## Linguistische Arbeiten



Katerina Somers Wicka
From Phonology to Syntax:
Pronominal Cliticization in
Otfrid's Evangelienbuch

## Linguistische

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## 530

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Katerina Somers Wicka

# From Phonology to Syntax: Pronominal Cliticization in Otfrid's Evangelienbuch 

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Abbreviations and Symbols

| 1 | first person |
| :--- | :--- |
| 2 | second person |
| 3 | third person |
| $\mu$ | mora |
| $\sigma$ | syllable |
| $\varphi$ | foot |
| $\omega$ | pword |
| ACC | accusative |
| Ad L | Ad Liutbertum |
| CP | complementizer phrase |
| DAT | dative |
| DEM | demonstrative |
| DET | determiner |
| DP | determiner phrase |
| GEN | genitive |
| IMP | imperative |
| IND | indicative |
| INF | infinitive |
| INTJ | interjection |
| MASC | masculine |
| MDu | Middle Dutch |
| MHG | Middle High German |
| NEG | negation, negative particle |
| NEUT | neuter |
| NHG | New High German |
| NOM | nominative |
| NP | noun phrase |
| OBJ | object |
| OE | Old English |
| OHG | Old High German |
| PRES | present |
| PRET | preterit |
| PL | plural |
| REFL | reflexive |
| SBJV | subjunctive |
| SG | singular |
| Spec | specifier |
| SRF | South Rhenish Franconian |
| TP | tense phrase |
| VOC | vocative |
| VP | verb phrase |
| WGmc | West Germanic |
|  |  |

From phonology to syntax:
pronominal cliticization in Otfrid's Evangelienbuch

## 1 Introduction

### 1.1 Introduction and organization

This volume is a synchronic investigation of cliticization processes attested in the Old High German (OHG) text, the Evangelienbuch, which was composed by the monk Otfrid von Weissenburg in the latter half of the ninth century. The analysis set forth seeks to elucidate these cliticization patterns, which will be traced throughout the entire text, as well as describe the prosodic conditions that ultimately lead to cliticization. The book's main argument may be stated simply: attestations such as meg ih (< mag ih) 'I am able to,' theiz ( < thaz iz) 'that it,' and wolt er (< wolta er) 'he wanted' comprise a host and a pronominal enclitic and are all manifestations of one unified process of cliticization. Establishing the crucial elements of the argument is not so straightforward, however. We are, after all, dealing with clitics, and part of modern linguists' fascination with these linguistic peculiarities surely is related to their rather elusive quality. Clitics are not easily classified or described in purely phonological or syntactic terms. Similarly, this analysis will not be tethered just to the realm of syntax or phonology, but rather will draw upon both disciplines in the presentation of its argument, even foraying into the more traditional territory of Germanic philology. This approach ensures that the present volume, in addition to presenting a comprehensive story of pronominal encliticization as it is attested in the Evangelienbuch, will also have a good deal to say on a variety of different topics, from the role of the prosodic word as a crucial constituent in OHG to the structure of the OHG clause. The argument is organized as follows:

Chapter two begins with an examination of those [host + clitic] sequences (which will also be referred to as "clitic groups ${ }^{1 \text { "") }}$ that show the occurrence of what is commonly referred to as primary umlaut, a regressive vocalic assimilation to $i / j^{2}$, across an apparent word boundary: meg ih (< mag ih) 'I am able to,' nem iz (<nam iz) 'took it,' and drénk ih (drank ih) 'I drink.' In the course of this discussion, I present an essentially prosodic view of cliticization as a means to describe the attested forms. The analysis shows that pronouns, under certain conditions, fail to meet the minimum requirements for a prosodic word, which in Germanic is one bimoraic foot. Data will be presented establishing that the minimum word in OHG ideally comprises two moras. When the pronoun is prosodically deficient, it cannot dominate its own prosodic word and cliticizes onto the preceding verb. In the case of the above forms and others like them, cliticization has effected phonological umlaut. Finally, the chapter presents a formal account of the processes that yield these forms, while also uncovering an additional motive behind cliticization beyond the prosodic deficiency of the pronominal enclitic. Implicit in the argument presented in this chapter is the assumption that the attested forms are produced by active processes of cliticization and

[^0]phonological umlaut, contrary to the claims of such works as Janda (1998). The volume returns to this last point in earnest in the following chapter.

Chapter three expands the dataset to show that the patterns identified in the seemingly peculiar forms of chapter two are not so exceptional after all. Here I argue that the account presented in the previous chapter also applies to the following data: theih ( $<$ thaz ih) 'that I,' theiz ( $<$ thaz iz) 'that it,' and theist (<thaz ist) 'that is,' clitic groups that are robustly attested throughout the work, and that cliticization in these cases is also motivated by the prosodic deficiency of the pronoun, as well as the host. As in chapter two, one of the main contentions of this analysis is that the relevant clitic groups are produced by active processes of cliticization. Additionally, the analysis shows that these structures have not been grammaticalized or lexicalized in any way. In order to support this assertion, the chapter first sets forth the syntactic parameters against which we may determine if the cliticized, umlauted variant of these structures is lexically listed alongside the uncliticized form. To this end, I begin this section with a syntactic analysis of the early Germanic and OHG clause. In the course of presenting this argument, the chapter also presents a critique of grammaticalization theory as a framework for describing clitic behavior in Otfrid.

Chapter four expands the dataset yet again to consider those apparent [host + clitic] sequences that exhibit elision of an unstressed vowel, e.g., wolt er ( $<$ wolta er) 'he wanted,' Bigónd er (<Bigónda er) 'he began,’ and Fráget er (< Frágeta er) ‘he asked.' These forms, like those already discussed, seem to show evidence of the same processes at work; i.e., the prosodic deficiency of the pronoun effects cliticization and prosodic reorganization. The analysis presented in the previous two chapters, however, operates under the assumption that the structures under investigation accurately reflect the speech patterns of the author. The fact that the Evangelienbuch adheres to a poetic meter requires that we critically examine this assumption and determine the extent to which the meter influences attestation patterns in the text. Specifically, we will concentrate on the figure of synaloepha, which refers to the elision of a word-final unstressed vowel for the sake of the poetic meter. Some scholars have in fact argued that structures such as Bigónd er are not cases of phonological cliticization at all but rather are a product of a mechanical metrical elision that has no basis in spoken language patterns. This chapter seeks to disentangle any potential influence of the poetic meter on the relevant forms from actual speech phenomena and show that the underlying processes yielding these tokens are, at their heart, prosodic in nature.

### 1.2 Theoretical frameworks

Though this volume presents a data-driven account of OHG clitic groups, a number of mainly generative theoretical frameworks informs the discussion. In keeping with the tenets of Lexical Phonology, laid out in works such as Kiparsky (1982), (1985), Mohanan (1986), and Booij \& Rubach (1987), I assume that underived lexical items are stored in the lexicon where they undergo the cyclic application of phonological rules within each level of word formation. After a form moves through the lexicon, it is located within a hierarchical syntactic structure. Drawing from functionalist models, I also assume that
frequently produced collocations, whose individual words were once separately derived in the lexicon and then postlexically subjected to additional alterations (e.g., cliticization), may be frozen as a fixed sequence and stored as one unit in the lexicon, a process that this volume refers to as form fossilization. At this point the fossilized structure is susceptible to other processes that are generally characterized as grammaticalization or lexicalization processes, whereby the clitic group's form, meaning and function changes.

This analysis also makes reference to the constituents that reside within the prosodic hierarchy, as conceived within the theoretical framework of Prosodic Phonology, discussed in Selkirk (1978), Booij (1983), Nespor \& Vogel (1986), among others. The account presented here most particularly relies on the constituent termed the phonological or prosodic word and treats pronominal encliticization in the Evangelienbuch as a case of prosodic integration, through which unfooted syllables may be incorporated into the larger prosodic structure. This process is described in detail in chapter two. One of the challenging aspects of fully accounting for cases of prosodic integration will be to reconcile this use of prosodic constituents within the framework of Lexical Phonology. Care will also be taken to integrate constituency assignment into the processes that yield phonological words and phrases. More will be said on the specific frameworks as they become relevant during the course of the analysis.

### 1.3 The source, its limitations and advantages

At the heart of this volume is the text from which the corpus of clitic forms has been drawn. Given the central role the text plays in the analysis, it is important to consider the work's transmission history. The Evangelienbuch, which is best characterized as a South Rhenish Franconian text, survives in the form of three manuscripts and fragments of a fourth, all of which were copied during the lifetime of Otfrid himself and, some have argued (e.g., Kleiber 1971), directly under his supervision. The text is easily attributed to Otfrid as the work bears his name, which makes Otfrid the first named German author. The oldest of the manuscripts and the one from which the others were copied is known as V (Codex Vindobonensis 2687. Theol. 345 of the Austrian National Library). The text preserved in this manuscript serves as the basis for many scholarly editions of the work, including Erdmann (1973) and Kelle (1856). Manuscript V shows evidence of five different scribal hands, though the overwhelming majority of the text was written by just two scribes. A third scribe wrote only a couple of lines but corrected the entire work after its completion. The hand of the corrector can be seen adding or deleting letters, accents and dots. The accent and dot are both features of Otfrid's poetic meter and will be more thoroughly discussed in chapter four. For this investigation I relied on the Erdmann edition of V, and used that in conjunction with the facsimile edition of the Vienna manuscript-I always checked forms of interest found in the Erdmann edition against their representations in the manuscript itself. In focusing this analysis on structures drawn from only V, I was able to bypass any issues that might arise from the variation that is often attested across copies.

When verses are presented in the body of this volume, they will be reproduced as closely as possible to the how they appear in the manuscript. For example, the punctuation that is normally present in scholarly editions, such as Erdmann (1973), will not be included here and did not factor into the analysis, as such orthographic additions require that the editor make certain grammaticality judgments. Any a priori placement of such markings could significantly impact the way in which a verse is interpreted, as is illustrated in the following example.


The pronoun thaz, which combines with ist to yield the structure theist, can be used in a number of different ways in OHG. Though thaz has begun to function as a relative in certain cases, it also retains its original demonstrative semantics and can still be used as a demonstrative pronoun ${ }^{3}$. In the line presented in (1), the presence of a comma after the first of the two verses implies that the second clause is subordinate to the first and that the pronoun thaz is functioning as a relative pronoun, as seen in (1a). With the use of a period, however, it seems that thaz is being used as a demonstrative pronoun. In ignoring any orthographical additions found in the edition, one is forced to grapple with such questions of ambiguity, which, as we will see in chapter three for example, play a significant role in this analysis.

Finally, in establishing the clitic status of the pronouns found in the Evangelienbuch there are a number of obstacles for the linguist to overcome. Obviously, when working with a historical text written in the ninth century, one is denied access to living native speakers. One must, therefore, accept that certain aspects of prosody are unrecoverablewe cannot fully reconstruct intonation and stress patterns, for example. Further adding to our disadvantage is the fact that the Evangelienbuch is a work of poetry. Otfrid does avail himself of diacritics, which he uses to mark stress-bearing syllables. However, these markings are indications of metrical stress, the patterns of which are rooted in, but cannot be assumed to be entirely consistent with those of natural speech. The limitations inherent to the dataset seem especially daunting when it is one's intent to analyze a phenomenon such as cliticization, which in languages such as modern German and English often does not even find expression in the standard orthography, but is only evident in these languages' spoken manifestations.

Relying on a historical text to recreate patterns of spoken language is a challenging, not impossible task and, in many ways, a text like the Evangelienbuch is well suited to this type of investigation. To begin with, the work was composed many centuries before the introduction and subsequent imposition of a standard language. As a result, Otfrid was obliged to represent his South Rhenish Franconian dialect as best he could without the help of, or interference from a standard orthography. This reality, though vexing to Otfrid himself, yields a written language that bears a closer resemblance to spoken language patterns than that which is typically found in more modern texts. We further know from Otfrid's Latin preface, the Ad Liutbertum (Ad L), that the author actively wrestled with the

[^1]task of committing to paper a language that lacked a written tradition ${ }^{4}$. In fact, we see significant portions of this preface devoted to questions of how best to represent "Frankish" sounds in written form (Ad L 58-87). We even have the benefit of Otfrid's direct commentary regarding certain topics that are directly relevant to the question of cliticization, including vowel elision and the graphemic representation of unstressed vowels. In these respects the Evangelienbuch is an ideal source for the types of analyses this volume undertakes. The specifics of Otfrid's commentary in the Ad Liutbertum, as it relates to these questions, will be discussed in greater detail in chapter four, in which I will offer a comprehensive analysis of the effects of the poetic meter on attested forms.

[^2]
## 2 Prosodic deficiency and cliticization in Otfrid

### 2.1 Evidence of primary umlaut in még iz, géb imo and ném iz

This analysis of cliticization patterns in Otfrid focuses on the seemingly peculiar forms, examples of which include még iz 'it is able to,' géb imo 'gave him,' and ném iz 'took it,' that inspired the project in the first place. One notable characteristic of the Evangelienbuch is Otfrid's prolific application of primary umlaut. As described in the standard OHG grammar, umlaut is a vowel harmony rule that raises $a$ to $e$ when the vowel is followed by $i$ or $j$. Examples of this process in Germanic include the following forms:
(1) OHG gast - gesti guest, guests

PGmc. *lagjan - OHG leggen to lay (down)
OHG faru - ferit I go, he/she/it goes
Raising of the vowel, however, could be blocked under particular circumstances-namely, in those cases in which certain consonant clusters intervened, for example -ht-, -lt-, and -rt(Braune \& Reiffenstein: 28).
(2) OHG mahti abilites haltit he/she/it protects

Otfrid's application of the umlaut rule is prolific in two senses. First, the reader can find instances in which raising has occurred in traditional umlaut-blocking environments, examples of which are shown in (3).
(3) mehti alongside mahti abilities II 17, 22
wehsit alongside wahsit he/she/it grows I 8,24
heltit alongside haltit he/she/it protects II 13, 10; V 20, 32

As is indicated in figure (3), the umlauted and unumlauted variants co-occur in the text. Another way in which Otfrid's work is unusual with regard to umlaut is that the process appears to be capable of operating between two separate words. A representative sampling of these forms is provided in (4).
(4) Wio meg iz ío werdan wár thaz ih werde suángar I 5, 37
how can it ever become true that I become pregnant How can it ever become true that I will become pregnant?
joh géb imo al zi hénti zi síneru giwélti II 13, 30
and gave him all to hand to his authority-Dat
And (he) handed all over to him, to his authority

The occurrence of umlaut in cases such as those just shown is not categorical. For example, the collocation mag $+i z$ ('is able to; it') is attested eleven times in the Evangelienbuch and shows vowel raising, i.e., meg $i z$, in six of those attestations. These data make the Otfrid text unique when compared to the rest of the OHG corpus-in no other OHG text does umlaut consistently show the ability to seemingly ignore word boundaries and yield structures such as these.

The existence of those forms presented in (4) presents the reader with something of a conundrum. The relevant collocations are all represented in published editions as two separate words. Yet one must account for the fact that the high vowel of the pronoun has triggered umlaut in the preceding verb. Given these facts, we must assume one of the following: either a form such as meg ih consists of two separate words, or the pronoun ih is a clitic and the finite verb and pronoun are dominated by one phonological or prosodic word (hereafter pword). In the former scenario, we must allow for the operation of a still phonological umlaut across word boundaries, or show that the umlauted form at some point became "lexicalized," as argued in Janda (1998). In the latter scenario, integration of the clitic into the pword of the finite verb would trigger the postlexical application of phonological umlaut.

It is one of the central contentions of this work that the pronouns contained in structures like még iz must be treated as clitics. In other words, this chapter rejects all two-pword analyses of these tokens, which means that in the course of this discussion I will consider and present evidence against the lexicalization argument proposed in Janda (1998). This section further argues that cliticization effected by prosodic and phonological factors has subsumed the pronoun within the preceding pword, thereby allowing for the postlexical application of phonological umlaut. In making this argument, I rely most particularly on synchronic analyses of the prosodic word and the prosodic representation of function words and clitics (Hall 1999; Booij 1995, 1996; Wiese 1996; Peperkamp 1997).

### 2.2 The prosodic status of the még ih forms

Zwicky's classic work on clitics and particles (1985) presents a series of tests whose purpose is to aid in the classification of clitics and independent words ${ }^{1}$. One such test speaks directly to the question at hand: what is the phonological status of the constituent parts of a sequence like még iz? Zwicky writes, "(t)he difference between the [clitic + word] and [word + word] cases is that between phonological words and phonological phrases (Zwicky 1985: 286)." This observation draws attention to the crucial fact that clitics form one phonological unit with an independent word, as opposed to dominating

[^3]their own phonological word. It also succinctly establishes a framework for our analysis by setting up one of the chapter's central questions, i.e., does még iz comprise one phonological phrase or one phonological word? This section, therefore, begins with a discussion of még $i z$ as one phonological phrase, consisting of two separate pwords, as well as a presentation of the twenty attested umlauted forms (2).


As mentioned above, any viable account of the forms presented in (4) must also be able to explain the presence of umlaut. Within the parameters of a two pword analysis this would be possible if one allowed for the operation of umlaut across pword boundaries. There is, however, no evidence that umlaut is routinely capable of crossing the gap between pwords and effecting vocalic change. As noted in Braune \& Reiffenstein (2004: 28) umlaut is confined to the domain of the pword, operating as a lexical rule in most OHG texts. It is the South Rhenish Franconian Evangelienbuch which exhibits most of the cases in which umlaut occurs across apparent word boundaries ${ }^{2}$. Even within this particular text, umlauted forms such as még iz and ném iz are relatively rare structures with only twenty total cases attested. If umlaut operated regularly across word boundaries, i.e., between two pwords, we would expect to see far more umlauted forms in the text, especially given the fact that, as this chapter has already discussed, Otfrid's work exhibits a rather hyperactive application of umlaut.

Yet there is no doubt that the umlauted forms of (4) are exceptional in many ways. As I have already noted, these tokens do not surface frequently, and they are, for the most part, unique to Otfrid. However, they are attested and must, therefore, be explained. Other than the analysis offered here, there is only one other existing account of these forms, that found

[^4]in Janda (1998). This work asserts that forms such as még iz and ném iz are lexically listed, or have been "lexicalized." ${ }^{3}$ The argument is presented within the context of a larger discussion regarding the nature of umlaut in the OHG period, a question that has implications for the present analysis of these forms as clitic groups, as it assumes that umlaut was still an active phonological process during this time. Janda, however, asserts that umlaut had already been morphologized by the time Otfrid composed the Evangelienbuch. We will briefly revisit the particulars of this argument in order to determine how this view of umlaut is brought to bear on our putative clitic groups, while at the same time, considering counterarguments to Janda's assertions.

Janda's argument that phonological umlaut is not active during the entire period of OHG rests on cases in which umlaut does not occur despite the presence of an appropriate trigger, as well as instances in which umlaut is present, but the trigger is not. One such example is the case of the preterit subjunctive forms of the "class i" weak verbs, or Rückumlaut verbs, a sample of which is provided in (6).

| Infinitive | Preterit subjunctive |  |  |
| :--- | :--- | :--- | :--- |
| zellen | - | zalti | to relate |
| brennen | - | branti | to (cause to) burn |
| sterchen | - | starchti | to strengthen |
| senten | - | santi | to send |

These examples show the root-vocalism /a/ followed by the weak preterit subjunctive suffix $-t i$, which contains the umlaut-trigger $i$. Yet no umlaut has occurred. Janda (1998) argues that, because these umlautless forms are confined to one morphological category, umlaut must have already been morphological or a phonological process with morphological conditioning. In other words, the preterit subjunctive forms above do not undergo umlaut simply because the preterit subjunctive morpheme -ti belongs in the category of nonumlauting morphemes. Underlying this argument is the unproven assumption that phonological umlaut and Janda's morphological umlaut cannot co-occur-if there is evidence that the occurrence or non-occurrence of umlaut is becoming associated with different morphological functions, then the phonological process that underpins umlaut's nascent morphologization must already be absent from the language.

Works such as Holsinger \& Salmons (1999) and Iverson \& Salmons (2001, 2003) show this assumption to be incorrect. These analyses argue that during the OHG period, umlaut was beginning to make the transition from being a purely phonetic-phonological process to becoming a morphological one. The fact that umlaut blocking in OHG is associated with this particular morphological category has a phonological basis, in that the stems of this class of verbs tend to end in consonants and clusters, which, in turn, tend to be fricatives and liquids. With the suffixation of $-t i$ suffix, a "striking" percentage of forms, some of them frequently attested, contain the phonological umlaut blockers $-h t$-, $-l t$, and $-r t$-: bringen-brahti 'to bring,' denken-dahti 'to think,' fellen-falti 'to fell,' merren-marta 'to hinder' (Iverson \& Salmons 2001: 6-7). As a result of this class's inherent resistance to phonological umlaut, language learners came to associate the morphological function of the preterit subjunctive with the lack of umlaut and, hence, a morphologically determined

[^5]exception to the phonological umlaut rule emerges. In this regard, the case of the preterit subjunctive of Rückumlaut verbs serves as an instructive, historical snapshot of the umlaut's emerging morphologization.

Returning to the larger argument, the még iz forms of Otfrid have already been identified by other works as evidence that runs counter to the morpholexical approach to umlaut presented in Janda (1998). Holsinger \& Salmons (1999: 251, fn.1) points out that forms such as drénk ih 'I drank' and werf iz 'threw it,' containing "umlaut-triggering pronouns," must be understood as lexicalized if one is to accept a non-phonological account of umlaut. Indeed, the analysis in Janda (1998) does attack the notion that these forms are the product of actual phonological processes (phonetic-phonological umlaut in particular), and presents the following arguments supporting a claim that these structures are lexicalized. The first argument presented is one that questions the degree to which the Otfrid data may be generalized. The author argues that because the data in the Evangelienbuch are so exceptional vis-à-vis all other OHG texts, one cannot use it as a basis for drawing conclusions regarding the nature of umlaut in OHG. In a sense, this statement is correct. In fact, there is no unified OHG language-each text from the period represents a separate and distinct dialect. The East Franconian found in the works of Tatian represents a different dialectal system and time period than the Bavarian of the Muspilli. That Otfrid's work exhibits unique characteristics absent in other dialects does not mean one should simply disregard the data, as Janda suggests. Instead these features and the processes that create them must be considered real properties of South Rhenish Franconian, and the Otfrid data must factor into any account of OHG umlaut.

