weak); */i e/ but not */u/ or */a/; and none of the long vowels.

3. mora-reduction in nonroot syllables, in principle only detectable in

the epigraphical record where the number of morae is reduced from

1 to 0 (i.e., deletion). If this is a unified process, then evidence of

apocope implies shortening of long vowels.

4. anaptyxes 1-2 (for which we have some evidence); and anaptyxis 3

(for which we have no evidence).

5. syllabication of semivowels in final position (and perhaps

interconsonantally).

8.2 The vowel system(s) of "Continental Runic"

From the analyses of the data in §§3-7, and the summaries presented above,

the following emerge as features of the vowel system(s) attested in the

inscriptions:

8.2.1 Short vowels

8.2.1.1 Stressed syllables

In stressed syllables, we have very little evidence for any change in the distribution of the short front vowels. With respect to the inventory of phonemes, we appear to have the expected five-member system:

lPGmc		CRun	
*/i/	*/u/	/i/	/u/
*/e/		/e/	/o/
	*/a/		/a/

Our only evidence for the phonologisation of /u o/ is the loss of thematic */a/ (attested in, e.g., <u>45. Kirchheim/Teck II</u> **arụgis** and <u>67. Schretzheim I</u> **arogịs**; <u>48. Lauchheim II</u> **dag**; <u>56. Nordendorf I</u> **wodan, -þonar**); the apparent counter-examples to the complementary distribution of /u/ and /o/ are ambiguous (§4.2.1.1).

The reflexes of */e/ and */u/ are for the most part sensitive to the height of the vowel in the following syllable (§4.2.1.1; §5.2.1.1): where a high vowel follows, reflexes of */e/ are represented **i** and reflexes of */u/ **u**; where the following vowel is mid or low, the spellings are consistently **e** and **o**. Reflexes of */i/ are represented **i** in all environments.

We have only one entirely reliable witness to the raising of */e/ before a nasal (§2.2.1): <u>68. Schretzheim II</u> **siþ**. All the other possible instances of

PGmc */e/ before a tautosyllabic nasal are in *i-* or *jō-*stems, where the raising can plausibly be ascribed to umlaut (§5.2.1.1).

8.2.1.2 Unstressed syllables

From the available evidence, it seems that reflexes of unstressed */i u a/ are consistently represented as **i, u** and **a**, respectively (§4.2.1.2; §5.2.1.2; §6.2). We have no evidence for unstressed reflexes of */e/. These findings are consistent with Braune's three-member system for OHG, /i a u/ (§2.3.2.1).

We do, however, have some evidence for /e o/ derived from unstressed long vowels, diphthongs or syllabicated semivowels, which would restore a five-member system if these vowels are short (§8.2.2.2).

lPGmc		CRun	
*/i/	*/u/	/i/	/u/
*/e/		(/e/?)	(/o/?)
	*/a/		/a/

8.2.1.3 Anaptyxis

The corpus contains sufficient evidence for anaptyxis 1 that we can be confident that it has taken place (§4.2.2; §6.2) – hardly a surprising finding, given that this process is presumed to belong to a stage of development earlier than the period of our inscriptions (§2.3.5). In the majority of cases, the epenthetic vowel is /a/ (the sole exception being 26. Friedberg **þuruþhild**, with /u/).

We have slight evidence for anaptyxis 2 in <u>4. Arlon</u> **rasuwa** and <u>61. Pforzen</u> <u>I</u> **ļṭahu** (if we construe it as **elahu** → *elah(h)u*). There are no witnesses to anaptyxis 3 in the corpus. We have one sequence (<u>54. Neudingen-Baar II</u> **imuba**) which appears to contain an anaptyctic vowel in a context not corresponding to any pattern known in OHG or OS.