With regard to the relevant forms themselves, identified in Janda as imo (of géb imo), ih (of még $i$ h), and $i z$ (of wérf $i z$ ), his analysis treats these pronouns as clitics, even going so far as to invoke the oft-observed parallel that clitics behave much like affixes (Berendsen 1986; Booij 1996; Wiese 1996; Hall 1999; Gerlach \& Grijzenhout 2001). Yet the analysis does not talk about affixation in terms of a process of phonological integration. Instead it argues that these pronouns exhibit "idiosyncratic or lexical properties," in that they trigger morpholexical umlaut. Given this idiosyncratic behavior, one should list these elements in the lexicon as "affix-like entities" that are capable of conditioning morpholexical umlaut on a preceding verb. Janda's analysis attempts to bolster the assertion that the relevant pronouns have special status by pointing out that a close connection exists between OHG pronominal clitics and verbal suffixes. One may see evidence of this special relationship in the second person singular forms, such as thu giloubis $(t)$. These forms, the author argues, often emerged in the manuscripts as giloubisthu (from original gilaubis thu), which paved the way for a reinterpretation of the second person singular ending from $-s$ to $-s t$.

The problems related to this interpretation of the umlauting forms are manifold and, in many respects, stem from the fact that the analysis is based on data that are incomplete. (7) below contains a summary of all of the relevant umlauting cases, as well as their nonumlauting counterparts.
(7)

| Umlauted forms |  | Unumlauted counterparts (\# of attestations) |
| :--- | :--- | :--- |
| géb imo | II 13, 30 | gáb iru, gab ih, gab imo (x3), firgáb in, gáb in |
| werf iz | II 11, 19 (object) | wárf iz |
| giréh inan | II 5, 6 |  |
| nem iz | I 20, 18 (object) | - |
| drénk ih | II 8, 52 | dránk ih |
| wérd iz | IV 14, 3 (x2) | wárd ih, wárd imo (x2), wárd iz (x2), wárd in |
| wés iz | II 1, 8 | was imo, was ímo, wás iz (x2), was íru, was íro, <br> was in |
| scél iz | IV 8, 16 (x2) | scál ih (x4), skal iz, scal iz |
| még ih/iz | V 25, 36 (x10 <br> total, x2 as <br> objects) | mag ih (x7), mág ih (x4), mag iz (x3), mág iz (x2) |

First, it must be noted that, in addition to $i$ h, $i z$ and imo, one would have to add inan and $i z$, as both a subject and object pronoun, to Janda's group of lexically listed "affix-like entities." Notably absent in Janda's account of the above forms is how these pronouns, all of which perhaps not so coincidentally contain the umlaut trigger /i/, developed this special and idiosyncratic ability to trigger lexical umlaut. More importantly though, the above account requires that one accept that all umlauted clitic groups presented in (7) are lexically stored alongside the more frequently attested non-umlauting clitic groups. Given the inclusion of presumably low frequency sequences such as giréh inan 'avenged him' and werf iz 'threw it' in the table above, it is difficult to imagine how the umlauted variant made its way into the lexicon. In fact, the mere fact that umlauted forms co-occur with unumlauted forms speaks against lexicalization of the sequences that do exhibit umlaut. It is also notable that none of these umlauted variants survive into MHG, a fact that suggests they were never lexicalized, either in OHG or later.

It is further interesting that the account presented in Janda (1998) sporadically refers to the pronouns $i h, i z$ and imo as enclitics, but never characterizes the process by which they attach onto the preceding finite verb as cliticization. In fact, the analysis does not present a description of the affixation process, nor does it explicitly discuss the prosodic status of the forms' constituent parts. When presenting the form giloubisthu 'you believe' as evidence of the close relationship between the relevant pronouns and verbal suffixes, Janda refers to this token as a possible "spelling" of the inverted second person singular form, the implication being that the structure is a product of orthography. If one considers how these forms are actually attested in the manuscript, it becomes clear that we are not dealing with mere orthographic tendency, but rather cliticization. In fact, the form cited in Janda (1998), giloubisthu, is attested as Gilóubistu (III 20, 173) in Otfrid. That the original coronal fricative surfaces as a coronal stop supports the conclusion that this attestation is the product of pronominal encliticization, which has effected a resyllabification, i.e., onset maximization, after the integration of the pronoun into the preceding pword.
(8)


The Evangelienbuch contains other tokens similar to the form provided in (6), including bistu, thénkistu, and lisistu, among others. I will discuss these forms in greater detail later in chapter four. At this point of the analysis, though, it is important to recognize that these attestations are clear cases of pronominal encliticization, exhibiting prosodic integration of the clitic within the domain of the host. In the following sections, I argue that the exact same process that yields the giloubistu forms, also produces structures such as még iz.

### 2.3 Defining the pword within the prosodic hierarchy

This chapter so far has examined arguments for a two pword understanding and shown them to be untenable. Yet the task of making a positive case for a one pword analysis of these structures remains; one must look for evidence beyond the presence of umlaut in order to incontrovertibly establish $i z$ 's status as a clitic and még $i z$ as one pword. Subsequent chapters return to this point by examining an expanded dataset that includes other instances of pronominal encliticization attested in the work. In the remainder of this chapter I present a formal account of the clitic group comprising forms such as még iz. This presentation begins with a discussion of the prosodic constituent to which the argument makes crucial reference, the pword.

A number of studies has shown that the prosodic/phonological word, or pword is an important prosodic constituent for describing various phonological phenomena (for a discussion of these studies, see Hall's (1999) introduction). The pword was conceived within the framework of Prosodic Phonology, which places a series of universal constituents within a greater prosodic hierarchy (for more on the theory of Prosodic Phonology, see Selkirk 1980a, 1980b; Booij 1983; Nespor \& Vogel 1986). The generally accepted hierarchy is presented in (9).

[^6]

The literature has, for the most part, argued against the inclusion of a "clitic group" between the phonological word and phonological phrase (proposed in works such as Nespor \& Vogel 1986; Hayes 1989; Vogel 1990) as a necessary constituent in the hierarchy. In this analysis I also see no need to refer to this particular constituent. In fact, reference to a clitic group would obscure generalizations that may be captured by limiting our discussion to include those constituents presented in (9). As Wiese (1996: 251) points out, properties of [host + clitic] sequences are no different than those of the pword. In this chapter I will show that this observation holds for the Otfrid data as well.

It is worth taking a moment to define what exactly constitutes and characterizes a pword. Many studies make the crucial observation that pwords and grammatical words are not isomorphic (Booij 1996; Selkirk 1980a; Hall 1999, among others). In general, morphosyntactic boundaries and pword boundaries coincide, yet there are notable exceptions to this rule. If we follow Wiese's (1996: 67) algorithm for modern German, suffixes that are either vowel-initial (e.g. -ung and -ität) or do not consist of their own syllable, that is are vowelless ${ }^{6}$ (e.g., $-t$, $-s t$, and $-n$ ), do not dominate their own pword but are integrated into the one preceding them. On the other hand, suffixes that begin with a consonant and are followed by a vowel (e.g., -lich) do constitute their own pword, as do members of all other morphological categories. Prefixes, in contrast to suffixes, always form a pword of their own. Illustrating his algorithm, Wiese presents the following examples found in (10) \& (11) (his figures $56 \& 57$ ).
a. Ver+sicher+ung+en assurances morphemes
b. $\{$ Ver $\}$ \{sicher $\}$ ung + en assignment of phonological words
c. $\{\operatorname{Ver}\}\{$ sicherungen $\} \quad$ integration of remaining material
a. lieb+lich+er
lovely
morphemes
b. $\{$ lieb $\}\{$ lich $\}$ er
c. $\{$ lieb $\}\{$ licher $\}$
assignment of phonological words integration of remaining material

Keeping in mind Wiese's assignment of pwords vis-à-vis the morpheme, we may now add another constituent to his analysis, the syllable. Consider the following forms drawn from Wiese's (1996) figure 55 (12). These structures also show syllable (.), morphological (+), and pword (\{\}) breaks.

[^7](12) a. Tier.+art, Stand.+uhr
b. täg. +lich, farb. + los
c. Ur.+oma, Ver.+antwortung
d. $\{$ kin. $\mathrm{d}+$ isch $\}$ \{Ach.t+ung $\}$
e. $\{$ le.b+en $\}\{$ Män.n+er+n\}
\{Tier $\}$ \{art $\} \quad\{$ Stand $\}\{\mathrm{Uhr}\}$
\{täg $\}\{$ lich $\} \quad\{$ farb $\}\{\operatorname{los}\}$ or $\{$ far.blos $\}$
\{Ur\}\{oma\} $\quad$ VVer\}\{antwortung

Beginning with the forms in (12a) and (12c), we first note that the syllable and pword boundaries coincide; i.e., syllabification, or onset maximalization, does not cross a pword boundary. This fact is especially notable in these four cases, given the general dispreference for syllables with no onset. The examples in (12b) also exhibit isomorphic syllable and pword boundaries, and it is based on this syllabification data that Wiese argues for a separate pword analysis for consonant-initial suffixes.

There are problems with this portion of the argument, however. Wiese himself indicates that a different syllabification of the word farblos 'colorless' is possible, given the fact that the consonant cluster $/ \mathrm{bl} /$ is present in German (both possible syllabifications are shown in 12b). Consequently, the author concludes that Modern Standard German allows for syllabification across pword boundaries. This assertion, in itself, seems dubious when one considers that syllabification in cases involving prefixes (12c) and compounds (12a) is unequivocally restricted to the domain of one pword. However, an examination of forms with consonant-initial suffixes with regard to both foot and pword structures places a two pword analysis of farblos and similar cases in jeopardy. The foot, which is located immediately below the pword in the prosodic hierarchy, shown in (9), comprises a sequence of one or more syllables, the first of which carries stronger stress than the syllables that follow. The stressed syllable, then, constitutes the head of the foot. The form farblos, parsed according to foot and pword structures is presented in (13).
Foot structure
farblos Pword structure

As one can see in (13), accounting for farblos in terms of the foot must necessarily draw the second lesser stressed syllable into its structure. Yet the form has been broken up into two separate pwords. Working within the parameters set by Wiese, we must accept one of the following: either farblos comprises two separate feet and pwords, an analysis that is not supported by stress patterns, in that both feet would have to be stressed. Or the construction of the foot can reach across pwords. This explanation would essentially place the foot above the pword in the prosodic hierarchy, a violation of the Strict Layering Hypothesis.

Given the untenability of both of these options, we should amend the parameters set by Wiese and consider some alternate definitions of the pword. Booij (1984) and Nespor \& Vogel (1986) also offer a morphological definition of the pword, though their terms vary slightly from those presented in Wiese (1996). They posit that all stem + suffix sequences constitute one pword. As in Wiese, parts of compounds comprise their own pwords, as do
prefixes and stems. Under this definition, farblos would be parsed into a single pword: (farblos) ${ }_{\omega}$, an account that is fully compatible with foot structure, while still adhering to the prosodic hierarchy. Yet this definition of the pword still stands out as unique when compared to the way in which other prosodic constituents are defined. It is notable that pword classification in the literature seems to be entirely reliant upon morphological categories. In contrast, other prosodic constituents are readily defined in prosodic terms, with reference to the constituent that resides below it in the hierarchy; e.g., the foot is comprised of a sequence of syllables or the phonological phrase of prosodic words. Fortunately, classification in prosodic terms is also possible for the pword, as illustrated in Selkirk (1995), which states that monosyllabic words also have the status of a head of a foot, which must comprise at least one stressed syllable. We can simplify matters by speaking of feet, instead of heads of feet, and posit the following:
(14) A pword must constitute one foot, which must contain at least one stressed syllable.

According to this definition of the pword, the earlier example, farblos, would parse as follows (the figure shows both syllabifications):


In this analysis I will treat the prosodic definition of the pword described in (14) as the initial necessary, but not sufficient condition that must be met in order for a sequence of syllables to attain pword status. As we will see below, morphological structure also plays a role in determining pword status.

Having established the basic means by which to classify the pword, we can turn to a discussion of the important role played by this constituent as the domain for various phonological rules and constraints. Implicit in the definition of the pword is the generalization, observed in a number of studies, that the pword serves as the domain for syllabification. This argument has been made, not only for modern German (Booij 1985; Wiese 1996), but also for modern Dutch (Nespor \& Vogel 1986; Booij 1996), among others. The pword has also been shown to be the domain of segmental rules as well as prosodic rules. Wiese (1996), for example, argues that this is the case for the rule of Nasal Assimilation in modern German, which operates obligatorily within the boundaries of the pword, but only optionally between words. A similar argument is advanced for Hungarian vowel harmony, which applies when both trigger and target are contained within the same pword (Booij 1984; Nespor \& Vogel 1986; for a list of additional studies see Hall 1999: 4). Lastly, the pword is also argued to be the domain for minimality constraints (McCarthy \& Prince 1986, 1990; Booij 1996; Hall 1999), which govern the minimal size a word can have in a particular language. The minimal size of a word is usually defined in binary terms-a
word is either minimally disyllabic, as is the case in SiSwati (Downing 1999), or bimoraic, as can be seen in English (Peperkamp 1996) and modern German (Hall 1999).

### 2.4 The minimum pword in OHG and the lexical-function word dichotomy

We will now begin to work our way back to the OHG forms in question by focusing our attention on Hall's (1999) analysis of the minimum pword in modern German. Hall's discussion of the pword in German focuses on the dichotomy between function words, e.g., determiners, auxiliaries, and pronouns, and lexical words vis-à-vis minimality constraints. Hall presents a list of high frequency, monosyllabic lexical words, a sample of which is shown in (16) (drawn from Hall's (4)).
(16) Monosyllabic lexical words

| Noun |  |  |
| :---: | :--- | :--- |
| Tisch | $[\mathrm{trf}]$ | table |
| Bau | $[\mathrm{bau}]$ | construction |
| See | $[\mathrm{ze}:]$ | lake |

Adjective

| flott | [flıt $]$ | brisk |
| :--- | :--- | :--- |
| zäh | $[$ [ts $]$ | tough |
| roh | $[\mathrm{RO}:]$ | rough |

Verb (second person singular imperative forms)

| sing | [ziy] | sing |
| :--- | :--- | :--- |
| hau | [haü] | hit |
| geh | [ge:] | go |

These tokens, Hall argues, illustrate that monosyllabic lexical items generally consist of two moras; i.e., they either end in a long vowel, a diphthong, or a sequence of short vowel plus single consonant (VC). ${ }^{7}$ On the basis of this generalization, Hall's analysis presents the following wellformedness constraint (Hall's 1999 (5)).
(17) minimal word requirement: The pword in German is minimally bimoraic.

A similar consideration of reduced function words in German, however, reveal that minimality constraints do not apply to words that serve a more grammatical function (18) (sample tokens drawn from Hall's 1999 (3)).

[^8](18)

Function words

|  |  | Strong form | Weak form(s) |  |
| :---: | :---: | :---: | :---: | :---: |
| Pronouns | du | [du:] | [du] [də] | you |
|  | er | [e:p:] | [8] | he |
| Determiners | der | [de:r:] | [de] | the (nom.sg.masc.) |
|  | die | [di:] | [dI] [də] | the (nom.sg.fem.) |
| Conjunctions | und | [unt] | [ən] | and |
| Auxiliaries | ist | [Ist] | [วs] | is |

In contrast to the forms presented in (16), the reduced function words in (18) do not meet the bimoraicity standard outlined in (17). In fact, Hall points out, there are no monosyllabic lexical words that end in a short vowel, whereas reduced function words do so quite readily. Given that (reduced) function words do not usually meet minimum word requirements, proposes the following generalization (19) (Hall's 1999 (1)).
(19) Lexical words are pwords; function words are not pwords.

This wellformedness constraint reflects the notable difference between function and lexical words with regard to behavior and prosodic status and is argued by a number of authors to be operative in several different languages (Kaisse 1985; Berendsen 1986; Inkelas 1990; Prince \& Smolensky 1993; Selkirk 1995; Peperkamp 1996; Booij 1996). The generalization presented in (19) further describes the exceptionality of function words in relation to lexical words, the former of which is denied pword status. Also illustrated in the Hall data and expressed in (19) is the important observation that function words are subject to reduction, whereas lexical items do not reduce. It is these (reduced) function words that are characterized by Booij (1996) as "prosodically deficient" elements in that they cannot stand alone as independent pwords and must, therefore, be integrated into, or adjoined onto a nearby prosodic constituent. Thus, Hall (1999), as well as Booij (1996) argue in favor of an essentially prosodic view of cliticization, one that hinges on the moraic deficiency of function words, their inability to dominate their own pword, and the resulting tendency for these elements to cliticize onto a host.

In addition to prosodic deficiency, stress and foot structure play a role in the routine reduction and cliticization of function words, as discussed in Selkirk (1995). The present analysis has already established that minimally a pword must consist of at least one foot, which must necessarily comprise one stressed syllable. Monosyllabic lexical items readily meet this condition, in that they carry lexical stress. The presence of a stressed syllable allows for the formation of the foot, and, hence, the pword. Reduced monosyllabic function words, in contrast, are inherently stressless, and, therefore, do not contain a syllable that is capable of forming a foot. As a result the form remains unfooted and without the status of a pword until it can be integrated into the prosodic structure as a clitic. The role of stress, foot formation and pword formation will come under greater scrutiny below, as the analysis presents a formal account of prosodic cliticization in Otfrid.

This discussion so far has been limited to the pword in modern standard German. Let us now engage in a closer examination of the OHG data with an eye toward clearly defining the canonical shape of a pword in Otfrid. Can we assume that the minimal word in OHG is also bimoraic? There are several reasons to think that we can, beyond the obvious fact that
the bimoraicity requirement holds for modern German. First, there are a number of studies that, though they investigate divergent phonological processes, speak directly to the importance of the bimoraic foot (and, hence, the pword, which must necessarily comprise one foot) as a crucial constituent that influences phonological and morphological change in the early West Germanic dialects. For example, Smith (2004; to appear) adopts a unified templatic approach to account for short-i retention in the Old Saxon (OS) $i$-stem nouns, as well as West Germanic syncope in the weak class I jan-verbs. Let us briefly consider a couple of forms that illustrate the loss or maintenance of the thematic vowel in the OS $i$ stem nouns in the nominative singular.

| WGmc.$*$ fardi $>$ OS fard trip  <br>  *tîdi $>$ tîd time | $\boldsymbol{B U T}$ |  |
| :---: | :--- | :--- |
|  | *siuni $>$ siun | face, eye |


| WGmc. | *seli $>$ OS seli |
| :---: | :--- |
| *uuini $>$ uuini | room <br> friend |
| *stedi $>$ stedi | city |

As is evident in (20), $i$ is lost when the stem is long, that is, when the stem is already bimoraic. Yet, when the stem is monomoraic, $i$ is maintained. These and similar facts lead the author to conclude that a prosodic template, one that is maximally disyllabic and minimally bimoraic, prescribed the prosodic shape of these forms.

Dresher \& Lahiri (1991) and Lahiri \& Dresher (1999) provide two other examples of studies that rely on the bimoraic foot in describing phonological change in West Germanic. In particular, they argue that seemingly diverse processes have all been sensitive to one particular prosodic pattern, which they call the "Germanic foot." This metrical pattern, which is maximally binary and left-headed, crucially comprises one stressed, bimoraic head. In cases in which the stressed head contains only one light, i.e., monomoraic, syllable, bimoraicity can be achieved through resolution; that is, the initial light syllable may incorporate the following syllable, be it light or heavy, into the same metrical position. The resolved, or (LX) structure is argued to be the metrical equivalent of one heavy syllable. The authors further observe that the Germanic foot is an operative pattern across a number of phonological processes, from High Vowel Deletion (HVD) and stress assignment in Old English (OE), to Open Syllable Lengthening in Middle English, Middle Dutch and Middle High German. If we briefly consider some of the HVD data presented in Dresher \& Lahiri (1991), we see the minimal bimoraic pword surface yet again.
(21) WGmc *gôdu $>$ OHG gôd good BUT WGmc *lofu $>$ OHG lofu praise
WGmc * wordu > OHG word word

These tokens show maintenance of the $u$ in the case involving an initial monomoraic syllable. In contrast, the high vowel is lost in those tokens whose root already contained a heavy initial syllable.

It is not the purpose of this discussion to recast the analyses referenced above in terms of minimality constraints, but rather to demonstrate the prominence of the bimoraic stressed syllable in Germanic. As stated in Dresher \& Lahiri (1991), stressed words in Germanic, including those containing only one syllable, have always been bimoraic, and we can see this preference across a number of phonological processes and dialects. In light of this discussion regarding the fundamental difference between lexical and function words, the previous statement should be amended to refer to only lexical words. Function words, in
contrast, do not generally meet the bimoraic requirement and, as will be argued more explicitly below, do not bear lexical stress.

Before examining the canonical shape of the monosyllabic lexical word in OHG, we must first establish this analysis's definition of bimoraic. As noted above, Hall (1999) treats all CVC syllables, regardless of whether they appear word-internally or word-finally, as moraically equal. In other words, sequences of a short vowel followed by a single consonant are always bimoraic. Following works such as Dresher \& Lahiri (2003) and Russom (2001), there is good reason, however, to treat word-final CVC syllables in Germanic as monomoraic. For example, in the former study, the authors make the critical observation that OE lacked secondary stress in final syllables. Consider the following forms drawn from the authors' (15).