8.2.2 Long vowels

8.2.2.1 Stressed syllables

The system of stressed long vowels is inherited from NWGmc, which is itself unchanged from lPGmc except for the shift of $*/\bar{e}_1/ > */\bar{a}/$:

lPGmc		CRun	
$*/\bar{\imath}/$	$*/\bar{u}/$	$/\bar{\imath}/$	$/\bar{u}/$
$*/\bar{e}_2/$	$*/\bar{o}/$	$/\bar{e}/$	$/\bar{o}/$
$*/\bar{e}_1/$			
	$*/\bar{a}/$		$/\bar{a}/$

8.2.2.2 Unstressed syllables

The only long vowels with unstressed reflexes attested in the corpus are $*/\bar{\imath}/$ and $*/\bar{o}/$. $*/\bar{\imath}/$ is preserved and consistently represented as **i** (the only exception being **ï** in Freilaubersheim **ḍaƀïna**) (§5.2.2.4). Reflexes of $*/\bar{o}/$ appear in the following contexts:

1. Weak pers.ns. in **-o** and **-a**, if the proto-form is PGmc */-ōn/ (§7.1; §7.1.3.2).

2. Unstressed reflexes of final */-ō/ are consistently represented as **u** (except where apocopated), reflecting the raising of PGmc */-ō/ > NWGmc */-ū/ (§4.2.3.2).

3. Oblique *ō*-stems (PGmc acc.sg. */-ōn/; gen.sg. */-ōz/, both > /-ǎ/ → **-a**) (§7.2.3).[66]

We have no direct evidence for the quantity of these vowels in the inscriptions, although apocope in the long-stemmed nom. *ō*-stems gives us some indication that the unstressed reflexes of the long vowels may be short, at least in final position (§7.2.2; §7.2.5). On the other hand, apocope seems to be restricted to certain suffixes: the dat.sg. *ō*-stem and 1.sg.pres. verbal suffixes are also */-ō/ in lPGmc, but neither is subject to apocope, regardless of the length of the preceding stem. If 71. Sievern ẉri̭u → *wrītu* is admissible as evidence for a CRun, rather than PNorse, then it appears that an overt ending is present here too, even after a long stem-syllable.

If the reflexes of unstressed */ī ō/ are long, they may form a system of unstressed long vowels with the monophthongal reflexes of */ai au/ (§8.2.3.2).

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[66] Our only witness to the gen. suffix is 12. Bezenye II **arsiḅoda**, if we accept Nedoma's interpretation.

8.2.3 Diphthongs

8.2.3.1 Stressed syllables

For each of the PGmc diphthongs, we have alternations between two or three digraphic representations: */eu/ → **eu ~ iu ~ eo**; */ai/ → **ai ~ aï ~ ae**; */au/ → **au ~ ao** (with **aw** a related form) (§3.1.2; §3.2.1.1; §3.3.1.1). Of these sets of alternants, only the reflexes of */au/ match the conditions for the changes attested in the later dialects (in this case, monophthongisation); and even here, the small quantity of data limits the strength of this conclusion. As I pointed out earlier (§2.3.1.4.1), the attempts of linguists to combine the monophthongisations of the *a*-diphthongs have encountered considerable problems.

Because the conditions for the OHG monophthongisation of */au/ are the same as those governing the UG distribution of the reflexes of */eu/ (§2.3.1.1), we might look for a common phonetic explanation. The runic data are of limited use for this purpose: reflexes of */au/ are attested only before alveolars (where the surface form [ao](?) > /ɔ̄/ is regular in OHG), while we have reflexes of */eu/ only before labials and velars (where the surface form in UG is /iu/). The only reflex of */eu/ which cannot plausibly be accounted for as a product of umlaut is Niederstotzingen **liub** (and even this is open to question, the co-text being unintelligible). If the */eu/ data can be explained without reference to consonant conditioning, and if there is no direct overlap between the consonantal environments of the attested reflexes of */eu/ and

*/au/, then we do not have grounds to advance a hypothesis in which their distributions can be viewed as part of a single process. This is not to say that (aside from Mertingen **ieok̦**) the data are inconsistent with a hypothesis in which */eu au/ > *[iu au] before labials and velars and *[eo ao] before dentals and /h/ in UG dialect territory (*/eo/ appearing only where it is motivated by umlaut).

It is curious that */eu/ is the only diphthong which shows evidence of umlaut effects (and it should be noted that in the inscriptions some of this evidence depends on the assumption that word-boundaries are transparent to the assimilatory influence of a following vowel). If the off-glide of */eu/ is lowered before a non-high vowel (following the same pattern as monophthongal */u/), why does */au/ not have a form *[ao] in the same context? Or if it does, why is it not marked orthographically when *[eo] is? This observation implies that the diphthongs are monophonemic in the dialects of the inscriptions; their behaviour does not correspond simply to that of their component monophthongs.

8.2.3.2 Unstressed syllables

We have no data for */eu/ or */au/ in unstressed position. The monophthongisation of unstressed */ai/ in stage 1 is well supported, although there appears to be some variation between **e** and **i** in the representation of the resultant monophthong (§3.2.2.1). This variation might be allowable as weak evidence that the reflex of unstressed */ai/ is short /e/ (~ /i/?) rather than long

/ē/ (~ /ī/), since there is no evidence for any parallel alternation in the unstressed reflexes of the long front monophthongs; the only unstressed long front vowel attested in the data is */ī/, which is consistently represented as **i** (§5.2.2.4; §8.2.2.2).

With these points in mind, we can tentatively posit the following subsystem:

lPGmc		CRun	
*/ai/	*/au/	/e/ (~ /i/?)	*/o/

If, on the other hand, these vowels remain long, they may form a four-member subsystem of unstressed long vowels with the reflexes of */ī/ and */ō/ (§8.2.2.2):

lPGmc		CRun	
*/ī/		/ī/	/ū/ (< final */-ō/)
*/ai/	*/ō/, */au/	/ē/	*/ō/

8.2.4 Semivowels

We have good reason to believe that the inherited semivowels become syllabic in word-final or compositional position, as in OHG and OS (§2.3.2.4). 45. Kirchheim/Teck II **arṷgis** and 67. Schretzheim I **arogị̈s** are the only plausible examples for */w/ > /u/ (§4.2.5). For */j/ > /i/, on the other hand, the evidence is abundant (§5.2.3).

In the reflexes of *wrītanan*, the alternation **ur-** ~ **wr-** can be explained as evidence for the syllabication of inherited /w/ between consonants (§4.2.5), a process not identified in OHG or OS. While this hypothesis gives us a good account of the runic data, it leaves us with the puzzle of why a glide which is amenable to syllabication should subsequently be deleted: if *wrait* has allomorphs /wrait/ ~ /u.rait/, ought this not to support an analogical spread of the latter to produce a general form /u.rait/, rather than deletion > pre-OHG */rait/?

8.3 Theoretical and methodological considerations

8.3.1 Grapheme and phoneme

The attempt to reconstruct vocalic systems from epigraphical data relies on an assumed correlation between orthographic and phonological contrasts. In the phoneme inventories proposed above, we have 14 vowel phonemes (5 short monophthongs, 5 long monophthongs and 4 diphthongs) but only 6 vowel runes, one of which (**ï**) is redundant. The reconstruction of five-member systems for the monophthongs is dependent on an inventory of 5 graphemes. If any other contrasts existed in the dialects of the inscriptions, they are undetectable unless the later dialects show a divergent development. The fuþark has, for example, no resources for marking the distinction between open and close mid vowels [ɛ] vs. [e], [ɔ] vs. [o], whatever their phonological status; nor for marking vowel quantity. In order to identify a vowel as long or short, we must consult external sources – pirmarily the OHG mss. – which are

themselves subject to similar constraints, in that they have only 5 graphemes

with which to represent the entire vocalic system.

One potential methodological weakness of this study is that it relies to a

large extent on the interpretations of inscriptions in the runological literature,

which are themselves based on assumptions about the relationship between

grapheme and phoneme. In many of the interpretations discussed in §§3-7,

variations in spelling are taken to be phonetically real and phonologically

significant. If this is not the case, our attempt to reconstruct a phonological

system from a corpus of written data is severely undermined. When we

introduce concepts such as "archaic" spelling (see below) or free variation, we

allow written forms to differ in entirely arbitrary ways from spoken forms. If,

for example, **i** and **e** do not necessarily mark a contrast between high and mid