BUT


BUT


The bolded syllables in (22), argue the authors, could be expected to carry secondary stress, given that they might be parsed as heavy syllables and, therefore, should constitute heads of their own feet. Contrary to these expectations, though, the bolded syllables do not receive stress. One way to account for the data would be to argue that word-final consonants are extrametrical, a rule that would cause all word-final CVC syllables to be monomoraic. Closed syllables in word-internal position, as seen in (22), would still count as heavy. Studies looking at CVC weight asymmetry in modern variants of Germanic note that the difference in weight between a CVC-internal and CVC-final syllable is both phonetically and perceptually motivated. Closed syllables in word-final position count as monomoraic because these syllables are subject to lengthening, which causes the "duration of a final CVC to be not as perceptually distinct from a final CV as a non-final CVC is from a nonfinal CV (Lunden 2006)." Assuming CVC weight asymmetry would afford us certain advantages with regard to the analysis presented here. For example, we would avoid having to analyze noun endings in OHG as comprising one heavy syllable, which should then be able to form its own foot and bear stress, but never does.


Assuming CVC weight asymmetry also allows us to treat unreduced monosyllabic pronouns and other function words as monomoraic, despite their VC structure (e.g., ih, er, $i z$ ). A monomoraic analysis of these pronouns is more consistent with our theoretical framework, given what we know about the behavior of function words, which are generally stressless, subject to reduction and denied the status of pword.

Having established what constitutes a bimoraic syllable in OHG, we can begin to look at the prosodic shapes that characterize the monosyllabic lexical word in Otfrid and consider the extent to which these words conform to the bimoraicity requirement. Below in (24) is a list of typical monosyllabic lexical words drawn from the glossary of Erdmann's edition of the Evangelienbuch and categorized according to syllable structure. Also presented below in (24) is a sample of monosyllabic verbal forms attested in Otfrid.


The nouns and adjectives presented in (24) represent every possible shape a monosyllabic lexical word may take in Otfrid. It is immediately apparent that the forms contained in the first three columns of (24) meet the bimoraicity requirement, whereas the forms in the last column do not. Similarly, certain monosyllabic verbal elements surface as bimoraic, but others contain only one mora. If one considers the actual attested forms, however, it becomes clear that the vast majority of OHG lexical items surface as bimoraic. It should first be noted that the nouns and adjectives comprising the first three columns of (24) constitute the majority ( $84.4 \%$ ) of the glossary forms. Futher, those monomoraic structures in the fourth column generally surface with inflection and, therefore, as bimoraic: stat 'city' surfaces as steti-GEN.SG.; dag 'day' as dage-DAT.SG.; stum 'mute' as stumme-NOM.PL. This generalization also applies to verbs: geban 'to give' surfaces as gibu-1SG.PRES.IND or gebe3SG.PRES.SBJV.

To contrast the lexical words, let us now consider a sample of high frequency function words attested in Otfrid.

Full form
$\left.\begin{array}{ll}\text { pronouns } & \begin{array}{l}\text { ih 'I' } \\ \text { thî 'you' } \\ \text { er 'he' }\end{array} \\ \text { iz 'it' (NOM/ACC.SG) } \\ \text { siu 'she' } \\ \text { sie 'they' (NOM/ACC.PL) } \\ \text { inan 'him' (ACC.SG) } \\ \text { imo 'him' (DAT.SG) }\end{array}\right\}$
modals \& mag 'can, be able to'
ist 'is'

Orthographically distinct (reduced) forms ${ }^{\text {s }}$
thu, -tu
si, se
si, se
(-)nan
(-)mo
the- ${ }^{9}$
we-
int-

In (26) we see that unreduced function words often consist of just one mora and/or have a reduced form that is monomoraic. What conclusions, then, can one draw from the data presented in (24), (25), and (26)? With regard to these data three important generalizations regarding the prosodic shapes of words in Otfrid may be formed. First, the vast majority of lexical words surface as bimoraic; i.e., either the stem already dominates two moras or inflection provides the additional mora needed to achieve bimoraicity. On the other hand, most of the function words in Otfrid surface as monomoraic-they are monomoraic either before or after reduction. This pattern is not categorical, however, and lexical items can and do surface as monomoraic. In other words, it is possible for lexical words to fall short of the wellformedness constraint that defines the OHG pword as bimoraic. This is certainly true for particular morphological categories, for example, the relatively high frequency singular preterit of the class IV and V strong verbs (gab 'gave;' nam 'took') which always has a CVC syllable structure. Below, I argue that the Otfrid data support the assertion that their monomoraic structure makes these strong verb forms susceptible to certain postlexical prosodic processes.

[^9]
### 2.5 A formal account of még iz and ném iz

So far, this chapter has established the parameters within which this volume's account of cliticization in Otfrid will take place. It has defined the prosodic constituents that will be shown to be crucially involved in this process, i.e., the pword, foot and syllable, and discussed the connection between these elements and various phonological phenomena, e.g., the pword as the domain of syllabification. It has also identified the constraints that affect the prosodic shape of words in OHG, e.g., the bimoraic pword. How, then, do all of these components work together to yield the umlauting forms attested in Otfrid? Let us begin to answer this question by, once again, presenting all tokens in Otfrid that evince cliticization and umlaut.

| ném iz 'took it' | I 20, 18 |
| :---: | :---: |
| géb imo 'gave (to) him' | II 13, 30 |
| giréh inan 'avenged him' | II 5, 6 |
| so wés iz 'so it was' | II 1, 8 |
| waz skel iz 'what should it' | II 7, 16 |
| scél iz wesan 'should it be' | IV 8, 16 |
| drénk ih 'I drank' | II 8, 52 |
| Er werf iz 'He threw it' | II 11, 19 |
| Ni wérd iz 'it did not become' | IV 14, 3 |
| wérd iz 'it became' | III 9, 4 |
| Wio meg ih wizzan 'How can I know' | I 4, 55 |
| Wio meg iz 'How can it' | I 5,37 |
| ih meg iz lóbon ' $I$ can praise it' | I 18, 4 |
| wio meg ih 'how can I' | I 25, 8 |
| ni még iz werdan 'it cannot become' | III 13, 24 |
| ni meg iz wérdan 'it cannot become' | IV 11, 29 |
| ih meg iz báldo sprechan 'I can say it confidently' | IV 12, 58 |
| wio még iz 'how can it' | V 1, 43 |
| ni még ih thaz irkóboron 'I cannot overcome that' | V 7, 35 |
| wes még ih fergon méra 'what more can I request' | V 25, 36 |

In accounting for these forms, we begin with the well-known classification of clitics presented in Zwicky (1977) and Jeffers \& Zwicky (1980). In these works three types of clitics are distinguished: the "simple clitic," the "special clitic" and the "bound word." The authors define the different clitic types in terms of their degree of relatedness to their corresponding full forms. Simple clitics are phonologically derived and, as a result, are closely related to their full forms. Bound words, on the other hand, do not have an associated full form. Falling in between these two types is the special clitic, which maintains a semantic connection to its full form, but is not phonologically derived.

A clitic's degree of relatedness to its corresponding full form has implications for its syntax. A simple clitic, being a phonological reduction of the full form, should surface in the same syntactic positions as its non-clitic variant. In contrast, the bound word shows the highest degree of syntactic freedom vis-à-vis the corresponding full form. Again, falling somewhere in the middle is the special clitic, which is "located within sentences by genuinely syntactic principles." For the purposes of clarification, the case of French
pronominals provides an instructive example of a special clitic, in which the clitic exhibits diverging syntax from its full form counterpart.
(28) Je vois lúii (full form) 'I see him'

BUT Je le vois ${ }^{10}$ (special clitic)
Applying these categories to our data in (27), we may provisionally classify the Otfrid clitics as examples of simple cliticization, based on data presented in (29).

> | Umlauted forms |
| :--- |
| ni még ih thaz irkóboron |
| NEG able to I that overcome |
| I am not able to overcome that |
| V 7,35 |

Wio meg ih wízzan how able to I know-INF How am I able to know... I 4, 55

> Unumlauted forms
> ni mag ih thóh mit worte NEG able to I yet with word-DAT Yet I am not able to with the word... I 18, 6
waz mág ih sagen
what able to I say-INF
What am I able to say
II 1, 12
ih meg iz báldo sprechan I able to it boldly say

Ih mag iz wóla midan
I able to it well avoid I am able to say it confidently IV 12, 58 I am able to well avoid it II 4, 77

This side-by-side comparison of umlauted and unumlauted structures reveals that the umlauted forms exhibit no special syntax. Rather the proposed pronominal enclitic surfaces in syntactically identical positions to the non-cliticizing pronouns that follows the unumlauted verbs.

Yet a consideration of the Otfrid data within this Zwickian framework does yield one notable peculiarity in these proposed clitic groups. In contrast to the definitions of the different types of clitics above, all of which involve some type of reduction of the clitic form itself, the ném iz and meg ih sequences do not entail reduction of any sort. In fact, one must assume that the pronouns contained in these [host + clitic] combinations have maintained their full vocalic quality, as $i$ does trigger umlaut in the preceding syllable. This observation leads to one important conclusion regarding the nature of cliticization processes in Otfrid-they need not involve the reduction of the aspiring clitic. This statement stands in contrast to many descriptions of cliticization processes that are often assumed to necessarily entail, or even be precipitated by reduction of the putative clitic.

If the processes that yield the ném $i z$ forms do not hinge upon any reduction of the pronoun, which factors induce cliticization in these tokens? This analysis proposes that cliticization is effected by the surfacing prosodic deficiency of the pronoun and, in most cases, of the host as well. Though some studies present more output-oriented analyses that are focused on the ranking of constraints in order to account for surface forms, e.g., Selkirk 1995; Peperkamp 1996, this account assumes that the principles of Prosodic Phonology operate within the larger framework of Lexical Phonology. Furthermore, a consideration of

[^10]both a lexical and postlexical level of the grammar will provide insight as to the prosodic status of Otfrid's clitic groups and allow us to establish the details of these cliticization processes from start to finish.

We begin, then, with a description of the umlauting clitic structures as they appear in the lexicon, using the form ném $i z$ as our model form. The abbreviation GrW used in (30) stands for the term "grammatical word."


The account presented in (30) reflects certain theoretical assumptions that require clarification. If we look at stage 1 , we notice that the verb is identified as stress-bearing, but the pronoun is not. This stress assignment is based on the relatively uncontroversial proposition that lexical words receive lexical stress, but function words do not. Further assumptions underlying the presentation of data in (30) include the idea that syllables are assigned within the domain of the grammatical word, and, on the basis of the syllable structure and stress assignment, feet are built and then, finally, pwords. In the case of the function word $i z$, however, foot and pword cannot be assigned, as the pronoun does not carry lexical stress, and the formation of a foot requires the presence of a stressed syllable. The pword, which must comprise at least one stressed head of a foot, as a result, also cannot be formed in the lexicon.

The figure in (30) also makes use of the term, "the grammatical word," which is not intended to refer to a constituent in its own right. It is rather a shorthand method of describing, for the purposes of this figure, a stem that has already undergone the vowelaltering inflectional process of ablaut. Previous studies that argue that the pword serves as the domain for lexical and postlexical syllabification (Booij 1996; Hall 1999), leave open the question of how and in what order prosodic constituents are actually assigned in the lexicon. Most often, such analyses require an initial morphosyntactic definition of the pword, because the pword, as the domain of syllabification, must be assigned before syllables. As a result, they either do not make reference to syllables and feet when defining the pword, as we saw in the case of Wiese (1996), or avoid the topic of the lexical formation of prosodic constituents altogether, as is the case in Booij (1996) and Hall (1999). In contrast to these approaches, I maintain that a prosodic constituent should be defined with regard to the constituent located below it in the hierarchy; i.e., a definition of the pword should necessarily reference the foot, that of the foot should reference the syllable, etc. Hence, syllables must be assigned first, then feet, and finally, the pword. We must also keep in mind, though, that the operation of various lexical rules crucially relies on the notion of the syllable, foot or pword, and we, therefore, should consider how the assignment of these prosodic constituents transpires in the lexicon.

As prosodic constituents like the pword can serve as the domain for the application of phonological rules, I argue that prosodic constituency assignment must be fully integrated into the affixation process, which takes place in the different levels of the grammar. Similar to the application of phonological rules, which are inherently cyclic, prosodic
constituency in the lexicon is recursively assigned, a process which, in many cases, creates new domains for rule application. An example from OHG, presented in the figure below (31), illustrates how this process might unfold.


One could then imagine that all bare, i.e., uninflected and undeclined, entries in the lexicon are already listed for prosodic constituency. Yet the prosodic structure of an entry can change, in order to incorporate any material that is added through the derivational and inflectional process. In the case of [nám $]_{\omega}$ in (30), one can assume that the initial constituency did not change, because irregular inflection was accomplished through ablaut, as opposed to the affixation of an inflectional ending.

Having established what has occurred in the lexicon, we now consider how these forms progress postlexically, once the prosodic output of the lexicon is strung together to form larger prosodic constituents, such as the phonological phrase and utterance.

| Lexical output | [nám] ${ }_{\text {¢ }}$ | $[i z]_{\text {o }}$ |  |
| :---: | :---: | :---: | :---: |
|  | 1. $[\omega]$ | [б] | - assignment of sentential stress |
|  | 2. [ $\omega$ | $\sigma]$ | - recursive formation of the pword to integrate the unfooted syllable |
| Postlexical output | 3. [ne | $\mathrm{miz}]_{\omega}$ | - resyllabification \& umlaut |

The output from the lexicon includes the pword nam and the pronoun $i z$, which has emerged without lexical stress and, therefore, as an unfooted syllable. At this point, the pronoun could potentially receive sentential stress, or metrical stress as we will see in chapter four, which would allow it to form a foot and pword postlexically. In the case of the structure ném $i z$, however, the pronoun remains unstressed and unfooted and must be integrated into the prosodic structure as a clitic.

A number of works have argued that, within the theoretical parameters of Prosodic Phonology, incorporation of the stray, unfooted syllable can be accomplished in one of three ways (Selkirk 1995; Peperkamp 1996; Booij 1996; Hall 1999; Gärtner \& Steinbach 2003). We will break for a moment from our account of ném iz, in order to consider the three types of prosodic cliticization and discuss which model is most consistent with the Otfrid data.
(33)

(b)

(c)


The method of adjunction represented in (33a) is argued to aptly capture the facts of the majority of encliticization processes in modern Germanic (Booij 1996; Hall 1999; Gärtner \& Steinbach 2003). Hall (1999), for example, asserts that encliticization in modern German entails pword integration, as seen in (33a), as long as this prosodification does not yield an output that violates a set of wellformedness constraints (a case in which pword integration is blocked will be discussed in greater detail below). In instances in which there are no phonotactic impediments, cliticization incorporates the unfooted syllable into the pword and foot structure of the host. Hence, cliticization effects a postlexical reformation of the pword domain, as well as the reassignment of feet and syllables, i.e. resyllabification. Indeed, as Booij (1996) argues for modern Dutch, the fact that encliticization induces obligatory resyllabification supports a one pword understanding of [host + clitic] sequences. The examples in (34) are drawn from Booij's (16).

| kocht het | $\left[\left[[\mathrm{kox}]_{\sigma}[\mathrm{trt}]_{\text {d }}\right.\right.$ |
| :---: | :---: |
| komt-ie | $\left[\left[[\mathrm{k} \supset \mathrm{m}]_{\sigma}[\mathrm{ti}]_{0}\right]_{\omega}\right]_{\omega}$ |
| pakt het hem | $\left[\left[[p a k]_{\sigma}[\text { to }]_{\sigma}[\mathrm{t} \partial \mathrm{m}]_{\sigma}\right]\right.$ |

'bought it'<br>'he comes'<br>'takes it (to) him'

An analysis of the forms in (34) that confers separate pword status onto the enclitic would be problematic, because we would expect the clitic to serve as its own independent domain of syllabification. The data clearly show that this is not the case. Furthermore, we would have to account for the formation of syllables across a pword boundary, an untenable proposition. In contrast to the Dutch examples in (34), all of which involve reduction of the function word before cliticization, Hall (1999) lists a series of [host + clitic] sequences that do not entail any reduction at all.
(35) kann ich
geht er
kommt es


Though the pronouns in (35) have maintained their full form, Hall still analyzes them as enclitics that have been prosodically integrated into the pword structure. The syllabification of these structures provides evidence of this constituency.

A one pword account of these clitic groups, as shown in (33a) also allows for the operation of those phonological rules that apply within the domain of the pword, but not in between two pwords. Consider the data in (36), drawn from Booij's (17).

| (36) | Prevocalic schwa deletion |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Words |  |  |  |
|  | (kaden) ${ }_{\omega}$ | /kadə + ən/ | [kadən] | quays |
|  | (Romein) ${ }_{\omega}$ | /romə + عin/ | [romsin] | Roman |
|  | Compounds |  |  |  |
|  | (mede) ${ }_{\omega}(\text { auteur })_{\omega}$ | /medə + otør/ | *[medotør] | coauthor |
|  | (mode) ${ }_{\omega}(\text { avond })_{\omega}$ | /modə + avont/ | *[modavont] | fashion night |
|  | Word + enclitic |  |  |  |
|  | zette het | /zetə ət/ | [zetət] ${ }_{\omega}$ | put it |
|  | haalde hem | /haldə əm/ | [haldəm] ${ }_{\omega}$ | fetched him |
|  | pakte ik | /paktə Ik/ | [paktık] ${ }_{\omega}$ | I took |

As we can see in (36), the Dutch rule of Prevocalic Schwa Deletion, which deletes schwas before an adjacent vowel, applies within pwords, but not between them. Also to be noted is the fact that this rule applies both lexically and postlexically. Booij provides a unified description of the rule and states that its domain of application is the pword. Because pwords can be formed recursively, both lexically and postlexically, this rule can apply even postlexically, where cliticization can create new domains of rule application.

Both Hall (1999) and Booij (1996) use adjunction, either onto the phonological phrase (33b) or onto a recursive pword (33c), as a way to account for those clitics that cannot, for one reason or another, be integrated into a neighboring pword. For example, Hall argues that, in the following cases involving a verb and the first or third person singular, nominative pronouns ich and er, the enclitic is adjoined onto the phonological phrase (33b), as opposed to incorporated into the pword (examples drawn from Hall's (27)).
(37) $\left((\text { komme })_{\omega} \text { ich }\right)_{\phi} \quad[$ kəməıç $] \quad$ 'I am coming' $\left((\text { legte })_{\omega}{ }^{\text {er }}\right)_{\phi} \quad$ [le:ktəe:r] 'he did put'

In the case of the forms presented in (37), the pronoun, which has emerged from the lexicon as an unfooted, stray syllable, cannot be incorporated into the preceding pword, because the output would yield a form that is in violation of a phonotactic constraint identified for the German pword by Hall. The Prevocalic Schwa Constraint states that the first of two vowels in hiatus cannot be a schwa. As a result of phonotactic conditioning, the pronoun cannot belong to the same pword as the verb.

Hall advances a similar argument to describe the adjunction of proclitics, which also cannot be incorporated into the structure of the subsequent pword. Booij (1996) and other studies, e.g., Gärtner \& Steinbach 2003, present similar arguments regarding the proclitic. Though their chosen methods of adjunction differ, they all agree that pword integration (33a) cannot be the correct analysis for proclitics for a couple of reasons. First, feet in modern German and Dutch are left-headed, implying that the leftmost syllable should bear stress. Proclitics, though, are not incorporated into this stress pattern, and word-initial stress continues to fall on the host even after cliticization. The attachment of a proclitic also does not induce obligatory resyllabification, as Booij (1996) notes for Dutch (examples drawn from Booij's (33)).

[^11]Both of these factors indicate that proclitics are not integrated into the pword structure. Yet opinions differ as to which mode of adjunction should be used to describe procliticization. Hall (1999) and Gärtner \& Steinbach (2003) argue that proclitics should be adjoined onto the phonological phrase (33b), whereas Booij (1996) opts for the recursive pword structure (33c). ${ }^{11}$

We return now to our model form, ném $i z$, and note that this form is comparable to the structures presented in (35) (e.g., kann ich). Recall that, though these forms did not entail reduction of the pronoun, they were parsed as one single pword: (kann ich) ${ }_{\omega}$. Similarly, the OHG pronominal enclitic $i z$ also does not surface as a reduced variant. We further observe that the $i$ in the preceding syllable triggers phonological umlaut. This fact indicates that the pronoun has been prosodically integrated into the pword structure, as opposed to having been merely adjoined onto the higher phrasal node. Hence, I propose that the pronoun, which emerged as an unfooted syllable from the lexicon, was postlexically integrated into the prosodic word of the host, in this case, the verb. The inclusion of new material required that prosodic constituency be reassigned, yielding a new syllable, foot and pword structure. This postlexical process of constituency assignment mirrors the lexical process outlined in (31) and is summarized in (39).

| (39) Lexical output | $[\text { nám }]_{\omega}$ <br> 2.[nám | $[\mathrm{iz}]_{\sigma}$ <br> iz $]_{\omega}$ | - syllables emerge from the lexicon <br> - recursive formation of the pword to <br> integrate unfooted syllable |
| :--- | :--- | :--- | :--- | :--- |
|  | Postlexical output | 3.né míz $]_{\omega}$ - resyllabification and umlaut ${ }^{12}$ |  |

The creation of a new pword also means that phonological rules with the pword as their domain of application could once again be imposed, just as they were in the lexicon. The data indicate that phonological umlaut in OHG was just this sort of rule; that is, its domain of application was the pword.

This account of ném iz holds that the pronoun emerged as prosodically deficient from the lexicon in that it lacked lexical stress and, as a result, was incapable of forming a foot and receiving pword status. In other words, the impetus behind the process that yields these clitic groups is prosodic in nature-cliticization is not induced by reduction of the pronoun. Indeed given the presence of umlaut in the final forms, we must assume an unreduced umlaut trigger is present after cliticization. Yet we can also talk about another layer of motivation for prosodic cliticization in this case, if we refer to the bimoraicity requirement discussed earlier. The verb ném, like other class IV and V singular preterit forms, dominates only one mora. In this analysis I contend that cliticization in this instance was further motivated by the fact that the verb, after emerging from the lexicon, failed the

[^12]minimum word constraint. ${ }^{13}$ The integration of the clitic not only incorporated an unfooted syllable, but also effected a prosodic reorganization, through which the monomoraic verb was able to achieve bimoraicity.