front vowels, our ability to interpret sequences containing these runes becomes

much weaker, and a multitude of alternative interpretations must be taken into

consideration. If the spelling difference between Kirchheim/Teck II **aru̯gis**

and Schretzheim I **arogi̯s**, for example, does not reflect a phonological

difference in an unstressed reflex of PGmc */w/ or */ō/ (/arugīs/ vs. /arogīs/),

then why should the same not apply to 14. Borgharen **bobo** vs. 80. Weimar II

bubo? Nedoma's argument that **bobo** and **bubo** are not identical depends on

the supposition that **u** cannot represent a reflex of stressed */ō/ – a supposition

not shared by Arntz, Förstemann, Haubrichs or Krause (see Weimar II entry in

§4.1). While I support Nedoma's argument, it is worth pointing out that if we

allow a decoupling of orthographic differences from phonological contrasts in

one instance, then we must be prepared to allow it elsewhere: if Weimar II **u** can represent a reflex of stressed */ō/, then could the same apply to, for example, 60. Osthofen **fura** → **fōra* "condition, situation"(?) (< PGmc **fōrjōn* > ON *ó-fœra* "dangerous situation"; OHG *un-gi-fuora* "unfavourable condition")?

The appeal to "archaic" or "conservative" spelling presents us with a dangerously easy way to dispose of anomalies. How are we to evaluate the gap between spoken and written language? Who is enforcing the "conservative" orthography, and by what means? The situation differs from that of manuscript production in the OHG/OS period, which we know to have orthographic conventions which can be transmitted through the institutions of the scriptoria. We have no evidence for the existence of comparable institutions governing the production of runic inscriptions.

8.3.2 Phonological theory

In analysing and attempting to model sound change theoretically, we are faced with a tension between the atomistic descriptions of the Neogrammarians, which tend to concentrate on the surface facts of (in this case) OHG and OS, and thereby overlook distinct stages of sound change; and the synthesising impulse of rule-based theories in the generative tradition, which are concerned with accounting for data by the most economical set of rules, and thereby risk obscuring the messy details of the ways in which speech communities address and resolve linguistic problems.

The former approach is exemplified in the treatment of the OHG reflexes of */eu/ (§2.3.1.1). The handbooks typically describe the distribution of the variants /iu/ and /eo/ as a set of surface facts, without making it clear that we are dealing with two processes which are quite distinct both systematically and chronologically. The synthesising approach gives us (for instance) the various attempts to unify the monophthongisations of */ai/ and */au/ (§§2.3.1.3-2.3.1.4). Both approaches tend to unify the umlaut processes under the contrast between /i u/ and /e o a/ as sounds which produce a relatively high or relatively low vowel in the preceding syllable (a contrast expressible in generative phonology terms as a feature [±high]). Both imply that we are dealing with a single process; but how sure can we really be that the surface distribution of variants is not actually the result of two separate processes, one conditioned by the high front and the other by the high back vowels?

Linguistic theories must be founded on the rigorous analysis of carefully-observed data. One of the perennial problems in runology is agreeing on what the data represent, given that we have relatively little material, and that much of what we do have is defective. If the orthography cannot be relied upon to reflect phonological variation in non-arbitrary ways, then the task of inference becomes significantly more difficult. In this study I have intentionally avoided any claims to advance phonological theory. What I hope I have done is to highlight some of the difficulties in this particular dataset and to challenge some of the assumptions about the relationship between written and spoken forms which underlie our efforts to interpret the data. When we are attempting to reconstruct the systems of a dead spoken language from written data, it is

easy to lose sight of the fundamental gap in transmission. Texts are not

products of a perfect system; they are created by people who do not necessarily

share the modern scholar's concern for accuracy or clarity. Working directly

from the data, we can detect only those contrasts which carvers (or writers)

choose to mark. The quality of the data is constrained, therefore, not only by

the limited resources of the writing system, but by the phonetic and

phonological sensitivity of the individuals who produced the texts.