This analysis of cliticization as a process of prosodic reorganization is not just a fitting description for our model form. Indeed, it also applies to nearly all of the umlauting data, presented in (27) and reproduced in (41).

| (41) | ném iz 'took it' | I 20, 18 |
| :---: | :---: | :---: |
|  | géb imo 'gave (to) him' | II 13, 30 |
|  | giréh inan 'avenged him' | II 5, 6 |
|  | so wés iz 'so it was' | II 1, 8 |
|  | waz skel iz 'what should it' | II 7, 16 |
|  | scél iz wesan 'should it be' | IV 8, 16 |
|  | drénk ih 'I drank' | II 8, 52 |
|  | Er werf iz 'He threw it' | II 11, 19 |
|  | Ni wérd iz 'it did not become' | IV 14, 3 |
|  | wérd iz 'it became' | III 9, 4 |
|  | Wio meg ih wizzan 'How can I know' | I 4, 55 |
|  | Wio meg iz 'How can it' | I 5, 37 |
|  | ih meg iz lóbon 'I can praise it' | I 18, 4 |
|  | wio meg ih 'how can I' | I 25,8 |
|  | ni még iz werdan 'it cannot become' | III 13, 24 |
|  | ni meg iz wérdan 'it cannot become' | IV 11, 29 |
|  | ih meg iz báldo sprechan 'I can say it confidently' | IV 12, 58 |
|  | wio még iz 'how can it' | V 1, 43 |
|  | ni még ih thaz irkóboron 'I cannot overcome that' | V 7, 35 |
|  | wes még ih fergon méra 'what more can I request' | V 25, 36 |

Consider the case of the umlauting modal verbs: $m e g i h / i z$ and skel $i z$. These attestations are slightly different than ném $i z$ in that the host is, itself, a function word. As such, the aspiring host, just as the pronoun that follows, emerges from the lexicon without lexical stress and, hence, unfooted. The modal does not gain pword status until after it emerges from the lexicon, at which point it receives sentential stress ${ }^{14}$ and can, subsequently, form a foot. Though the verb now does qualify as a pword, it fails to meet the bimoraicity requirement, just as we found with ném iz.

[^13]In accounting for the rest of the forms in (41), we note that the attestation involving the verb wesan would be subject to the same analysis as ném iz. In this case, the verb 'to be,' OHG wés iz 'it was,' is not being used as an auxiliary, but rather as a lexical verb.
(42) so wés iz mit gilústi in theru drúhtines brústi

II 1,8
so was it with desire in the lord-GEN breast
and so it was (existed) with desire in the lord's breast

Given the context in which this form is attested, we should not treat wesan as a semantically empty auxiliary, but rather should analyze it as a lexical word that received stress in the lexicon and, thus, emerged as a pword. Two other umlauting clitic groups stand out as unique in that they involve the cliticization of a disyllabic pronoun: géb imo 'gave (to) him' and giréh inan 'avenged him'. Also noteworthy is the fact that both of these pronominal enclitics have frequently attested reduced forms, i.e., mo and nan, respectively. Yet, it is not the reduced pronoun that is integrated into the monomoraic pword of the host. ${ }^{15}$ Indeed, it is likely that cliticization would be blocked were the pronoun to surface in its reduced form, because clusters $/ \mathrm{bm} /$ and $/ \mathrm{hn} /$ are not attested in OHG in syllable-initial position. It would even be possible to posit that the verb's prosodic deficiency inhibited any reduction of the pronoun, which had to maintain its full form in order to allow for cliticization. Despite their singularity, though, géb imo and giréh inan are still subject to the same analysis we applied to ném iz; i.e., cliticization effects the prosodic integration of an unfooted syllable and is also motivated by the host's monomoraicity.

We are now left with only four of the twenty umlauting forms: two attestations of wérd $i z$, werf iz and drénk ih. In all of these cases, we immediately note that the host is bimoraic and, therefore, does not suffer from the same prosodic deficiency attested in the other tokens. We can, therefore, assert that cliticization was motivated by the presence of a stray syllable at the postlexical level. As these prosodically robust hosts are in the minority, we may conclude that these forms represent outliers among the umlautung sttructures. Cliticization is, more often than not, effected by the deficiency of lexical host, as well as prosodic status of the pronoun. In this respect, we may characterize it as a process of prosodic organization, through which constituents are formed and reformed in the hopes of attaining preferred prosodic patterns, in this case, the bimoraic pword. We have also noted in this chapter that cliticization in Otfrid need not involve phonological reduction of the clitic. Rather, it is this imperative of prosodic organization that is critical in the formation of the umlauting data. As subsequent chapters expand the dataset to include other attestations of [host + clitic] sequences, we will see that the patterns identified here are observable throughout the Evangelienbuch.

[^14]
## 3 Theih, theiz and theist: a case of form fossilization?

### 3.1 Theih, theiz, theist and the grammaticalization cline

The next group of Otfrid attestations under consideration is closely related to the umlauting clitic groups discussed in chapter two, which include examples such as ném iz 'threw it' and még ih 'I am able to.' Similar to the analysis presented in chapter two, this section begins with the, as yet unestablished assumption that theih, theiz, and theist are all the product of an active process of cliticization, the full form variants being thaz ih 'that I,' thaz iz 'that it,' and thaz ist 'that is,' respectively. Sample attestations are presented in (1).
a. ni wáne theih thir gélbo I 23, 64
NEG think that-I you deceive
Do not think that I deceive you
ni scríbu ih hiar in úrheiz thaz ih gewísso ni weiz
NEG write I here imprudently that I certainly NEG know
I do not imprudently write here, what I certainly do not know
b. firnámun in giwári theiz ein gidróg wari

III 8, 24
perceived in truth that-it a ghost would have been
They perceived in truth, that it would have been a ghost
uns thúnkit in giwíssi, thaz iz hónida si III 19, 6 us-DAT seems in certainty that it mockery be
It certainly seems to us, that it be mockery
c. Thaz sér thaz thar ruarit mih, theist léidon allen úngilih V 7, 25
the pain that there strikes me that-is afflictions-Dat all unequal The affliction that strikes me there, that is unequal to all (other) afflictions

Thaz íst ouh dag hórnes joh éngilliches galmes
V 19, 25 that is also day horn-GEN and angelic song-GEN That is also the day of the horn and of the angelic song

Another point of intersection between the [host + clitic] sequences of the previous chapter and the theih forms is that both sets of attestations exhibit phonological umlaut triggered by a clitic pronoun. In analyzing this new group of forms, this chapter will show that the umlauting structures of chapter two are not as exceptional as they may first appear. In fact, the processes that yield ném iz are widely productive in the shaping of prosodic constituents throughout the Evangelienbuch. A examination of theih, theiz, and theist will serve as our point of departure in establishing how robust these prosodic patterns are.

A notable difference between these two groups of forms is that the cliticized variants of thaz ih, thaz iz, and thaz ist are far more frequently attested throughout the five books of the

Evangelienbuch, with a total of 189 tokens. This broad attestation pattern stands in contrast to the relatively infrequently occurring umlauting structures of chapter two. A numerical breakdown of the theih structures according to book and form type is provided below in (2).

| $(2)$ | Book I |  | Book II |  | Book III |  | Book IV |  | Book V |  | TOTAL |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | cl. | full | cl. | full | cl. | full | cl. | full | cl. | full | cl. | full |
| theih | 9 | 22 | 9 | 11 | 16 | 10 | 12 | 18 | 11 | 18 | $\mathbf{5 7}$ | $\mathbf{7 9}$ |
| theiz | 12 | 2 | 18 | 2 | 16 | 5 | 11 | 3 | 20 | 2 | $\mathbf{7 7}$ | $\mathbf{1 4}$ |
| theist | 11 | 1 | 11 | 6 | 10 | 12 | 10 | 6 | 17 | 11 | $\mathbf{5 9}$ | $\mathbf{3 6}$ |
| Total | 32 | 25 | 38 | 19 | 42 | 27 | 33 | 27 | 48 | 31 | 193 | 129 |

*cl. $=$ cliticized form; full $=$ full form

The full, or noncliticized, forms in (2) comprise all of the cases in which the relevant collocation is present, i.e., in which thaz is followed by $i h, i z$, and ist, but cliticization did not take place and two separate pwords were maintained. It is also important to note that, altogether, cliticized forms outnumber the full form variants 193 to 129, though there are differences from one type to the next. Specifically, the uncliticized thaz ih sequence is more frequently attested than its cliticized variant theih. In contrast, in the case of both theiz and theist, the attestations of the clitic group outnumber the full, uncliticized sequences.

Given the frequency with which the author opted for cliticized over uncliticized structures, we must consider the question of lexicalization, as defined in Janda (1998). In the case of the ném iz attestations, I argued against Janda's claim that these structures had been lexicalized, noting that the wholesale adoption of items such as werf iz 'threw it,' notably with $i z$ as a direct object, and giréh inan 'avenged him' into the lexicon was highly improbable. The simple fact that umlauting forms and non-umlauting forms, e.g., meg ih and mag ih, cooccur provides additional evidence that these clitic groups are not lexicalized structures. Yet, can we make the same argument for theih, theiz, and theist, or can Janda's lexicalization argument adequately account for the data? Can we analyze these clitic groups as structures that are actively derived in the lexicon, or should we treat them as having undergone some degree of lexicalization? Unlike the ném iz forms, which do not survive Otfrid, theih, theiz, and theist are attested in Middle High German (MHG) as deich, deiz, and deist, respectively (Paul, Schröbler, Wiehl \& Grosse 1998: 35, 221). Clues that these MHG forms have been lexicalized or grammaticalized ${ }^{1}$ to some extent can be found in their phonological composition. For example, deiz both exhibits umlaut and contains the umlaut-trigger $i$, even though the OHG subject pronoun $i z$ has, in the meantime, become MHG ez. The structure deist is also attested in MHG as dêst and dest, thereby showing the kind of phonological reduction that generally seems to characterize lexicalization or grammaticalization processes. Further reduction can be seen in this clitic group when it combines with wâr in a collocation that is frequently produced in MHG poetic texts deiswâr < daz ist wâr, 'that is true.' Hence, we know that theih, theiz, and theist persist

[^15]into later stages of German and change, and that these MHG forms cannot be considered actively produced clitics. What still needs to be established, however, is whether or not the Otfridian forms have been lexicalized, as defined by Janda (1998). In order to accomplish this, we must first examine the traditional treatment of clitics within grammaticalization theory.

In much of the literature that exists on the topic, scholars treat clitics as the central actors in the process of grammaticalization. According to this view, different types of clitics are located on the grammaticalization cline, as seen in (3), which is based on Zwicky (1977) and presented in Klavans (1982).
(3) (lexical) word $>$ simple clitic $>$ special clitic $>$ (bound) affix

Unequivocal in the presentation of this cline is the famous dictum " $(\mathrm{t})$ oday's morphology is yesterday's syntax" (Givón 1971: 413); i.e., that clitics represent the way station in a unidirectional process through which free-standing words, whose ordering was once dictated by syntax, become increasingly grammaticalized. This grammaticalization process limits the clitic's movement within the clause, until its position becomes set and the original clitic, now an affix, is inextricably bound to its host. Implicit in the presentation of this cline is that the cliticized syntagm, or clitic group, originally derived postlexically, is eventually adopted into the lexicon and accessed by the speaker as one fixed unit. The process through which a clitic group becomes part of the lexicon can be referred to as "lexicalization," which is the term that Janda (1998) employs. Caution must be taken in the use of this term, however, because it can also be used in a quite different manner. Within the framework of grammaticalization theory, "lexicalization" also refers to a phrase or syntactically determined lexical item that becomes lexically listed and develops new semantics which cannot be derived from its original constituent parts, e.g., OE hlaf-weard 'loaf guardian' > lord. In one important way lexicalization, as we have just now defined it, and grammaticalization actually describe fundamentally similar phenomena in that they both refer to processes through which a syntagm may be added to the lexicon. In the case of grammaticalization, an originally syntactically determined phrase also becomes part of the lexicon as one fixed unit. However, in contrast to the lexicalized syntagm, the grammaticalized structure serves a more grammatical function; e.g., a former pronominal enclitic becomes an affixial inflectional marker. The products of grammaticalization processes are often semantically bleached, whereas the fossilized syntagm that undergoes lexicalization takes on new semantics (Hopper \& Traugott 2003; Wischer 2000; Lehmann 2002; Brinton \& Traugott 2005). ${ }^{2}$

Given the two processes presented above, theih, theiz, and theist should likely be discussed within the framework of grammaticalization. In all three cases, cliticization generally involves a host and clitic that are both function words, i.e., thaz as a complementizer or demonstrative, the pronouns $i h$ or $i z$ and ist as an auxiliary and a main

[^16]verb ist. ${ }^{3}$ It seems possible that, if these clitic groups should become lexically listed, we would observe a semantic bleaching of the affected constituents and increased grammatical function of the clitic. However, for the purpose of the present analysis of the OHG attestations, whether one treats these forms as moving toward lexicalization or grammaticalization is irrelevant. Instead we must first focus on the question of whether or not the forms in question exhibit any signs of having been adopted into the lexicon, a concept that I will henceforth refer to as "form fossilization." A formal definition of this term is presented in (4).
(4) FORM FOSSILIZATION: Form fossilization describes the process through which a [host + clitic] sequence, originally the product of an active phonological process of cliticization, becomes lexically listed, at which point the [host + clitic] sequence is produced wholesale by the speaker.

In adopting this term we accomplish two goals. First, we avoid any confusion that may arise from the use of the term "lexicalization," which can refer to two distinct processes. More importantly, when we talk about form fossilization as it is defined in (4), we are forced to separate and describe all of the different phenomena that are generally characterized simply as grammaticalization processes.

Primarily, then, we will look to answer the following questions: Are there any indications that Otfrid's theih, theiz, and theist have been adopted as fixed units into lexicon, or are these forms still phonologically derived? Given the prominent role played by clitics in Zwicky's cline as well as in grammaticalization theory in general, we may consider analyzing the Otfrid data according to the simple clitic-special clitic distinction, the latter of which is more "grammaticalized" than the former. However, any focus on the question of grammaticalization at this stage would be premature, as we must first establish if the theih structures are fossilized in Otfrid. In fact, in this analysis I argue that form fossilization is a necessary, though, we will find, not sufficient condition for any potential subsequent grammaticalization or lexicalization processes. To take the argument one step further, this chapter assumes that it is form fossilization that renders a clitic group vulnerable to the host of processes generally categorized under the rubric of "grammaticalization" (e.g., the development of idiosyncratic syntax, semantic bleaching, etc.). If we are able to establish form fossilization for these Otfrid attestations, then we can examine the data for evidence of the various types of grammaticalization or lexicalization processes that might result from the clitic groups' inclusion in the speaker's lexicon.

The crucial next step then is to define what constitutes a fossilized form and describe what such a form might look like. Before we do this, however, it is important to consider the theoretical assumptions on which the present analysis relies. As is becoming evident, this chapter draws from both formalist and functionalist approaches to language production and language change. My model for language production is decidedly generative in that I assume that linguistic output, phonological-morphological, as well as syntactic, is the manifestation of an individual's rule-based grammar and the operation of constraints. Where I deviate from the generative framework is in my belief that frequency of production can play a pivotal role in the ways in which grammars change. This view is more in

[^17]keeping with functionalist and analogy-based models of language change presented in works such as Fischer (2007: 131-135), Hopper \& Traugott (2003), and DuBois (1985: 359-60, cited in Fischer 2007). Indeed, I believe that the theih data discussed below shows that frequency of token production is an important factor in form fossilization, which in this work is treated as a precursor to lexical change. Certainly the approach offered here adopts tenets that some adherents of formalist and functionalist theories might consider anathema. Though it may lack a certain degree of theoretical fidelity, the current model has the important advantage of being able to accurately account for the historical data, as I hope this analysis shows.

Before we discuss the ways in which fossilized clitic groups might look and behave differently than non-fossilized clitic groups, it would be helpful to consider how a fossilization process might unfold. This analysis has already argued that the frequency with which a particular syntagm is attested relates to the question of fossilization. In fact, in chapter two I argued against a "lexicalized," or fossilized treatment of forms such as giréh inan 'avenged him' and werf iz 'threw it,' based on the assertion that these are relatively low frequency collocations. Central to this argument is the notion that a syntagm must be commonly attested in the spoken language in order for it to become part of the lexicon as one fixed unit. If speakers produce a particular clitic group frequently, it is not unreasonable to assume that they might, over time, adopt the structure wholesale into their lexicons. Once the structure is lexically listed, the clitic group is no longer the product of active phonological processes but is accessed by the speaker as one unit. After fossilization has occurred, it is likely that the affected form would initially still enjoy a strong semantic and syntactic connection to its full, uncliticized counterpart. Yet, one can imagine how a fossilized form might eventually lose this connection to the uncliticized, non-fossilized form. In this case, we might expect part of the fossilized form to become semantically bleached and take on a more grammatical function (e.g., a clitic becomes an affix), or perhaps the non-fossilized variant begins to surface in syntactic positions not available to the fossilized structure, whose syntactic structure has been frozen through fossilization.

Based on the scenario depicted in the above paragraph, this analysis examines a number of indicators that point to a structure's status either as a fossilized or non-fossilized form. One such indicator would be how frequently the cliticized variant surfaces relative to the uncliticized sequence. That the cliticized structures discussed in chapter two are not broadly attested throughout the Evangelienbuch and are, therefore, somewhat exceptional, speaks against the assertion in Janda (1998) that they had been incorporated into the lexicon. With regard to frequency, however, the data look quite different in the case of the forms theih, theiz, and theist. A breakdown of the number of attestations is provided in (5).

| (5) |  | number of <br> cliticized forms | percentage of <br> cliticized forms | number of <br> full forms | percentage of <br> full forms |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | theih | 57 | $41.9 \%$ | 79 | $58.1 \%$ |
|  | theiz | 77 | $84.6 \%$ | 14 | $15.4 \%$ |
|  | theist | 59 | $62.11 \%$ | 36 | $37.89 \%$ |
|  | Total | $\mathbf{1 9 3}$ | $\mathbf{5 9 . 9 4 \%}$ | $\mathbf{1 2 9}$ | $\mathbf{4 0 . 0 6 \%}$ |

We see in the above figure that, on the whole, the cliticized structures outnumber the uncliticized full forms; out of the total 322 times in which the necessary collocation is
present, the author opts for the cliticized variant almost sixty percent of the time. If we break the data down further according to form type, we notice that, in the case of theiz, the cliticized form is favored nearly eighty-five percent of the time. The clitic group theist also makes up a majority of the attestations, though a slightly more modest one. It is only with the clitic group theih that we actually see the full form, in this case thaz ih, outnumbering its cliticized counterpart.

Given the frequency with which the clitic group variant is attested in the text, we must consider the possibility that these forms have been fossilized. This is especially the case for theiz, for which the potential for fossilization seems the greatest. Frequency alone, however, does not make the case for or against fossilization. As we can recall from chapter two, the fact that both subject and object pronouns (e.g., ih 'I,' inan 'him,' iz 'it'-as subject and object, etc.) are subject to this process of cliticization is evidence that such forms were actively produced, not lexically listed. Based on this observation we may identify another indicator, which we can then apply to the data in question; i.e., we can expect a clitic in a fossilized structure to always come from the same syntactic category. To reiterate, a fossilized structure must be equated with fossilized syntax. If we truly have a syntagm that has been adopted into the lexicon, we should not see variation in the syntactic identity of the constituent parts that comprise the lexical entry. With regard to syntax, we will also consider if clitic groups and their full form counterparts surface in different positions in the clause, as this would be another clue that would point to form fossilization. An assessment of the syntactic structure of the theih clitics, however, requires that we pause in our discussion of the question of form fossilization and consider the syntactic landscape in which the relevant forms were produced. We will also take this opportunity to re-present, and refine, the argument against a fossilized understanding of the ném iz forms, an analysis that will serve as a useful counterbalance to a similar treatment of theih, theiz, and theist. But first, let us look to the OHG clause and make explicit those assumptions regarding syntactic structure upon which this analysis is based.

### 3.2 Early Germanic and OHG clause structure

There is a good reason why, to date, no comprehensive account of clause structure in the Evangelienbuch exists-Otfrid's poetic composition has yielded a host of seemingly unwieldy clauses that stubbornly defy categorization. For this reason, scholars who are interested in OHG clause structure will often pass up the Evangelienbuch as a source of data, despite the fact that it is an original and extensive composition in the vernacular. Some studies, mainly Robinson's (1997) study on OHG clause subordination and verb placement, turn to prose texts, in this case, the Isidor translation. Other works, such as Wunder's (1965) Der Nebensatz bei Otfrid attempt a topological classification of the Evangelienbuch's clauses, but quickly become mired in the considerable variation exhibited in the ordering of syntactic constituents. The most thorough treatment of OHG syntax of which I am aware is Axel (2007), which looks at various topics including left
periphery phenomena and the placement and movement of the verb. ${ }^{4}$ Though the Evanglienbuch is certainly discussed in the work, Axel's main corpus comprises the major OHG prose texts, i.e., the Isidor, the Monsee Fragments and Tatian, as well as Notker's Consolatio and Williram's paraphrase of the Song of Songs. The purpose of the current discussion of clausal structure is not to present a comprehensive description of Otfrid's syntax, but rather to provide enough of a structural framework to facilitate an examination of the syntactic similarities and differences in the attested clauses. The following arguments will make reference to X-bar theory.

The conception of OHG clausal structure adopted by this analysis is based on the account presented in Dubenion-Smith \& Somers Wicka (2004), which draws crucial components of its analysis from Lenerz (1985) and Pittner (1995). According to this view, the structure of the OHG clause is intimately related to the clause's diachrony. Therefore, it is worth considering what the early Germanic, or pre-OHG clause looked like. It is generally agreed that early pre-OHG clausal structure did not have a complementizer phrase (CP) framework at its disposal; i.e., all clauses were verb-final, free-standing tense phrases (TP) (e.g., Lenerz 1985; Abraham 1993; Kiparsky 1995). Upon development of a CP, the original TP structure was not simply abandoned. In fact, free-standing, verb-final TPs are attested in Otfrid, as well as in other forms of Germanic (Hêliand attestations are drawn from Dubenion-Smith \& Somers Wicka figure (2)).

## (6) Otfrid:

Ir zéichan ni giscówot thanne iu wírdit so nót III 2, 11
you-PL the signs NEG look when you-dat became so necessary
You did not look at the signs, when it became unto you necessary
Uns állen thaz giwís ist tház thu selbo Kríst bist III 12, 25 us-DAT all that certain is that you yourself Chist are That is unto us all certain, that you yourself are Christ

So ther ántdag sih tho óugta thaz siu thaz kind I 14, 1 so the day of remembrance Refl then came that she the child sougta
nursed
And so the day of remembrance came, that she nursed the child

## Old Saxon:

nu uuit sus gifrôdod sint
Hêliand $150^{5}$
now we-DU very aged are
Now we two are very aged
Ik is engil bium
Hêliand 119
I his angel am
I am his angel
Constituents residing within this basic framework could then be fronted or extraposed for pragmatic purposes. A particularly productive process of left dislocation involved the finite

[^18]verb, which, when moved to clause-initial position, would constitute an expression of greater illocutionary force ( + IF). That this type of movement was robustly attested can be seen in the Otfrid data itself, which exhibit numerous finite verb-initial clauses throughout the Evangelienbuch. A small sample of this data is presented below in (7).
(7) Fúar tho sancta Mária, thíarna thiu mara,

I 6, 1 traveled then saint Mary maid the famous Then saint Mary, the famous maid, traveled...

Bigínnu ih hiar nu rédinon, wio ér bigonda brédigon
II 7, 1 began I here now to relate how he began to preach I will begin now here to relate, how he began to preach

Bigan drúhtin eines rédinon gisuáso mit then théganon III 12, 1 began the lord this-GEN to speak intimately with the followers The lord began to speak of this intimately with the followers

Giang Pilatus wídari mit ímo tho in then sólari
IV 21, 1
went Pilate in turn with him then into the hall Pilate, in turn, went then with him into the hall

Warun thie júngoron tho bi fórahtun thero Júdono V 11, 1 were the disciples then for fear the Jews-Gen The disciples were then, for fear of the Jews...

Observe that the above examples are unambiguous cases of finite verb-initial clauses, in that they all constitute the first clause of their respective chapters. One might also note that the opening line of a chapter would be the ideal place to find a pragmatically more prominent utterance, which would serve to focus readers' attention to the new setting and content of a different section of composition.

Lenerz (1985) and Dubenion-Smith \& Somers Wicka (2004) argue that this productive process of left-dislocation, of which we still find significant traces in Otfrid, led to a reanalysis of the pre-clausal TP landing site, which speakers came to interpret as part of the clausal structure, rather than a mere adjunct. That the preposed element was often the finite verb also prompted speakers to analyze this new C as a syntactic position that was linked to inflection, a process that is illustrated in (8).
a. Pre-OHG TP structure

b. Innovative CP structure


In (8b) we can see how the former adjunct has been incorporated into the larger clausal structure-it has been analyzed as a functional head which projects into its own phrase, the CP . Parallel to the emergence of the CP in Germanic is the development of relative pronouns and complementizers out of demonstrative pronouns. As argued in Pittner (1995), this original class of demonstratives could function as anticipatory correlatives, which were located within the matrix clause, but referred to an NP in the following clause. Evidence of this particular phenomenon can be seen in those attestations in which the relative construction bore the case of its antecedent in the matrix clause. (9a) and (b) are drawn from Pittner's figure (1).
a. Sendida mih [...] zi dheodom, dhem euuuih biraubodon sent me to them-DAT that-DAT you robbed Sent me to the people that robbed you
b. Thaz íz liuhte allen then in húse sint that it shines all-dat those-dat in house are That it shines unto all who are in the house
c. Ságet in ouh zi wáre fon themo éndidagen tháre

IV 7, 27-29 told them also certainly of the last days there It also certainly told ${ }^{6}$ them there of the end of the world
giwúag in ouh ginóto thes ántikristen zíto mentioned to them also necessarily the anti-Christ-GEN hours also necessarily mentioned to them the hours of the anti-Christ Thes githuíngnisses thes wórolt thúltit thanne lés the affliction-GEN those things-GEN world-NOM suffer then oh The affliction, those things the world will then suffer, oh

[^19]In all of the examples presented in (9) the bolded pronouns have been assigned the case of the antecedent located within the matrix clause. In the case of (9a) and (b) we find that the NP carries the dative case, as opposed to the nominative case it should have received as a predicate nominative in the subordinate clause. In (9c) the accusative object in the subordinate clause is marked with the genitive case determined by the verb giwâhan in the matrix clause. With regard to case assignment, the correlative pronouns in the examples above can be seen as originating from the matrix clause.

According to Louden (p.c.) this analysis of the evolution of the relative pronoun in Germanic can be extended to the emergence of the complementizer dass, which also developed out of the class of demonstratives. In this case, the demonstrative pronoun thaz, which originated in the matrix clause, was extraposed and, finally, reanalyzed as belonging to the subsequent clause. This process would look as follows.
(10) [ich das wusste $]_{\mathrm{TP}}[\text { sie da waren }]_{\mathrm{TP}}$ 'I knew, that they were there'

I that knew they there were
$\left[\text { ich }_{t} \text { wusste }_{\text {TP }} \text { das[sie da waren }\right]_{\text {TP }}$
[ich wusste $_{C P} \quad[\operatorname{das}(\mathbf{s}) \text { sie da waren }]_{\mathrm{CP}}$
This picture of clausal development in Germanic has certain implications for the current analysis of the Otfrid data and does much to explain the structural ambiguities that are evident in these attestations. For example, as Piper (1887) notes in his comprehensive edition of the Evangelienbuch, the pronouns ther-MASC, thiu-FEM, and thaz-NEUT (corresponding to modern German der, die, and das) and their inflected derivations are, on one hand, becoming semantically more bleached and are often used as articles. ${ }^{7}$ On the other hand, however, they also still function as demonstratives, which continue to carry the full semantic weight of a substantive. We further see these pronouns functioning much like a modern relative pronoun. (11) presents the considerable functional breadth of the demonstrative pronoun in Otfrid.
a. Ladotun ávur tho then man ther thes gisíunes biquam III 20, 105 invited but then the man-ACC who sight acquired But they invited then the man, who had acquired the ability to see
b. "Oba thu Helías avur bíst ther uns kúnftiger ist

I 27, 23
If you the savior are who-NOM us-dAT forthcoming is If you are the savior, who is unto us forthcoming
c. Thes scímen thi ih nu zélita thes sih io IV 33, 7 this brilliance-GEN which-ACC I now tell which-GEN REFL ever wórolt frewita the world rejoiced
Of this brilliance, of which I now told, in which the world rejoiced

[^20]d. (gisuáso joh thin kúndo ist then thu bi námen nennist) V 8,30
intimately your friend is the one-ACC you by name name
And intimately is your friend the one you name by name
e. Thaz thén ni tharf man béiten aftar stétin leiten III 2, 17-18
that the one-ACC NEG need one force-INF to places lead-INF
ther so kréftiger ist
the one so stronger is
That one need not force him, lead (him) places, that one is in this way stronger
f. Ther jú ni liaz in nótin régonon then líutin III 12, 15-16 that one-NOM NEG let in need rain-INF the people-DAT
thuángta sie giwáro hárto filu suáro oppressed them indeed very very sorely That one did not let (it) rain in need unto the people, (he) oppressed them indeed very, very sorely

In the first three examples (11a), (b), and (c), we have demonstrative pronouns being used in a way that is decidedly 'modern;' i.e., in all cases a relative pronoun refers to an NP in the previous clause and bears the case dictated by the clause in which it is embedded, not the clause in which its referent resides. As it will play a role in the analysis of the theih structures, we may also briefly note the use of the relative pronoun thi in (11c), which is attested rather than the masculine nominative singular pronoun then. In Otfrid, one often finds thi or the used in relative constructions in place of the demonstrative ther for any case or number. In contrast, the attestations presented in (11d), (e), and (f) show the demonstrative in Otfrid functioning as a substantive.

This ambiguity in pronominal function can be connected to clausal ambiguity as well, especially if OHG speakers had both TP and CP clausal structures at their disposal, as this analysis contends. The figure in (12) illustrates this point.
(12) Helías sis ther máro

Elia, (you) be this famous one,
ther thiz lánt so tharta
a. who made this land so wither
b. this one made this land so wither

There are, in fact, two possible ways to parse the above clauses, and one's analysis is dependent upon whether one chooses to treat the second pronoun ther as a relative or demonstrative pronoun. Should we opt for the interpretation provided in (12a), then we must assume a CP clause structure. It is also possible, however, to argue that the pronoun is a demonstrative residing in a free-standing TP structure. Diagrams of these two potential analyses are provided in (13).
(13)
a. ther thiz lánt so tharta
who made this land so wither ( CP )



b. ther thiz lánt so tharta
this one made this land so wither (TP)


Both structures presented in (13) are possible interpretations of the clause, yet the data themselves do not indicate that one analysis should be favored over the other. There are attestations, however, in which the syntactic function of an apparent relative pronoun is clear, and it is in these cases that we may connect the way in which a pronoun functions syntactically to a particular clausal framework. To elucidate this point, consider the next set of examples in (14).
a. Quad ér theih thir gibiete thaz hábe thu fasto in múate V 15, 7 said he that-I you-dAT command-SBJV that have-IMP you fast in heart He said, "that (thing) I might command you, you should have that (commandment) fast in (your) heart"
b. Intérent iz ouh filu fram álle these kóufman dishonor-3.PL it also very much all these merchants

II 11, 26
joh these mézelara thaz ságen ih iu in wára and these hucksters that tell I you-pl in truth (They) dishonor it also very much, all these merchants and these hucksters, I tell you that (thing) in truth
c. Tho drúhtin themo mán luag thes ih hiar óbana giwúag

II 6, 4
then lord the man-dat barred that-GEN I here above mentioned Then the Lord barred unto man that (thing) I mentioned here above
d. Thes fáter min mir giónsta theist álles guates fúrista III 22, 29 that father my me-dat bestowed that-is all-GEN holiness-GEN highest That (thing) my father bestowed unto me, that is the highest of all holiness

In all of the examples in (14), the bolded pronoun is unambiguously functioning as an original demonstrative, not as a relative pronoun. Yet, in these four clauses we also see variation in the placement of the finite verb, a fact that can be explained if we analyze the
data within two separate clausal frameworks. Specifically, I argue that the underlined clauses in (14a) and (14b) are examples of CPs, whereas those in (14c) and (14d) are TPs. In the case of the latter two examples, then, I opt for the structure presented in (15a), as opposed to the structure in (15b).
(15) a. thes ih ... giwúag (TP)

b. thes ih ... giwúag (CP)


Assuming a CP structure for this clause, as seen in (15b), is problematic in that, with the movement of the pronoun thes to $\operatorname{Spec} C \mathrm{P}$, we would also expect to see the finite verb raised to C. The TP framework, on the other hand, nicely accounts for the attested word order. In the examples presented in (14a) and (14b) we see exactly the type of verb raising expected in a CP with the pronoun fronted to Spec CP .
(16) thaz ságen ih iu in wára


It is important to note that the data considered in (14) are fairly clear-cut with regard to clause structure, because of the canonical placement of the finite verb. However, the same could not be argued for a number of other clauses in the Evangelienbuch, some of which show significant variation in the ordering of syntactic constituents. Two such examples can
be found in (11e) and (11f). The issue of variation will be addressed in greater detail at the end of this section.

Ambiguity similar to what we saw in the case of the demonstrative/relative pronoun is also evident in the use of the demonstrative thaz, which also serves a complementizer in Otfrid. The range of structural uncertainty inherent in these attestations is illustrated below.
a. Thir willu ih géban innan thés slúzila hímiles

III 12, 37-18
you-dat shall I give in the meantime keys heaven-GEN
thaz thu wáltes álles thes selben ínganges
that you be powerful all-GEN this-GEN same entrance-GEN
I shall give you, in the meantime, the key(s) of heaven (so) that you might be powerful over all of this same entrance
b. Uns állen thaz giwís ist tház thu selbo Kríst bist

III 12, 25
us-DAT all that known is that you yourself Christ are
That is known unto all of us that you yourself are Christ
c. Thie líuti datun mári thaz Johannes Kríst wari

I 27, 1
the people made known that John Christ was-Pret.Sbjv The people made (that) known that John was Christ
d. Ih scal thir ságen min kínd then híon filu

II 8, 13-14
I should you-dat say my child the spouses-DAT very hébig thing
burdensome affair-ACC.SG
theih míthon ouh nu wésta thes wínes ist
that-I in the meantime also now knew the wine-GEN.SG is
in brésta
them-DAT shortage-NOM.SG
I should tell you, my child, a shortage of wine is unto them, the spouses, a very burdensome affair, that I also now knew in the meantime
(17a) shows thaz functioning as an unbiguous complementizer; i.e., thaz could not be a demonstrative that has been extraposed from the initial clause. The pronoun also cannot be a preposed demonstrative of the second clause. In fact, if one considers the semantics of the utterance, a complementizer analysis of thaz is the only one that fits. In (17b) and (17c) we have two cases in which a complementizer analysis seems the likely choice. In fact, in either example it would be structurally impossible to treat thaz as a demonstrative belonging to the second clause, which is, in both cases, a predicate construction. However, for (17c) there is still the possibility of treating thaz as a demonstrative that has been extraposed from the initial clause and is followed by a verb-final TP. This analysis does not seem applicable to (17b), though, with the object thaz still present in the matrix clause. In our final example in (17d) we have our most ambiguous clause in this group, and whether one treats the thaz in theih as a demonstrative or complementizer is entirely dependent upon what kind of relationship one assumes this clause has to other clauses contained in the utterance. On one hand, we may assume that 'theih mithon ouh nu wésta' is a dependent clause connected to 'Ih scal thir ságen, min kind', in which case thaz should
be analyzed as a complementizer. It is also possible, however, to treat 'theih mithon ouh nu wésta' as a free-standing, verb-final TP and thaz as a preposed demonstrative pronoun.
(18) a. theih míthon ouh nu wésta (CP)
that I in the meantime also now knew

b. theih míthon ouh nu wésta (TP)
that (thing) I in the meantime also now knew


In (18a) 'theih mithon ouh nu wésta' would be seen as a dependent clause connected to the initial matrix clause. We could also potentially analyze the remaining clausal material, 'then hion filu hébig thing' and 'thes wines ist in brésta' as the final subordinate clause, which would leave a trace in the syntactic structure of the clause in question, as seen in (18a). Perhaps the simpler analysis is the one presented in (18b), however, which assumes that thaz is a demonstrative in a interjected, stand-alone TP. Though this is a point to which we will return in greater detail below, it is important to briefly note right away that the structures presented in (18) assume that the form theih comprises host and clitic, both of which occupy their own positions within the syntactic tree. This conclusion is obviously relevant to the question of form fossilization posed in the previous section of this chapter.

In addition to the uncertainty that results from the presence of two potential clausal structures in the grammar, the TP and the CP, we must consider yet another source of syntactic ambiguity. Indeed, we cannot ignore the fact that the Evangelienbuch is a poetic text in which the author is free to take considerable liberties in the ordering of constituents. In many cases, we can see how the extraposition of a constituent may have been motivated by the rhyming imperative. (19) illustrates this possibility.
(19) Er tho then júngoron gibót thaz sie iz hálin thuruh nót

III 13, 1-2
(a) théiz ni wurti
mári
that-it NEG would have become known
(b) thaz er Kríst wari that he Christ would have been

He then commanded the disciples, that they would not have concealed it out of necessity [...]
(a) that it would not have become known
(b) that he would have been Christ

In this case, thaz, contained within the structure théiz, functions as an unambiguous complementizer. Its status as a complementizer allows us to assume a CP clause structure, in which we would expect the finite verb in word-final position, as we see in (19b). In contrast, the clause in (19a) does not meet these expectations with the finite verb wurti seemingly located in the penultimate structural slot. A possible explanation for the unexpected placement of the verb is that the constituent mári was extraposed, in order for the author to maintain the rhyme, as shown in (20).
(20) théiz ni wurti mári


In this respect, we may still view the example in (20) as a finite verb-final CP , though it is a clause that exhibits a certain amount of poetic license in the ordering of constituents.

This discussion has pointed to three separate characteristics of OHG clause structure all of which are relevant to the question of the fossilization of cliticized structures. First, the text presented in the Evangelienbuch, from a syntactic standpoint, is the product of two different, yet related, clause structures, the original TP and the innovative CP. Second, within these clausal frameworks, constituents may be, and often are, extraposed or preposed. And last, this shifting of a constituent out of the main clause structure is motivated by a number of factors; e.g., a finite verb contained within a free-standing TP may be preposed for pragmatic reasons, in order to effect greater illocutionary force. On
the other hand, a constituent may also be shifted to the end of a clause in order to sustain the rhyme. The way in which these factors shape the syntactic landscape of the text is clear-they significantly obfuscate the syntactic realities of the Otfridian clause. Despite this opacity, however, we may hold to the clausal characteristics just outlined above, while we address the central question of this chapter.

### 3.3 Lexically listed or actively derived? The case against a fossilized understanding of theih, theiz, and theist in Otfrid

In order to begin answering the question that serves as the title for this section, we must first look to establish if the clitics contained in these structures surface in the same syntactic positions as their full-form counterparts. It will also be useful to recall the similar comparison made for the ném iz structures, when we considered their relative placement within the clause in chapter two. These data will be presented again here and recast in the syntactic terms just established in section two of this chapter. (21) and (22) provide clauses that contain both the relevant clitic groups, as well as the uncliticized full form counterparts.

$$
\begin{align*}
& \text { umlauted forms }  \tag{21}\\
& \begin{array}{l}
\text { a. ni drénk ih thes gimáchon } \\
\text { NEG drank I that-GEN equal-ADJ } \\
\text { Never have I drunk its equal } \\
\text { II } 8,52 \\
\text { c. bi thiu wérd iz thar so mári } \\
\text { hence became it there so famous } \\
\text { That's why it became so famous } \\
\text { there III } 9,4 \\
\text { e. ih meg iz báldo sprechan } \\
\text { I can it confidently say } \\
\text { I can say it confidently IV 12, } 58
\end{array}
\end{align*}
$$

unumlauted forms
b. luzil dránk ih es thar barely drank I it-GEN there I barely drank (of) it there

$$
\text { I 9, } 25
$$

d. wio wárd ih io so wírdig How became I ever so worthy How did I ever become so worthy I 6, 9
f. ih mag iz wóla midan

I can it well avoid
I can well avoid it
II 4, 77
(22)


| SpecCP | C | SpecTP | SpecVP | Complement VP | V | T |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. $\mathrm{ni}_{\mathrm{k}}$ | drénk $_{\text {i }}$ | ih |  | thes gimáchon | $\mathrm{t}_{\mathrm{i}}$ | $\mathrm{t}_{\mathrm{i}}$ |
| b. luzil ${ }_{\text {k }}$ | dránk ${ }_{\text {i }}$ | ih |  | es | $\mathrm{t}_{\mathrm{i}}$ | $\mathrm{t}_{\mathrm{i}}$ |
| c. bi thiu ${ }_{\mathrm{k}}$ | wérd ${ }_{\text {i }}$ |  | iz | so mári | $\mathrm{t}_{\mathrm{i}}$ | $\mathrm{t}_{\mathrm{i}}$ |
| d. $\mathrm{WiO}_{\mathrm{k}}$ | wárd ${ }_{\text {i }}$ |  | ih | so wírdig | $\mathrm{t}_{\mathrm{i}}$ | $\mathrm{t}_{\mathrm{i}}$ |
| e. $\mathrm{ih}_{\mathrm{j}}$ | $\mathrm{meg}_{\mathrm{i}}$ | $\mathrm{t}_{\mathrm{j}}$ |  | iz | sprechan | $\mathrm{t}_{\mathrm{i}}$ |
| f. $\mathrm{ih}_{\mathrm{j}}$ | $\mathrm{mag}_{\mathrm{i}}$ | $\mathrm{t}_{\mathrm{j}}$ |  | 1Z | midan | $\mathrm{t}_{\mathrm{i}}$ |

It is interesting to note that, in contrast to the ambiguous clauses we discussed in the previous section, the attestations in (21) represent incontrovertible examples of finite verbsecond CPs (as shown in (22)). In fact, all umlauting clitic groups have a host located in second position. Before continuing with further analysis, we should also briefly discuss (22)'s treatment of the adverbial ni . In our tree structure it is represented as occupying its own structural position, SpecCP, after having been moved from its original $\mathrm{V}^{\prime}$ adjunct position. For the sake of clarity, the trace is not included in the above figure. $N i$, itself, can, and often does cliticize onto a host in Otfrid, e.g., nirdeilet 'did not pass judgment' and the oft-attested nist 'did not.' This analysis, however, does not consider the patterns of nicliticization and assumes that ni, just as the pronominal clitics under examination, occupies its own syntactic position, from which it then may be prosodically and phonologically integrated into a host's structure. Other constituents or traces not included in the figure for the sake of clarity include wio (d), bi thiu (c), and luzil (b), all of which are assumed to be generated as $V^{\prime}$ - or $\mathrm{T}^{\prime}$-level adjuncts.

Also evident in (22) is the fact that I assume that there is a syntactic difference between agentive and non-agentive subjects in OHG and that the former is a true subject located in the SpecTP, whereas the latter is an underlying object that is generated VP-internally. According to works such as Grewendorf (1989), verbs in Modern German that select HAVE as the auxiliary in the perfect tense occur with true, or unaccusative, subjects, whereas verbs that select BE involve underlying objects, or ergative subjects. In this regard auxiliary selection for the formation of the perfect tense can serve as a useful diagnostic for assessing ergativity in Modern German. These syntactic classifications map onto semantic categories; i.e., unaccusative subjects tend to correlate with agentive subjects, which are volitional and animate, whereas ergative subjects correlate with non-agentive subjects, or semantic patients. The semantic difference between the syntactically distinct ergative and unaccusative subject is nicely captured in the two Modern German clauses: ich bin geflogen versus ich habe geflogen 'I flew/have flown'. The use of BE in the initial clause signals that
the subject was merely a passenger on a plane, not the true agent of the action. In the latter clause the auxiliary haben indicates that the subject flew the plane him- or herself.