Maps

1. Distribution of runic inscriptions included in the study
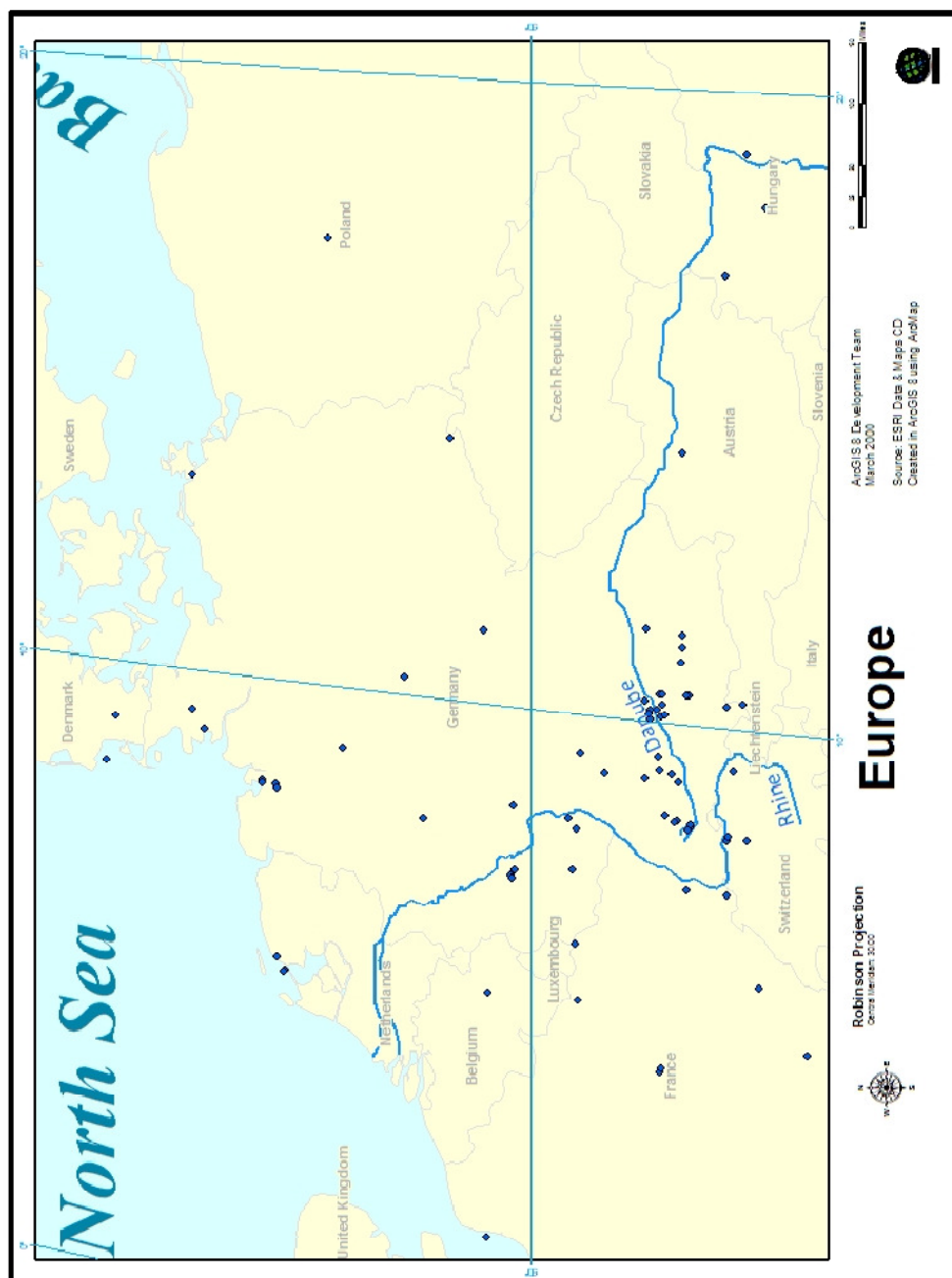
2. Reflexes of PGmc */au/ represented as a digraph
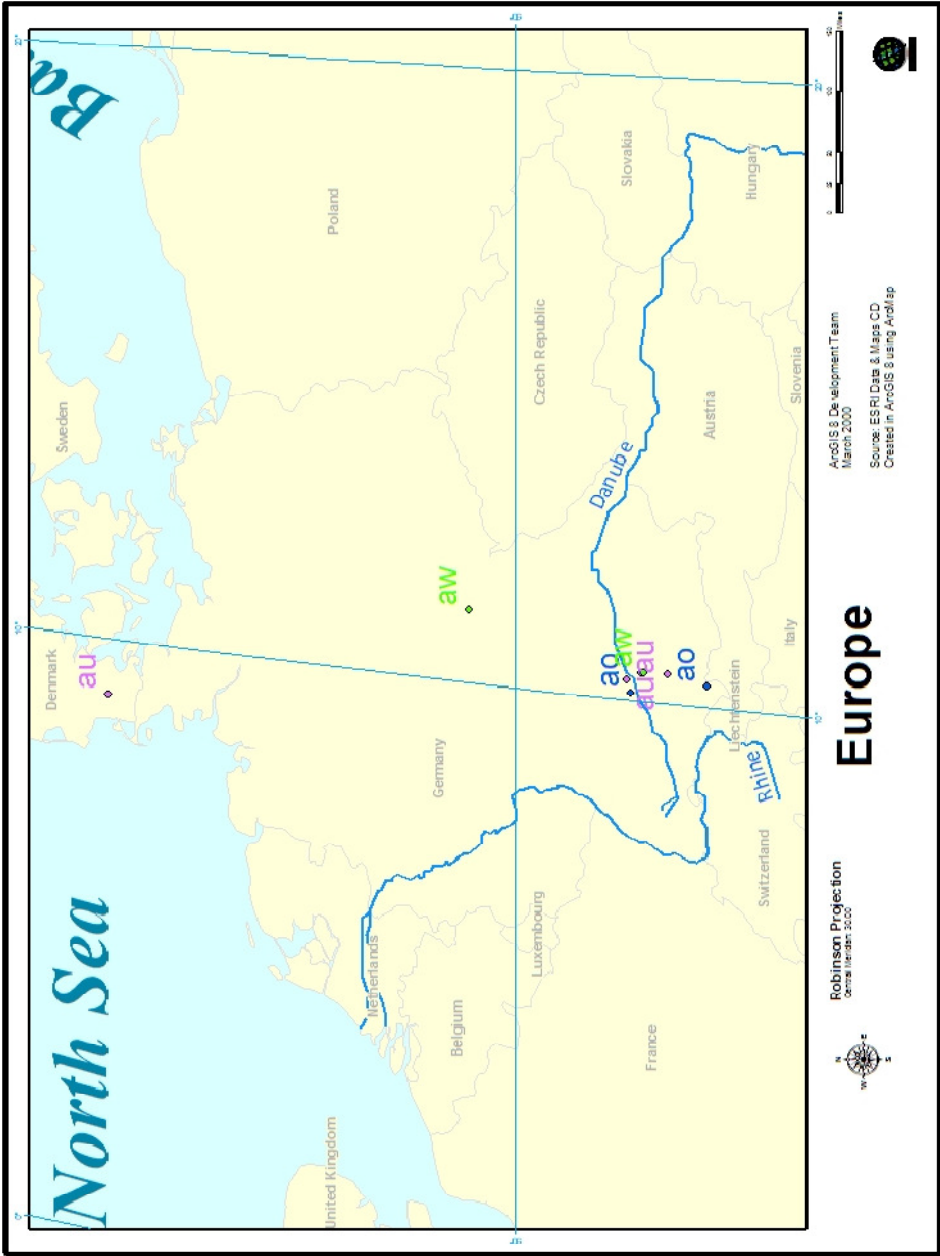
3. **u** vs. **w** spellings in the verb "write" (PGmc *wrītanan*)
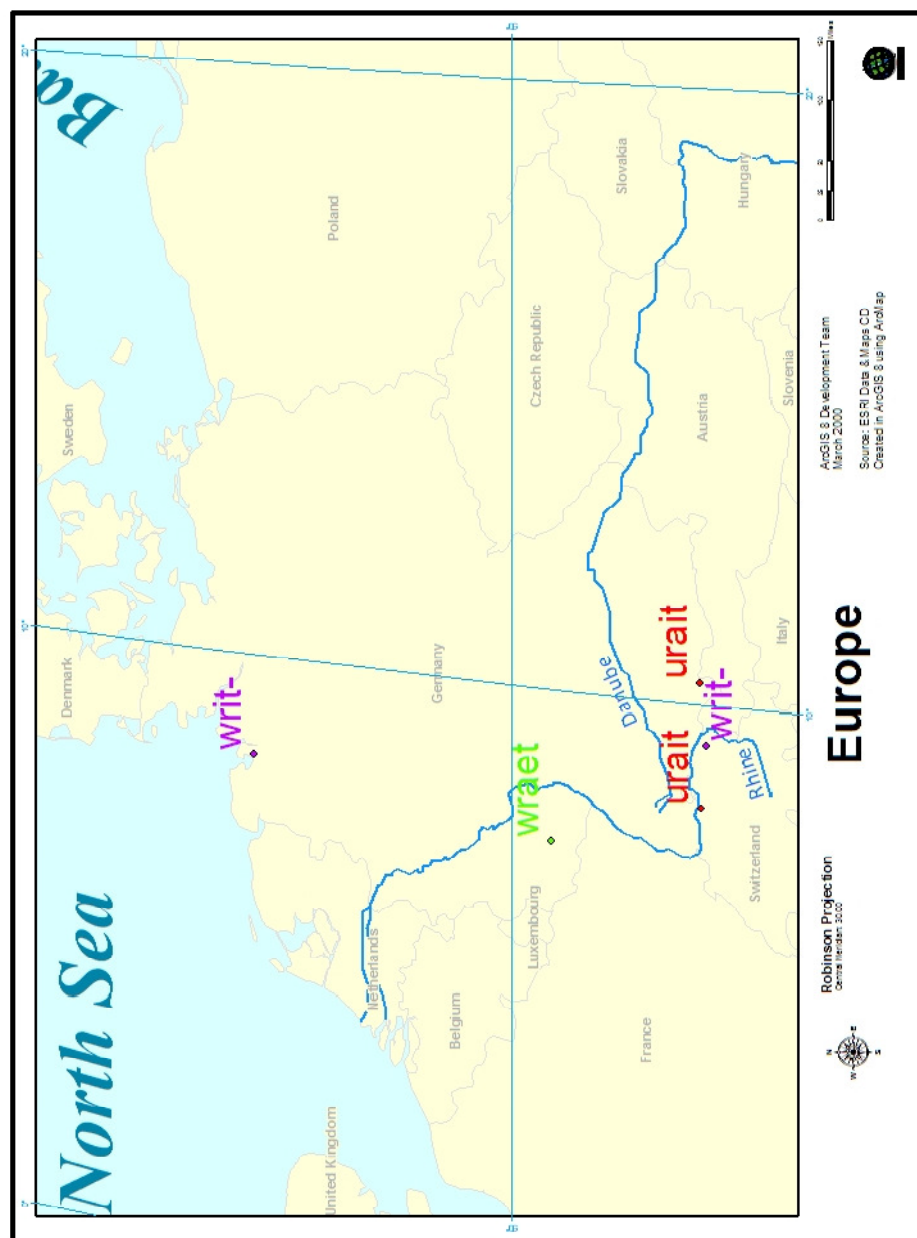
4. **j** vs. **i** spellings for consonantal /j/

Bibliography

Abbreviations for journals and corporate authors

ABäG – *Amsterdamer Beiträge zur älteren Germanistik*

ERGA – *Ergänzungsbände zum Reallexikon der germanischen Altertumskunde*

FmaS – *Frühmittelalterliche Studien*

ISRR – International Symposium on Runes and Runic Inscriptions

JEGP – *Journal of English and Germanic Philology*

JIES – *Journal of Indo-European Studies*

GGA – *Göttingische Gelehrte Anzeigen*

NoR – *Nytt om Runer*

NOWELE – *NOrthWestern European Language Evolution*

PBB – *Beiträge zur Geschichte der deutschen Sprache und Literatur* ("Paul und Braunes Beiträge")

PBB/H – *PBB* "Ostausgabe" (Halle/Saale)

PBB/T – *PBB* "Westausgabe" (Tübingen)

RGA – *Reallexikon der germanischen Altertumskunde.*

ZfdA – *Zeitschrift für deutsches Altertum*

ZfdPh – *Zeitschrift für deutsche Philologie*

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