Applying the HAVE/BE diagnostic to historical German data is problematic, however, as the periphrastic perfect tense first emerges during the OHG period and is attested only sporadically: e.g., fram ist gegangan 'has gone/went further' (Tatian, Chapter 2, Sentence 8) and er habet gizaltan 'he (has) told' (Otfrid, IV 15, 55). ${ }^{8}$ Already in OHG one can see that both auxiliary types are in use. Behaghel (1924: 272-282) discusses the division between these two auxiliaries, noting that BE generally indicates a change of state or movement from one place to another, whereas HAVE appears with transitive verbs and intransitive imperfectives, e.g., schlafen 'to sleep' and arbeiten 'to work.' Behaghel also states that, though some verbs show variation in auxiliary selection synchronically and diachronically, others consistently opt for one or the other. One verb, for example, that has regularly taken BE as an auxiliary is werden 'to become': biliði uuârun ... giuuorðen an thesero uueroldi 'parables came to pass in this world' (Hêliand: 374-375). Behaghel cites the verb's mutative and perfective characteristics as the reason behind its steady classification (Behaghel 1924: 277). Given these semantic qualities, as well as werden's historical status as a verb that has always taken BE, the subject pronouns in (22c) and (22d) have been classified as ergative subjects and slotted in the SpecVP. When assessing the syntactic status of verbs and subjects in this chapter, I will engage in similar analyses to the one just offered here for the forms in (22) and rely on descriptive works, such as Behaghel (1924) and Paul, Schröbler, Wiehl \& Grosse (1998), as well as those works, such as Sorace (2000), Shannon (1989), Shannon (1990), and Grewendorf (1989), that discuss auxiliary selection in semantic and syntactic terms.

Returning to the broader analysis, we recall the conclusion drawn in chapter two that observed that clitic groups do not show any special syntax; i.e., they surface in the same positions as the uncliticized full forms, a fact that points toward their status as actively derived clitics, not as fossilized structures. Additional evidence that the umlauting clitic groups are not fossilized was found in the fact that object and two types of subject pronouns are subject to cliticization, which is not what one would anticipate from a more fixed [host + clitic] sequence. Rather, we would expect to be able to narrowly define a fossilized structure in terms of which category of word may serve as host or clitic. This clear classification of host and clitic certainly does not apply to the umlauting data of chapter two, and figure (22) illustrates this fact by showing, in structural terms, how pronouns located both in SpecTP, SpecVP, and Complement VP may cliticize onto a host in C. The data in (21) and (22) show that there is no syntactic unity with regard to the cliticizing pronouns in the umlauting forms. In fact, they can surface anywhere in the Inner Field and still be subject to cliticization. I therefore argue that such forms are actively produced and show no signs of having been fossilized. In the case of these clitic groups, any pronominal constituent that is superficially located directly after the finite verb in C, regardless of the syntactic position in which it was generated, is subject to cliticization, provided the appropriate prosodic conditioning is present, as outlined in chapter two.

We will now subject the theih forms to the same analysis and seek to establish if these attestations reveal any syntactic peculiarities vis-à-vis their full form counterparts. The first

[^21]question we ask is if these [host + clitic] sequences are somehow syntactically different than the non-cliticizing variants. A side-by-side investigation shows that they are not.
cliticized forms
a. theih scúahriomen síne zinbíntanne biríne that I might touch his unfastening shoe laces
c. théiz ni wurti mári
that it would not have been known
e. theist mannes lúst zi líbe that is the appetite of man in life

I 27, 58

III 13, 2

## full forms

b. thaz ih [...] then liut zi wége richte that I might, [...], lead people to the
right path
II 13, 8
d. thaz íz ni wurti mári
that it would not have been known
I 19, 14
f. thaz ist thoh árunti min that is still my dispatch

$$
\text { I 1, } 17
$$

The fact that full forms and clitic groups are superficially located in the same positions would point to an analysis that treats the theih structures as actively-produced, phonological clitic groups. We even have two syntactically, and lexically, identical attestations, (23c) and (23d), yet one shows cliticization and the other does not. These data strongly suggest that the clitic groups behave no differently, in syntactic terms, than the full forms. In this respect, these [host + clitic] sequences do not appear to be fossilized.

If we more closely analyze the syntactic structures that yield the theih attestations, as well as the ways in which the pronoun thaz actually functions in an utterance, we can find further evidence indicating that these forms are best described as phonological clitics. We would, for example, expect the constituents comprising a less fossilized [host + clitic] sequence to be less narrowly defined in both syntactic and functional terms. This was certainly the case with chapter two's clitic groups, in which the clitic could be the subject pronoun (located in SpecTP), the object pronoun (located in Complement VP), or an ergative subject (located in SpecVP). Does a similar analysis apply to the theih data? Before we discuss this question, however, we must consider one notable way in which these data are different than the ném iz forms. As has already been noted in this chapter, in the case of the theih structures uncliticized variants outnumber those forms that exhibit cliticization. In contrast, the cliticized variants, theih, theiz and theist, are more frequently attested in the aggregate than their uncliticized counterparts. For the sake of convenience, figure (5), which contains a breakdown of these data, is re-presented here as figure (24).

| $(24)$ |  | number of <br> cliticized forms | number of full <br> forms | percentage of <br> cliticized forms | percentage of <br> uncliticized forms |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  | theih | $\mathbf{5 7}$ | $\mathbf{7 9}$ | $\mathbf{4 1 . 4 8 \%}$ | $\mathbf{5 8 . 5 1 \%}$ |
|  | theiz | $\mathbf{7 7}$ | $\mathbf{1 4}$ | $\mathbf{8 5 . 7 1 \%}$ | $\mathbf{1 4 . 2 9 \%}$ |
|  | theist | $\mathbf{5 9}$ | $\mathbf{3 6}$ | $\mathbf{6 7 . 9 \%}$ | $\mathbf{3 2 . 1 \%}$ |
|  | Total | 193 | 129 | $59.94 \%$ | $40.06 \%$ |

Having examined the data in (24), we notice that rate of occurrence versus non-occurrence of cliticization is not constant across the three different form types. In fact, theiz shows the highest percentage of cliticized attestations. The cliticized variant theist is also attested the majority of the time, though at a lower rate than theiz. Theih, on the other hand, surfaces as
the uncliticized variant more times than not. Given these varying rates of attestation, it would be misleading to conflate the three forms when discussing the question of fossilization for these types of clitic groups. This analysis will, therefore, treat the forms separately and assume that it is possible for the syntagm theiz, for example, to be a fossilized structure, whereas theih might still be actively produced.

We begin with the form that shows the least potential of having already been fossilized in the Evangelienbuch. As has just been observed, it is the full form thaz ih, rather than the clitic group theih, that is attested in the majority of cases, a fact that would support the assertion that theih is not a fossilized form, but, rather, is actively derived. Further examination of the theih data supports this conclusion by showing that, though there apparently is syntactic uniformity among the clitic contained in these structures (i.e., the clitic is always the subject pronoun $i h$ ), the host thaz is capable of filling different syntactic roles. Consider the examples presented in (25).
(25) Scírmi druhtin mir ouh só theih sí thin scálk giwisso III 1,41 protect-IMP lord me-Dat also so that-I be-SBJV your servant surely Protect me thus as well, Lord, (so) that I might surely be your servant

Drúhtin quad er hílf mir ... theih híar nu ni firwérde .... III 8, 41-42 lord said he help-IMP me-DAT that-I here now NEG perish-SBJV Lord, he said, help me, ... (so) that I might not perish here

In both cases, we have the constituent part thaz functioning as an unambiguous complementizer in the clause-it is not possible to treat thaz as a preposed or extraposed demonstrative pronoun. The presence of a complementizer indicates that we should assume a CP structure for both of these clauses, as shown in (26).
a. theih sí thin scálk giwisso

b. theih ... ni firwérde





Note that, in the case of (26a), e still assume a CP structure, despite the fact that the finite verb is not in final position. This analysis is based on the discussion of the OHG clause found in section two of this chapter and uses extraposition as a means of describing the attested ordering of constituents. Central to the analysis, however, is that, in both cases presented above, the complementizer host is found in C. We will soon discover that this location is not the sole structural position of a potential host. We may also note that the subject pronoun ih in both cases is located in SpecVP as a non-agentive subject. This classification of firwerdan as ergative is based on the verb's semantics; i.e., to perish refers to a change of state, and its subject is more of a semantic patient than an agent. Wesan, 'to be,' has also been treated as ergative and its subject located in SpecVP for mostly historical reasons. Though no cases of the periphrastic perfect with this verb are attested in OHG (Behaghel 1924: 276; Braune \& Reiffenstein 2004: 307), by the MHG period the auxiliary BE is regularly selected, a state of affairs that remains consistent until Modern German ${ }^{9}$ (cf. Behaghel 1924; Sapp 2008, who looks at auxiliary choice for sein in ENHG).

A broad consideration of the theih data reveals that the constituent thaz may also function as a demonstrative or relative pronoun and still serve as a host to the pronominal clitic $i h$. Examples of this are presented in (27).
a. gizellet wóroltthiote ál theih iu gibíete $\quad$ V 16, 22
enumerate-IMP people-DAT all that-I you-PL command-SBJV
Enumerate unto the people everything that I might command unto you
b. lis sélbo theih thir rédion

III 14, 4
read-IMP yourself that-I you-DAT relate
Read for yourself that (thing) I relate to you
c. firnim nu wíb theih rédino

II 14, 35
understand-IMP now woman that-I relate
Understand now, woman, that (thing) I relate
d. Quad ér theih thir gibiete thaz hábe thu

V 15, 7
said he that-I you-DAT command-SBJV that have-IMP.SG you fasto in múate fast in your heart He said, "that (thing) I might command you, you should have that (commandment) fast in your heart"

[^22]In all of the above clauses, a complementizer analysis of thaz is impossible, and thaz must be treated either as a relative or a demonstrative pronoun. This obvious difference in function has implications regarding the clausal framework within which these forms are produced. In the first place, thaz, as it is attested in the clauses of figure (27), cannot be located in C, as was the case with those attestations presented in (25). What is more, thaz can function as a modern-looking relative pronoun (27a), as well as a substantive demonstrative (27b), (27c), and (27d), and still serve as host for cliticization. As we discussed in section two of this chapter, thaz, the relative pronoun, and thaz, the demonstrative pronoun, are located in two different clausal frameworks, the former in a CP framework, the latter in a TP. We will begin with the modern-looking relative clause presented in (27a), which can be represented syntactically as follows in (28).
(28) a. gizellet wóroltthiote ál theih iu gibíete


Analyzed as a relative clause, the host thaz is located in the SpecCP, which stands in contrast to the cases of cliticization in which the host functioned as a complementizer and resided in C. Though it is still possible to treat the preposed thaz as a substantive demonstrative pronoun, a relative analysis better expresses the obvious syntactic and semantic connection between the NP al and the following CP that modifies it. ${ }^{10}$

[^23]In the other three examples shown in (27), however, an analysis of thaz as a substantive demonstrative pronoun is the only viable alternative. For instance, if we take a closer look at the clauses in (27b) and (27c), we note that there is no NP antecedent that would allow for a relative reading of the pronoun thaz in either case. In fact, in order for the clauses to make semantic sense, one must treat the pronoun as a full noun, as can be seen in the translations provided in figure (27). Yet despite the fact that thaz functions as an original demonstrative, as opposed to a more modern relative, the two clauses which make up each example seem to fit a familiar, modern-looking template, with the first clause resembling a main clause, and the second a subordinate. This syntactic connection between the two clauses is represented in the figure below.
(29) b. lis ... theih thir rédion
c. firnim ... theih rédino


Similar to the relative construction represented in (28), the extraposed clause originates in the complement of the VP. In this case, however, the pronoun is a demonstrative and the clause in which it is embedded is a TP. ${ }^{11}$ With regard to the process of cliticization, the examples in (27b) and (27c) show that a potential host may also be a preposed demonstrative adjoined to the clause's maximal projection. A similar structure may be assumed for the theih-clause presented in (27d), but with one notable difference: the clause bears no syntactic relationship with the previous clause; i.e., it is not an extraposed TP, but is completely free-standing.

[^24]

In this case I have also located thaz in an adjunct position within a TP framework, similar to the structures in (29). In contrast to the examples presented in (26), in which the pronoun ih was located in SpecVP, we note that (28), (29) and (30) all show ih as residing in the SpecTP as unambiguous agentive subjects.

The above discussion shows that, in the case of theih, there is considerable syntactic and functional variation in the attested clauses. Thaz may, for example, function as a complementizer located in the head of a CP. It may also, however, function as a relative pronoun and reside in SpecCP. The cliticized pronoun ih may be both an agentive subject located in SpecTP, as well as a non-agentive subject residing in SpecVP. Furthermore, not all attestations even occur within a CP framework, as we saw in our last three examples, all of which involve a substantive demonstrative pronoun thaz adjoined to, in the former cases, an extraposed TP, in the latter case, a free-standing TP. ${ }^{12}$ The fact that there is no unified syntactic description of the pronoun that may serve as host in this cliticization process points to the conclusion that theih has not yet been stored as an indivisible unit in the lexicon. Further bolstering this assertion is the fact that the author still treats host and clitic as two separate, and seemingly independent, units, as (31) illustrates.
(31) wer quédent sie theih sculi sín odo ouh rácha wese mín who say-PRES.PL they that-I should be or also situation be-PREs.SBJV my Who do they say that I should be or that my situation be? III 12, 8
[wer quédent sie] ${ }^{13}$
[theih sculi sin] odo ouh [(thaz) rácha wese mín]

In order for the underlined clause in (31) to make semantic sense, we must access thaz from the preceding theih-structure, but not $i h$. Were this clitic group already fossilized, we might expect that the predicate apposition clause (rácha wese mín) required repetition of the complementizer thaz, as a fossilized theih would exist as one fixed unit in the lexicon, not

[^25]as a combination of constituent parts. This example, when considered in conjunction with the additional evidence presented above, that is, the frequency of occurrence of cliticization versus non-occurrence and the syntactic and functional diversity of cliticized forms, supports the conclusion that theih in Otfrid is not a fossilized form, but rather is produced freely.

To contrast the theih analysis, we now turn to the form thaz $i z$, which, of ninety-one total occurrences, is attested as the cliticized variant seventy-seven times ( $85.71 \%$ ). In terms of frequency, theiz seems to be the likeliest candidate of the three clitic group types to have undergone fossilization. An examination of the syntactic and functional range of the host reveals that the constituent part thaz is, in some respects, more narrowly defined than was the case with the parts comprising theih. In fact, in all occurrences of the cliticized variant, thaz functions as an unambiguous complementizer.
(32) Mit spénstin ginúagin tház sies ni giwúagin with allurements sufficient that they-it NEG referred

IV 37, 28
théiz ni wúrti irfúntan thaz drúhtin was irstántan that-it NEG be-PRET.SG discovered that lord was risen With sufficient allurements, so that they would not have referred to it so that it would not have been discovered that the Lord had risen

Yrkánta tho ther fater sár theiz thiu zít was in wár
III 2, 35 recognized then the father immediately that-it the hour was in truth The father recognized then immediately that it truly was the hour

Dua theiz in thír scine intiz dragen lídi thine V 2, 17 do-IMP that-it in you-DAT shine-SBJV and-it carry limbs-NOM.PL your Do (this), so that it might shine in you, and your limbs carry it

This unity of syntactic function, however, does not extend to the clitic $i z$, which can fill several different roles, including that of non-agentive subject and object. Examples of the former are presented in (33).
a. Thaz ih giscríbez hiar so frám theiz thír io wese lóbosam IV 1, 39
that I write-SBJV-it here so further that-it you-DAT be-SBJV praiseworthy
That I might write it here so further so that it might be unto you
praiseworthy
b. Er tho then júngoron gibót thaz sie iz hálin
he then the disciples commanded that they it concealed-Sbjv
III 13, 2
thuruh nót
through necessity
théiz ni wurti mári thaz er Kríst wari that-it neg was-SBJV known that he Christ was-Sbjv
He then commanded the disciples, that they would not have concealed it out of necessity that it would not have become known, that he would have been Christ
c. Thu scált thih io mit dríwon fora góte riwon you should you-REFL.ACC always with certainty before got repent

I 23, 44
theiz thír si wáhsenti in síneru gesíhti that-it you-DAT be-SBJV growing in his sight You should certainly always repent before God so that it unto you may be growing in his sight
d. Theist algiwís... theiz thuruh ínan ist gidán II 2,19 that-is certain that-it through him is done That is certain..., that it is done through him

In examples (33a) and (33b), $i z$ is the subject in a predicate nominative construction with the verbs wesan and werdan, respectively. The subject $i z$ in (33c) is contained within a clause that has a periphrastic verbal construction, comprising a finite verb in the present subjunctive and a present participle. The adverbial nature of the participle, particularly evident in older forms of Germanic in which the participle still bears inflection, compels us to once again treat $i z$ as a non-agentive subject in, what is essentially, another predicate nominative structure. The final theiz clause in (33) is an example of a passive construction with a a semantic patient functioning as the grammatical subject. As a result, in all of the above examples, we locate the subject in the SpecVP.

There are a handful of clauses that one might consider exceptions to the aforementioned tendency. In contrast to the above cases, the subject pronouns in these clauses (examples shown in (34)) may be better classified as unaccusative and slotted in SpecTP.
a. Thu wírdist mir gilóubo sélbo thu iz biscóuo you become me-DAT believing yourself you it behold
theiz dúit thia mína redina hárto filu nídira
V 23, 228
that-it makes the my discourse very much unimportant
You become unto me (the) believing (one), even you yourself behold it so
that it makes my discourse very much unimportant
b. Dua theiz in thír scine intiz dragen lídi thine

V 2, 17 do-IMP that-it in you-DAT shine-SBJV and-it carry-PL limbs your Do (this) so that it might shine in you, and your limbs carry it
c. Gib druhtin ségan sinan in líchamon mínan
give-IMP lord blessing his in body my
joh theiz io híar in líbe minera séla klibe V 3, 2
and that-it ever here in life my soul adhere-SBJV
Give, Lord, his blessing in my body and so that it ever here in life might adhere onto my soul
d. Thaz sih es thárawentit theiz innan érdu stentit V 1, 25 that-DEM REFL it-GEN turns that-it in earth-DAT stands
nim góuma waz thaz méinit theiz untar érda zeinit take-IMP care what that means that-it under earth-ACC points That turns out thus, such that it stands (came to stand?) in the earth Take care (of) what that means that it points under (the) earth
e. thaz móht er thaz giflízan thaz gótes hus zislízan IV 30, 12 that could he that-ACC strive the God-GEN house destroy

Joh thaz er móhti avur thár iz eino irzímboron sár and that he could-PRET.SBJV but there it alone rebuild immediately
joh dáti thiu sin gúati theiz thríten dages stúanti and did-SbJV the his goodness-INST that-it third day-GEN stood-sbJV That he could strive for that, (could) destroy the house of God and that he alone but might have been able to rebuild it immediately, and would have done it through his goodness, so that it would have come to stand on the third day

The subjects of these clauses are not the clear cases of semantic agents that exhibit animacy and exercise volition that we found in the clauses of (27). Indeed, given the fact that the relevant pronoun in these cases is $i z$ ' $i t$,' as opposed to other personal pronouns such as 'he,' 'she,' or 'I,' it is not surprising that there are no prototypical agents among the clitic groups in this category. Instead, we find $i z$ referring to the whole act of believing and seeing (34a), the noun gúndfanon 'war flag' from a previous line ${ }^{14}$ (34b), God's blessing (34c), the noun ther boum (34d), a poetic reference to the cross (thaz krûci) and thaz gótes hus (34e). With regard to syntax, however, we should still consider the possibility that these grammatical subjects are located in SpecTP. The case in favor of this placement is strongest for (34a) in that the verb duan is transitive, and transitive verbs that take an affected direct object have consistently throughout the history of German selected the HAVE auxiliary (cf. Sapp 2008 for ENHG and Shannon 1990: 471 for OHG).

The case is not so clear-cut for the other five tokens presented in (34b-e). In an effort to place the remaining verbs into appropriate structural positions, we begin by referring to the analyses presented in Shannon (1989) and (1990). In these works Shannon argues that the use of HAVE and BE in the earliest forms of German was entirely confined to those verbs that fit the transitive and mutative prototypes respectively. Shannon (1989: 255) and (1990: 468-469) defines these prototypes as follows:
(35) Prototypical mutative events involve only a single participant. They are perfective predicates that denote an end point or the beginning of a change. The grammatical subject is a semantic patient or theme, which is non-volitionally affected and externally changed in that it is has changed state or position, i.e., has moved.

[^26]Prototypical transitive events involve two participants. The relationship between the two entities is asymmetrical in that the first participant moves toward and makes contact with the second participant, which is affected and reacts externally by changing state or moving. These predicates exhibit a high degree of transitivity.

According to Shannon (1990: 469-471) early perfect structures in German followed one of the two prototypes with the BE + past participle emerging in OHG somewhat earlier than the periphrastic form with HAVE. In the course of the development of the perfect tense in German the BE and HAVE auxiliaries were gradually extended beyond their original prototypical use. In order to apply Shannon's prototypes to the Otfrid data, we will further assume that there is a syntactic component to the above templates-those predicates that fit the mutative template occur with prototypical ergative subjects, whereas those that fit the transitive template have prototypical unaccusative subjects.

Referring to the prototype definitions presented above, we note that none of the predicates in (34-e) whose syntactic classification is still in dispute appear to fit either template terribly well. In all cases we might argue the predicates better fit the mutative prototype in that these events involve one participant; i.e., there is no accusative, or affected, object, and, hence, these events do not exhibit a high degree of transitivity. However, the grammatical subjects of the predicates are not clear semantic patients or themes either. Determining whether or not the clauses exhibit a change in state or movement and, thereby, express perfectivity, can aid us in the classification process, especially for those predicates that have the verbs stân and scînan at their heart. Behaghel (1924: 278) notes that stân (as well as liggen and sizzen) could have perfective semantics, an observation that the lines in (34e) support. In this case a perfective reading of stân makes more semantic sense than a translation that treats stân as a stative verb.
(36) thaz móht er thaz giflizan thaz gótes hus zislízan Joh thaz er móhti avur thár iz eino irzímboron sár joh dáti thiu sin gúati theiz thrítten dages stúanti
that he could strive for that, (could) destroy the house of God and that he alone but; might have been able to rebuild it immediately, and would have done it through his goodness, ...
$\Rightarrow$ so that it would have come to stand on the third day
$\Rightarrow$ so that it would have stood on the third day
A perfective reading is also possible for (34d), given the general context of the relevant lines and the semantic range of the verb. Translations of scinan (Piper (1887) and Erdmann (1882)) as NHG scheinen, leuchten, erscheinen, offenbar werden, or 'to shine,' 'to appear,' 'to seem,' 'to become apparent,' indicate that this verb in Otfrid may have also had possible perfective semantics. Based on these glosses, an alternate reading of the line in (34b), 'Dua theiz in thír scine' as 'Do (this) so that it might become apparent in you' is entirely possible. Because of the potential perfective semantics of the verbs scînan and stân, this analysis treats their subjects as ergative and locates them in SpecVP.

In the case of zeinen (translated by Piper 1887 as NHG zeigen, (hin)weisen, or 'to point,' 'to show,' 'to indicate') and klîban (NHG anhaften, anhängen, festhalten, or 'to adhere,' 'to stick,' 'to attach'), however, neither the glosses nor the greater context of the lines in
which they are attested show any indication that these verbs had perfective semantics. In fact, kliban occurs with the adverb io 'ever' (34c), which speaks in favor of a durative reading of the line. The prototypes, therefore, cannot help us with the syntactic classification of all of the data in (34). Instead, we may turn to Sorace (2000), in which the author lays out her auxiliary selection hierarchy (ASH), and Sapp (2008), which applies ASH to a corpus of ENHG forms. In the former work the author proposes that verbs at either end of ASH are "core" HAVE or BE verbs and verbs in the middle tend to show the most variation intra- and cross-linguistically. The hierarchy as presented in Sorace (2000: 863) is shown below.

```
Auxiliary Selection Hierarchy (ash)
    change of location selects BE (least variation)
    change of state
    continuation of a pre-existing state
    existence of state
    uncontrolled process
    controlled process (motional)
    controlled process (non-motional) selects HAVE (least variation)
```

Drawing on Sorace's descriptions of the different levels of the hierarchy, zeinen and klîban are probably best characterized as controlled non-motional processes (cf. Sorace 2000: 874). These types of verbs rountinely select HAVE in Modern German, even when they take a non-agentive subject. The data presented in Sapp (2008) further suggest that controlled non-motional processes exhibit a certain degree of diachronic stability in German in that they consistently take HAVE in his ENHG corpus. Because zeinen and klîban's semantics are incongruous with that of the mutative prototype and also land them squarely in an ASH category whose members show consistent selection for HAVE, both synchronically and diachronically (albeit later in German's development), this analysis concludes that these OHG verbs take unaccusative subjects, which are located in SpecTP.

Finally, we have clauses in which $i z$ functions as an object pronoun. Consider the constructions presented below in (38).
a. Thóh si iz sero fille níst ni si ávur wolle though she it sadly beat-SBJV NEG-is NEG she but want-SBJV
(súntar si imo múnto) theiz íaman thoh ni wúnto rather she it protect-SBJV that-it-ACC someone-NOM NEG injure-SBJV Though she might beat it sadly, but (it) is not (that) she might want to, rather may she protect it so that no one may injure it
b. Thir gáb nu quad zi gúate min fáter thaz zi múate you-DAT gave now said for goodness my father-NOM that for soul
ni theiz mán gidati thaz thu nu súlih quati NEG that-it-ACC man did that you now thusly said "My father gave you that now", he said, for virtue's sake, for the soul so that man did not do it, that (thing) you now thusly said
c. Theiz hiar in wóroltfristi mán nihein ni wésti

V 17, 7 that-it-ACC here in earth-time man nothing NEG know-PRET That here in time of earth man did not know it

The pronoun $i z$ in (38a) refers to kindiline 'child' (line 32), whom the mother must discipline for the child's own good. Iz, as an object pronoun, can also refer to an entire subsequent CP (38b), as well as a preceding CP (38c). In all three cases, however, the object pronoun $i z$ resides in the complement of the VP.

In sum, though thaz in the structure theiz always functions as a complementizer, the pronoun $i z$ functions as an ergative subject, an unaccusative subject, and an object pronoun. This variation in function can be translated into syntactic terms, which locate $i z$ in three different positions, i.e., SpecVP, SpecTP, and Complement VP, respectively. We further note the following example, which bears a resemblance to a similar example (found in (31) above) we considered for the form theih.
(39) Thiu túnicha thiu gúata bi thia ther lóz suanta thaz si álang mit giwúrti giháltinu wúrti Theiz wári so gispróchan ni wúrti wiht firbróchan IV 29, 17 thaz iro nihéin ni wari thaz wíht ira firzári

The holy shroud: regarding this (shroud) fortune decided, that it would have, with joy, been preserved intact,
that it would have been so spoken, that nothing would have become ripped to shreds, that no one would have been unto it, that nothing would have torn it

In (39) the structure theiz is clearly being treated as comprising two semantically distinct units by the speaker, and only the host thaz, without the clitic $i z$, is used for the second clause. This interpretation takes into account the context within which this line is presented; i.e., this analysis is based on the assumption that the three lines following bi thia ther lóz suanta comprise a series of CP thaz-clauses, and that the second half line of line 17 is also such a clause, though, in this case, thaz is not repeated. ${ }^{15}$ This example indicates that the author still recognizes two distinct units in the clitic structure, but does not, by itself, unequivocally make the argument against fossilization. A speaker could still recognize the semantically separate constituent parts of a clitic group that has been adopted into the lexicon and, yet, is no longer actively produced. ${ }^{16}$ However, given the lack of syntactic unity in the clitic $i z$, this analysis maintains that fossilization has not yet taken place.

Despite the syntactic diversity exhibited by the clitic $i z$ in attestations of the structure theiz, the fact that the clitic group is so frequently attested in relation to the full form thaz $i z$ compels us to consider the following question: how close is theiz to wholesale adoption in the lexicon? In addressing this question, we may examine the data in order to determine the extent to which the occurrence, and non-occurrence, of cliticization is confined to a

[^27]circumscribed syntactic setting. If, for example, we found that the collocation thaz $+i z$ (non-agentive subject) always cliticizes, then we might posit that theiz is closer to fossilization than would be the case if the non-agentive $i z$ surfaces as both clitic and independent, non-cliticizing pword. All attestations of the collocation thaz iz, either as the cliticized or uncliticized form, in the five books are represented in (40).

| $(40)$ | cliticized-full | cliticized vs. full (in percentage) |
| :--- | :---: | :---: |
| Ergative-with verb to be | $52-7$ | $88.14 \%-11.86 \%$ |
| Ergative | $17-1$ | $94.44 \%-5.56 \%$ |
| Agentive | $3-4$ | $42.86 \%-57.14 \%$ |
| Object | $5-2$ | $71.43 \%-28.57 \%$ |

The data in (40) show that, though cliticization is generally preferred across all syntactic types, $i z$ does maintain its status as a separate pword in each of the divergent syntactic realizations discussed above. These numbers indicate that neither occurrence of cliticization, nor non-occurrence, is ever categorical in any of the syntactic categories, which, in turn, further implies that theiz is an actively produced form. But are the necessary conditions in place for fossilization? If we consider the same data in a slightly different way, we may find an answer. (41) below considers the total number of attestations in which the collocation thaz $+i z$, either in cliticized or full form, is present, breaking these numbers down according to syntactic category.

| (41) <br> Construction type - thaz iz \& theiz | Total number <br> theiz \& thaz iz | Percentage |
| :--- | :---: | :---: |
| a. Ergative-with the verb to be | 59 | $64.84 \%$ |
| b. Ergative | 18 | $19.78 \%$ |
| c. Ergative-ALL (a. \& b.) | 77 | $84.61 \%$ |
| d. Agentive | 7 | $7.69 \%$ |
| e. Object | 7 | $7.69 \%$ |
| TOTAL | 91 | $100 \%$ |


| $(42)$ | cliticized-full | cliticized vs. full (percentage) |
| :--- | :---: | :---: |
| Non-agentive $(77$ total $)$ | $69-8$ | $89.61 \%-10.39 \%$ |

The data in (41) show that the collocation thaz $+i z$ is associated with a non-agentive subject pronoun $i z$ over $84 \%$ of the time. Further, out of these 77 total attestations, cliticization occurs almost $90 \%$ of the time (42). Given these parameters, one can imagine how language learners might begin to analyze theiz as one indivisible unit that is crucially linked to a prescribed syntactic function, i.e., thaz as complementizer, and $i z$ as a nonagentive, or ergative, subject. Though fossilization of the form theiz has not occurred in Otfrid, we can identify the collocation of "complementizer + ergative subject" as a possible preferred syntactic environment for cliticization.

A comparatively brief consideration ${ }^{17}$ of the MHG data suggests that, indeed, the Franconian deiz has all of the characteristics of fossilization that we might expect based on

[^28]the above analysis, including syntactic uniformity of the constituent parts. In order to illustrate this point, we will look at data drawn from Wolfram von Eschenbach's Parzival. As an East Franconian text, Parzival was chosen primarily for its dialectal similarity to the Evangelienbuch (cf. Paul, Schröbler, Wiehl, Grosse 1998: 172 for a combined treatment of the two dialects). The entire text contains twelve tokens ${ }^{18}$ of the clitic group deiz, next to nineteen occurrences of the non-cliticizing daz ez collocation. In the case of the attested clitic groups, the syntactic identity of the constituent parts is completely uniform-daz functions as a complementizer, which we would locate in C , and $-i z$ as a non-agentive subject that we would place in the SpecVP. Examples are provided in (43).

> a. Ez ist selten worden naht, wan deiz der sunnen ist geslaht, sine bræhte ie den tac dernâch.
b. sîn helfe was doch sô gedigen deiz al daz volc was verswigen.
c. "ist iemen dinne?" si sprach "jâ." do er hôrt deiz frouwen stimme was
d. ein knappe spranc zer tür dar în. der truog eine glævîn ...
an der snîden huop sich pluot und lief den schaft unz ûf die hant, deiz in dem ermel wider want.
e. Parzivâl der tjoste nâch volgt. dem orse was ze gâch: ez viel hin ab, deiz gar zebrast.

| It has seldom become night | Book XV: |
| :--- | :--- |
| except that it is fitting for the sun | 776, 1-3 |
| may bring always the next day |  |
| afterward |  |

his cure however was so complete that it was concealed from all of the people
"Is someone in there?" She said "yes"
when he heard that it was a woman's voice
a squire ran to the door inside he carried a lance ...
from whose tip blood sprung out
and ran down the shaft up until the hand
such that it reached until his sleeve

Parzival followed after
( $\sim$ pursued) the joust. It was too
sudden for the horse
it fell down such that it
completely burst

Book V: 231, 17-22
Book XV:
776, 1-3

Book XIII:
644, 7-8

Book IX:
437, 2-3

Book IX:
444, 29

Unambiguous ergative subjects can be found in the first three clauses-(43a) and (43c) are predicate adjective and nominative constructions, respectively, whereas (43b) is an example of a passive construction in which the grammatical subject is a semantic theme.
(43d) requires a bit more discussion than the preceding cases, because winden, as it is used in these lines, takes on a very specific meaning. The Mittelhochdeutsches Wörterbuch translates the word to mean 'gehe nur bis auf einen gewissen Punkt,' or 'go only until a certain point' at which point the movement stops. The verb is often used in MHG to describe the trajectory of the thrust of a sword or a spear; for example, the point of either

[^29]may be thrust through the brain and skull of a man until it reaches his tongue (Tristan und Isold, 5457) or through the mouth until it reaches the man's heart (Tristan und Isold, 8983). In the Parzival excerpt, the verb is used to describe the movement of the blood which has sprung forth from the tip of the lance, run down the shaft until it reached the aggressor's sleeve. Given that the predicate in this case is clearly expressing movement, in addition to the non-agentive qualities of its subject, I have slotted the latter in the SpecVP. Also placed in the SpecVP is zerbresten, which is translated by Lexer (1992) as NHG zerbrechen, zerbersten, zerreißen, or 'to tear (apart),' 'to break (to pieces),' 'to burst asunder.' This predicate has the clear perfective semantics that are associated with the zerprefix. Furthermore, the subject is a unambiguous patient, and the clause even starts to take on the semantics of the passive voice-deiz gar zebrast could certainly be translated as 'that it was completely torn to pieces.'

The picture of the non-cliticizing daz ez collocations look quite different, however, in that $e z$ exhibits the full diversity of syntactic function seen in the OHG forms (44).
(44) a. Sîn harnasch was gar sô rot daz ez den ougen rœete bôt
b. Dô was mîn hêr Gâwân sô gezimiert ein man daz ez si lêrte riuwe
c. den het an im alsolch gewant ob im dienden elliu lant
daz ez niht bezzer möhte sîn
d. Bêâkurs in dâ enphienc
sô daz ez mit freude ergienc
e. Daz ors unt daz phärdelîn erhuoben ein sô hôhen grîn
daz ez Iwânet erhôrte
f. diu junge sô verzagete daz ez diu alte klagtete Arnîve diu wîse

| His armour was so completely red | Book III: |
| :--- | :--- |
| that it offered unto the eyes | $145,17-$ |
| redness | 18 |

There was my lord Gâwân such an adorned man that it taught them sorrow

| he was unto him so dressed | Book V: |
| :--- | :--- |
| as if he were waited upon in all | $225,9-11$ |
| lands |  |
| that it could not be better |  |

Bêâkurs received him then Book so that it came to pass joyfully XIV: 721,

The horse and the little horse Book III: began to raise such a loud neigh 155,29that Iwânet heard it 30, 156, 1
the boy completely lost his Book XI: courage 574, 3-5
such that the old one bemoaned it
Arnîve the wise one

29-30
Book X:
513, 1-3

Book V:
225, 9-11

In the above lines we see that non-cliticizing $e z$ can function as an agentive, or unaccusative, subject, (44a) and (b), non-agentive, or ergative, subject, (44c) and (d), and object, (44e) and (f). Suggestive is that the pronoun $e z$ can fulfill manifold syntactic roles, but only for the uncliticized, full form variant. When the clitic group deiz surfaces, the syntax of the clitic is notably restricted. These data support the argument made above, i.e., that the theiz structures were close to fossilization and that eventual fossilization would likely be restricted to the sequence: complementizer + non-agentive/ergative subject.

We now turn to an analysis of the final form theist, whose constituent parts are, in syntactic terms, the most narrowly defined of the three clitic structures under examination
in this chapter. In fact, in all cases, thaz functions as a demonstrative pronoun residing in the SpecCP, with ist, the finite verb, located in C. A series of representative examples is presented in (45).
a. Tház ist uns iróugit thaz got ist Krístes houbit
that is us-dat shown that God is Christ-gen head V8,16
wízist thaz gimúato theist drúhtin unser gúato
know-2.sG that well that-is lord our good That is shown to us, that God is the head of Christ you know this well: that is our good Lord
b. Sih thaz héroti theist imo thíomuati I 3, 41 Behold the royalty that-is him-DAT subordinate Behold, the royalty: that is unto him subordinate
c. Ther dóuf uns allen thíhit thaz wazar theist giwíhit

I 26, 1 the baptism us-dat all blossoms the water that-is blessed
sid druhtin Kríst quam uns héim ...
until lord Christ came us-dat home
The baptism blossoms among us all. The water, that is blessed until the Lord Christ came home to us...
(45a) and (45b) present characteristic examples of the way in which theist is used throughout the Evangelienbuch, that is, in predicate nominative constructions. As seen in (45c), the theist-clause can be used to emphasize a preceding DP, in this case thaz wazar, which has been topicalized. It is certainly possible to view this latter theist construction as one of the OHG forerunners of a modern German relative clause, hints of which may already be found in a number of Otfridian constructions. Consider the following examples in (46).
a. Ésil wízun wir tház theist fíhu filu dúmbaz

IV 5, 7
donkey know we that that-is beast very dumb
Donkey, we know that, that is a very dumb beast
b. Wéist thu weih thir rédinon thaz selba lób theist thaz lón II 21, 13 know you what-I you-Dat tell that same praise that-is the reward
giwisso wízist thu thaz...
certainly know you that
You know what I tell you, that same praise, that is the reward surely you know that...
c. In búachon ist nu fúntan thaz wort theist mán wortan in books is now found the word that-is man become
iz ward héra in worolt fúns joh nu búit in úns it emerged here in world ready and now lives in us In books is now found the word, that is now become man it emerged ready in the world and now lives in us
d. Wir sculun úaben thaz sáng theist scóni gotes ántfang I 12, 29 we should practice this song that-is luminous God-GEN greeting We should practice this song, that is the luminous greeting of God

The theist clauses presented in (46a) and (46b) are clear examples of this emphatic structure found throughout the work. The pronoun thaz references the preceding NP, though should not necessarily be understood as heading a dependent relative clause, given the greater semantic context in which these lines are attested, as well as the placement of the finite verb. Rather, the emphatic clause stands alone. The situation is somewhat more ambiguous in the case of ( 46 c ) and (46d), both of which are analyzed here as free-standing, not dependant relative clauses. Though, semantically, a translation of thaz as a relative pronoun is entirely possible, the fact that the finite verb resides in second position seems to indicate that these clauses deserve a similar analysis to the first two examples in (46).

It is here, though, where we must consider the possibility that the form theist is already fossilized in Otfrid. Certainly, the fact that host and clitic always belong to the same syntactic categories-demonstrative pronoun, located in SpecCP, and finite verb located in C-would suggest that, at the very least, the necessary conditions for fossilization are already present. Furthermore, the two constructions in which we find the form theist, the predicate nominative and emphatic constructions discussed above, are both frequently attested. Recall that thaz ist, either as a cliticized or full form, is attested 95 times throughout the work. Furthermore, the emphatic structure highlighted above surfaces not only in many of the attestations involving theist, but also in cases with a preceding DP and a verb other than wesan, as seen in the examples presented below.
a. Tho híntarquam thiu múater ther sún ther ist so gúater I 22, 23
the son DEM.PRO is thus the good one
Then the mother was horrified (the son, he was thus the good one)
b. Thu ni bíst es wan ih wís thaz lánt thaz heizit paradys
that land DEM.PRO is called paradise
You are not aware of it, I believe: that land, that is called paradise
c. Thie múater thie rúzun joh zahari uzfluzun
the mothers DEM.PRO grieved and tears poured forth
The mothers, they grieved, and tears poured forth
d. Thiu wíb thero lántliuto thiu irwénotun tho lúto

IV 26, 5
the wives the Jews-GEN DEM.PRO began to cry then loudly
The wives of the Jews, they began then to cry loudly

This emphatic structure with a topicalized DP is not a rare one in Otfrid. ${ }^{19}$ We, therefore, note that the host, thaz, and the clitic, ist, are not only narrowly defined in syntactic terms, they also occur within apparently frequently attested syntactic constructions, i.e., predicate nominative structures, in many cases after an emphasized, topicalized DP. Together, these facts speak strongly in favor of fossilization of this particular clitic group.

Do we, then, have any evidence that might argue against the fossilization of this form in Otfrid? In order to press a case against fossilization, we might point to the frequency with which cliticized forms are attested vis-à-vis their full form counterparts.

| $(48)$ | total number of theist tokens <br> full and cliticized | cliticized forms | full forms |
| :---: | :---: | :---: | :---: |
|  | 95 | $59(62.11 \%)$ | $36(37.89 \%)$ |

One could argue that, though just over $62 \%$ of the forms appear as the cliticized variant, this does not constitute a robust enough majority to warrant talk of form fossilization. In the case of theiz, I ultimately argued against form fossilization, despite the fact that roughly $85 \%$ of the attestations had undergone cliticization. In other words, the cliticized form may be favored more than eight of ten times and still resist fossilization. We, therefore, might expect to see fewer full form variants of theist attested in the text, if the clitic group were lexically listed. If the structure is already fossilized and its syntax fixed, we might also expect to find evidence of a functional, syntactic, and/or even semantic divergence between full and cliticized form. There is, however, no evidence of any such developments in the text, as seen in (49), which provides full form attestations of theist that are identical in function and meaning, i.e., no semantic bleaching, to those examples already examined (cf. the data in (46) above).
(49) Thaz ist nu wúntarlichaz thíng úbar thesan wóroltring that is now wonderful thing over this world That is now a wonderful thing over this world
that is us-DAT here demonstrated in Christ spoken That was demonstrated to us here, spoken in Christ

Petrus zellu ih thir tház thaz wíg thaz ist so hébigaz
IV 13, 31
Peter tell I you-dat that the battle that is so grave Peter, I tell you this (thing), the battle, that is in this way grave

However, without the syntactic evidence we had for theih and theiz, which strongly implied that those forms were actively produced and not lexically listed, it seems imprudent to advance the same claims against fossilization in the case of theist. Certainly the form, if not yet fossilized, is on the verge of adoption into the lexicon, in that its constituent parts

[^30]are, in syntactic terms, narrowly defined. Given this syntactic evidence, for the purposes of this analysis we will err on the side of caution and assume that we cannot count the theist forms among our still large group of actively-produced clitic groups.

### 3.4 Fossilization versus grammaticalization

Section three of this chapter has just established that, in the case of theih and theiz, the clitic groups comprising thaz and a following pronoun are not fossilized in Otfrid, but rather, are clearly the product of an active process of cliticization. We may, therefore, add these 132 cliticized forms to our dataset of chapter two, which included structures such as ném iz and még ih, all of which are also actively produced clitics. The fact that we have been able to augment the number of tokens in our dataset to such an extent shows that the seemingly peculiar forms of the previous chapter, are, in fact, not so singular. There are a couple of notable differences between these two types of forms-theih, for example, is an unquivocal clitic group. The umlauting thaz-clitics are always represented as one unit in the editions as well as the original manuscript. These forms also show obvious evidence of boundary loss and phonological fusion occurring between host and clitic. In contrast, clitic groups such as még ih do not seem to exhibit boundary loss in the published editions ${ }^{20}$, though the presence of umlaut is indicative of a fundamental level of phonological fusion between the two constituent parts.

The similarities between the two sets of forms compel us to apply the same one pword analysis to theih and theiz. Let us, first, consider the proposed sequence of derivation and cliticization and also recall the theoretical assumptions, outlined in chapter two, that underlie the analysis. We began with the assertion that lexical words receive stress in the lexicon, whereas function words do not. This account is also based on the argument that prosodic constituents, e.g., the pword, foot and syllable, though initially formed in the lexicon, can be recursively assigned at any point. Furthermore, our account assumes that the assignment of a prosodic constituent must crucially make reference to the constituent that resides below it in the prosodic hierarchy. Finally, we note that this proposed sequence adopts the central argument formulated in this chapter-theih and theiz are derived in the lexicon and are not fossilized forms. The proposed sequence progresses as follows.

[^31]| Lexical output | 1. [thaz] | [ih] | - lexical stress is (already) assigned |
| :---: | :---: | :---: | :---: |
|  | 2. [б] | [ $\sigma$ ] | - assignment of syllables |
|  |  | ] | - assignment of feet |
|  | 4. - | - | - assignment of pwords |
|  | 5. $[\text { thaz }]_{\text {}}$ | $[\mathrm{ih}]_{\text {}}$ |  |
|  | 6. [ớ] | [ $\sigma$ ] | - assignment of sentential stress |
|  | 7. [ $\omega$ ] | - | - recursive assignment of pwords |
|  | 8. $[\omega$ | $\sigma]$ | - reformation of the pword to integrate the unfooted syllable |
| Postlexical output | 9. [thazih] | [theih] ${ }_{\text {w }}$ | - umlaut \& assimilation |

We find that cliticization in the case of thaz ih and thaz iz is motivated by the same prosodic forces that produced forms such as még ih and skel iz. In all instances host and clitic, both of which are function words, emerge from the lexicon as prosodically deficient constituents, in that they fail to meet the bimoraicity requirements dictated by the minimum word constraint. In those cases in which thaz and the pronoun receive sentential stress, both constituents may build their own independent pwords and cliticization does not occur. If the pronoun does not receive postlexical stress, it cliticizes onto the constituent to its left. Drawing from data last presented in (24) on page 87 of this chapter, we note that the pronoun $i z$ in the collocation thaz iz generally does not receive this postlexical stress, for we see that the clitic group surfaces $84.6 \%$ of the time. The opposite is true for the thaz ih collocation, in which the pronoun is more likely to resist cliticization, doing so $58.1 \%$ of the time. This discrepancy can be explained if we consider the pragmatic difference between the pronouns $i h$ and $i z$. The latter pronoun is, already in Otfrid, beginning to serve as a purely grammatical subject with no attachment to a nominal antecedent, i.e., as an expletive. In fact, in 38 of the 77 attestations of the clitic group theiz the pronoun unambigously functions as an expletive. Two examples of this usage are provided below.

| a. Ther evangélio thar quit <br> theiz móhti wesan séxta zit | The gospel says there <br> that it could have been the sixth hour | II 14, 9 |
| :--- | :--- | :--- |
| b. Er tho then júngoron gibót ... He then commanded the disciples ... <br> théiz ni wurti mári <br> thaz er Kríst wari thil 13, 1-2 <br> that he was Christ   |  |  |

In (51a), $i z$ is the subject of a predicate expressing time. In (51b) the expletive keeps the place of an extraposed thaz clause. In both cases, though the pronoun is argumental, as is argued in Abraham (1993) and Lenerz (1985a), it is not connected to a referent. It might be expected, then, that $i z$ cliticizes more than $i h$, as $i h$ always has a clear referent and is more likely to receive postelexical stress, whereas $i z$ is becoming semantically more bleached. ${ }^{21}$

[^32]There is one final final point to made regarding the relative frequency of all three token types-the syntagm that shows the highest degree of syntactic and functional diversity (theih) is also the clitic group that is produced less frequently vis-à-vis its full form counterpart, whereas the more frequently produced clitic groups are either more restricted, as is the case with theiz, or completely restricted, as seen with theist, in the syntactic identity of their constituent parts. These data indicate that there is a correlation between frequency of token production and form fossilization, i.e., lexical change.

To return to the broader argument, in those instances in which the pronoun remains stressless and cliticization is triggered, the process effects a prosodic reorganization whereby the host achieves bimoraicity and the unfooted syllable comprising the clitic can be incorporated into the greater prosodic structure. This process is depicted in (52).

| $\omega \quad \omega$ |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| $\varphi$ |  |  | $\varphi$ |
| 1 |  | $\Rightarrow$ |  |
| $\sigma$ | ( $\sigma$ ) |  | $\sigma$ |
| $\mu$ | $\mu$ |  | $\mu \mu$ |
| tház | ih |  | theih |

Hence, this analysis argues that the forms of chapter two, ném iz and még ih, and the umlauting thaz-forms of chapter three, theih and theiz, are two sides of the same coin, so to speak, in that they are subject to, and shaped by, the exact same prosodic processes.

A few words should also be said about the role of grammaticalization and grammaticalization theory in the discussion of the thaz-structures. This analysis made a clear distinction between the two separate processes of fossilization and grammaticalization. In doing so, it rejected the view held by some proponents of grammaticalization theory that grammaticalization is itself a mechanism of change (cf. Bybee et al. (1994) and Vincent (1995)). This point is thoroughly outlined in Fischer (2007:116), who quotes Bybee et al. (1994: 298) as follows: "Thus our view of grammaticization is much more mechanistic than functional: the relation between grammar and function is indirect and mediated by diachronic process. The processes that lead to grammaticization occur in language use for their own sakes" (emphasis added in Fischer (2007)). In this chapter I adopt an opposing view in that I argue that frequency in the production of Otfrid's theih clitic groups and form fossilization, not grammaticalization, are the causes of change.

Given these theoretical parameters, it was important to establish if any of the relevant forms had become part of the lexicon-were no longer actively produced. In this respect, the grammaticalization cline demonstrated its utility in that it provides a framework within which one may examine particular forms and determine if they behaved as a fossilized syntagm might. The analysis found that the possibility of fossilization in Otfrid really only existed for the theist attestations. Despite its potential status as a fossilized form, it is interesting to note that the constituent parts comprising theist show no signs of semantic bleaching, nor do they exhibit special syntax vis-à-vis the non-cliticizing full forms, both of
quality of the two relevent consonants (coronal $z$ and palatal $h$ ) is the least alike of the three clitic groups. I would like to thank Rob Howell for bringing this point to my attention.
which we might expect to find in fossilized clitic groups, if considered within the grammaticalization framework, that is. In fact, in the case of all three form types, there were no data to support the assumption that, as clitic groups, theih, theiz, or theist can be described through reference to the grammaticalization cline in any meaningful way; i.e., the clitic groups were identical with regard to function and meaning to their full forms and showed no signs of movement in the direction of becoming an affix. The deiz tokens from Parzival, interestingly enough, also show no evidence of grammaticalization as it is defined here, despite the fact that fossilization has clearly occurred. We further note that pronouns still actively cliticize onto preceding finite verbs in modern German (examples presented in chapter two, figure (35)) and, according to Hall (1999), do so for the same prosodic reasons evident in the OHG forms. In this respect, the clitic groups analyzed in this chapter, as well as in chapter two, place the a priori contextualization of clitics as unstable elements on the grammaticalization cline in question.

### 4.1 Pronominal cliticization or metaplasmus and synaloepha? The cases of wolt er, feristu, and theih (revisited)

The analysis has thus far shown that forms such as meg ih and theih are actively produced and not stored as one unit in the lexicon. I have also argued that the primary impetus behind cliticization is the prosodic deficiency of the pronominal clitic and, in many cases, the host as well. Through cliticization these structures are able to form bimoraic feet, which is a favored prosodic pattern in Germanic. Throughout this entire discussion, however, we have been operating under the assumption that the data under examination reflect actual speech patterns of the author, as opposed to being artifacts of Otfrid's poetic meter. The question of the influence of the meter on attested structures is raised in Otfrid's Latin preface, the Ad Liutbertum. Here Otfrid refers to the Latin orthographical figure metaplasmus, which describes the alteration in the form of a word for the sake of the meter. One type of metaplasmus he discusses is synaloepha, which refers to the elision of the final vowel before a following vowel-initial word. This figure of synaloepha is particularly relevant to an entire group of potential [verb + pronoun] clitic groups, all of which exhibit elision of an unstressed vowel. Must we assume that apparent clitics that show an elided vowel are more metrical than spoken phenomena? To what extent do these forms reflect spoken language versus metrical patterns? The ultimate goal of this chapter is to disentangle any potential influence of the poetic meter from actual speech phenomena. To avoid confusion throughout this discussion, I will use the term "metrical" only to reference the poetic meter. In keeping with this distinction, the argument presented here holds that the cliticization processes observed throughout the Evangelienbuch can be treated as generally prosodic (i.e., reflecting the spoken language), not just mere metrical (i.e., reflecting the poetic meter) phenomena. Naturally, as the latter is firmly rooted in, and a more stylized reflection of the former, there will be many instances in this chapter in which the terminology and concepts of prosody, on one hand, and those of the poetic meter, on the other, overlap.

This chapter begins with a general overview of what is known, and has been opined, about Otfrid's meter, while highlighting the challenging aspects of reconstructing it. Though a comprehensive analysis of the work's poetic meter falls beyond the scope of this chapter, this discussion will establish some basic parameters regarding the meter, to which we may refer when examining verses of the Evangelienbuch. We will then layer groupings of data into the analysis, beginning with the theih, theiz, and theist forms of chapter three. The main focus, however, will be those structures that involve elision of an unstressed vowel, e.g., wolta er $>$ wolt er 'he wanted,' zalta er $>$ zalt er 'he related,' as these forms are directly relevant to the issues related to metaplasmus and synaloepha raised by Otfrid in the preface.

The origins of Otfrid's poetic meter are disputed in the scholarly literature. The most commonly held view is that the meter is based on the Latin Ambrosian hymns attributed to
the fourth century bishop of Milan (Bostock 1976). Schweikle (1967), however, makes the observation that Otfrid, who is careful to discuss many of the challenging linguistic aspects of the work's composition in the preface, fails to give any source of his meter, Latin or otherwise. Furthermore, the only aspect of the meter discussed by the author himself is the scheme of end-rhyme, which is employed consistently throughout the work. Despite these reservations voiced by Schweikle, the hymns attributed to St. Ambrose are generally accepted as the most likely source. Described in Bostock (1976: 208), these verses were written in stanzas comprising four lines, each line with four stressed syllables, or "lifts" (indicated as ó in the figure) and a final stressed syllable.
(1)Iam súrgit hóra tértiá oóoóoóó

Et nós inténti cúrrimús oóoóoóoó
Psalléndi ópus ímplemús oóoóoóoó Christúm laudámus dóminúm oóoóoóoó

In the excerpt presented in (1) we note that each lift is separated by a monosyllabic dip, which is assumed to bear little or no stress. Only in the first line of (1) do we see an example of a monosyllabic metrical foot (bolded in the figure). In this figure, as is generally the case in other Latin hymns exhibiting the same meter ${ }^{1}$, we also note that, unlike what we find in the Evangelienbuch, regular rhyme does not always occur. With regard to its accentual patterns, the Otfridian meter is argued to be similar to that of the Latin hymns, in that it too assigns four beats per verse, though the overall line structure is somewhat different. An example of a fairly typical set of lines from the Evangelienbuch is shown in (2).
(2)Mit selben Krístes segenon wíll ih hiar nu rédinon
in einan lívol suntar thiu séltsanun wuntar With the blessings of the selfsame Christ, I intend to relate here now, Separately in one book, the wonderful miracles

Figure (2) shows two lines, each of which comprises two verses. It is obvious what one of the likely sources of uncertainty regarding the structure of the work's meter might bethough four metrical beats are assumed for each verse, not all of the metrical stresses are actually indicated in the text. Indeed it is the rare case in which all of the assumed lifts are explicitly marked in a verse, and the reader must rely on his or her own powers of scansion in order to place the remaining accents.

Though it might not be immediately apparent where one should place the unmarked stresses in (2), scansion is aided by a description of three accentual patterns presented in Bostock (1976: 325). Presumably, all of the verses in the Evangelienbuch should fit, more or less, into the following metrical cadences (3).

[^33](3) masculine: (o)óoóoóoó (ó=stessed lift/heavy or light syllable ${ }^{2}$ )
feminine: (o)óoóoxò ( $\mathrm{x}=$ metrically equal to one lift and subsequent dip)
trisyllabic: (o)óoóoóoò (ò=lift bearing secondary stress)
Regardless of cadence type, these patterns indicate that Otfrid aimed to keep the lesser stressed dips to one syllable and not engage in the widespread "free-filling" of dips characteristic of alliterative poetry. As a result, we would expect most verses to be held to a length of seven syllables, with the possibility of an initial unstressed eighth syllable. In the case of verses conforming to the feminine cadence, verses should comprise six syllables, also with the possibility of an initial unstressed seventh syllable. The third and fourth lifts of the feminine cadence warrant further attention. Following Bostock (325), the third lift comprises one stressed syllable which should always be heavy. The last lift of the feminine cadence, as well as the last lift of the trisyllabic cadence, bears secondary stress. Let us then try to map Bostock's patterns in (3) onto actual verses from the Evangelienbuch. The type of cadence exhibited by a particular verse is evident in the shape of the word that appears in verse-final position, as illustrated in the following examples.

| (4) masculine: | Nám er einan sában thar umbigúrta sih in wár (ó oó o ó o ó) (ó o ó o ó o ó) took he a linen with-that engirded himself indeed With that he took a linen (and) indeed engirded himself | IV 11, 13 |
| :---: | :---: | :---: |
| feminine: | So síe tho thar gázun noh tho zi dísge sazun <br>  so they then there ate still then sat at the table So then they ate (and) then still sat at the table | IV 11, 1 |
| trisyllabic: | Sie dátun so ih zélita in thaz crúci man nan nágalta <br>  they did as I recount onto the cross one him nailed They did, as I recount, one nailed him onto the cross | IV 27, 17 |

In the example of a masculine cadence presented in (4), we see two verses that conform to the assumed metrical pattern shown in (3). This is not the case with the first feminine verse, which defies a rigid application of the appropriate metrical cadence in that it is missing an unstressed syllable. In order to fit the actual verse to the feminine cadence, thar has been analyzed as a monosyllabic metrical foot comprising a lift and a dip (bolded in the figure), though there are certainly alternate ways of interpreting this verse vis-à-vis the cadence. The second feminine and first trisyllabic verses, on the other hand, fall obediently into line. Also obstinate to the metrical pattern is the second trisyllabic verse in (4), which engages in the free-filling practice Otfrid generally eschewed (also bolded in the figure).

In addition to end-rhyme and the cadences, there is one last feature of Otfrid's meter that requires brief discussion, i.e., the dot diacritic, a few examples of which are provided below in (5).

[^34](5)

| thaz si chínd bari $\quad$ zi woralti éinmari | I 11, 30 |
| :--- | ---: |
| that she child-ACC bear-PRET.SBJV into world singular-ADJ |  |
| That she would have borne a singular child for the world |  |
| Wolaga ótmuati so gúat bistu io in nóti | I 5, 67 |
| oh-INTJ humility-voc so good are-you ever in necessity |  |
| Oh humility! You are ever so good in necessity |  |
| Thaz drúhtin dúan wolta int iz héra in worolt sánta |  |
| that lord to do wanted and-it here into world sent |  |
| That (thing) the Lord wanted to do and sent it here into the world |  |

Like the meter in general, the author's use of the dot is disputed in the literature. What is certain is that a dotted segment, always a vowel, was to be elided. However, the purpose of that elision is not self-evident, and different scholars have offered a variety of opinions regarding this point. Kappe (1909) \& (1910), for example, assumes that both dotted segments and those segments that were actually elided from the text reflected elision patterns of Otfrid's spoken language. De Boor (1928) disagrees with this assumption and concludes that if a vowel was to be elided for the sake of the meter and contrary to spoken usage, the author availed himself of the dot. If, however, a segment was elided from the text completely, it would have also been dropped in regular speech. The dot, however, is inconsistently attested throughout the work with roughly $83 \%$ of dotted forms appearing in the earlier books (the preface, Books I and II) and the remaining $17 \%$ attested in Books III, IV and V. This fact implies that, whatever Otfrid's method was concerning the dot, his manner of application was sporadic. It would seem an unwarranted leap of faith to adopt de Boor's treatment of the dot and assume that metrical elision is simply far more pervasive in the earlier sections of the Evangelienbuch than in the later sections, or that none of the cases of actual elision in the later books is effected more so by the dictates of the poetic meter than by speech patterns. Instead in this analysis I assume that elision could be indicated in the manuscript either through use of the dot or by excluding the segment entirely. Furthermore, I assume that elision could be induced by a number of different factors, most particularly, the poetic meter or prosody.

Based on the above discussion, we may then begin to formulate some generalizations regarding Otfrid's meter that will provide the framework for our subsequent discussion. Like Bostock (1976: 326), we note that the most salient features of the Evangelienbuch's meter seem to be the ubiquitous end-rhyme scheme and the alternating monosyllabic lifts and dips, though the latter pattern is certainly not always realized. Given the apparent variation exhibited in the rhythmic schemes of the actual verses, it would probably serve us well to do as Bostock cautions and not try to force every verse into "too rigid a metrical pattern." Yet, we still must contend with the possible effects that these patterns could have on the orthographic representations of apparent clitics. Consider, for example, the case of theih, theiz, and theist. Before cliticization, these structures were thaz ih, thaz iz, and thaz $i s t$, respectively. It is possible to argue that cliticization in these cases was motivated primarily by the desire of the author to adhere to a metrical pattern. In this case, theih would be the result of a metrically induced cliticization process, whose existence reflected
more of a metrical than prosodic imperative-through cliticization a verse that comprises nine syllables better conforms to a metrical cadence that holds a verse to eight syllables.

In the case of those forms that exhibit elision of the vowel, there might even be a stronger argument in favor of the attested forms being better reflections of the meter rather than speech, as illustrated in the figure below.

| (6)Before elision |  |  | Attested form |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | (o ó oo ó o x ò) |  |
| Bigonda er in tho redion $>$ Bigond er in tho redion $\operatorname{lll}$ 20, 143 began he them-DAT then relate |  |  |  |  |
|  |  |  |  |  |
| He began then to relate to them |  |  |  |  |
| gilóubta er filu spáto |  | > | gilóubt er filu spáto | I 4, 84 |
| believed he very late |  |  |  |  |
| He believed very late |  |  |  |  |

In the two verses presented in (6) elision of the initial unstressed vowel effects a monosyllabic dip, which forms a paradigmatic metrical foot with the preceding stressed lift and allows the verses to conform to the feminine cadence presented in Bostock. In fact, the primary question we must ask concerning these forms is whether or not actual cliticization of the pronoun onto the verb has actually taken place. One could argue that the verses in (6) are nothing more than representations of a metrical elision of the unstressed vowel. This process of synaloepha could be, as is argued in Baesecke (1910:375), firmly rooted in the Latin poetic tradition, rather than in the patterns of the spoken vernacular. So, the main argument we must substantiate is that the forms mentioned above, most especially the types of structures in (6), are indeed cases of cliticization as they would have occurred in speech. We should also try, as much as we are able, to show that elision was first and foremost motivated by prosodic factors, not the poetic meter. In achieving this end, we will also examine data illustrating that the cadences outlined in Bostock accurately describe the shape of the majority of verses in the Evangelienbuch.
4.2 The influence of the poetic meter on the attestation patterns of theih, theiz, and theist

We begin then with theih, theiz, and theist, forms for which it is comparatively easy to disentangle to the effects of the poetic meter and identify those cases in which only prosody and spoken language patterns can account for the attested structures. Indeed these tokens appear to be obvious clitic groups, in that the constituent parts, through assimilation, have combined to form one defined unit, which is always represented as such in the manuscript. What is more, the forms show the operation of phonological umlaut, which could have only been effected through the cliticization of the pronoun onto the host. These forms could not be explained by referencing any of the Latin figures of metaplasmus, certainly not synaloepha. Therefore, it would be exceedingly difficult to account for theih, theiz, and theist only in terms of metrical phenomena, whereas the prosodic analysis provided in
chapter three presents a comprehensive description of the processes that yield the relevant forms.

The more difficult question regarding these structures, though, is the extent to which the meter may have influenced the attestation patterns of the cliticized vis-à-vis the full form variant. Can it be shown that occurrence or non-occurrence of cliticization renders verses more consistent with the aforementioned metrical patterns, i.e., the cadences identified in Bostock or even the alternating monosyllabic stress and dip pattern? The data indicate that the poetic meter, to a limited extent, does influence whether the cliticized or non-cliticized variant is attested. Before we examine individual attestations, however, let us first consider the data in the aggregate.

| (7) | no cliticization <br> (thaz ih, thaz iz, thaz ist) | cliticization <br> (theih, theiz, theist) | Total |
| :--- | :---: | :---: | :---: |
| \# of verses conforming to <br> the feminine cadence | 57 | 86 | $\mathbf{1 4 3}$ |
| \# of feminine verses that <br> do not conform | 4 | 3 | 36 |
| \# of verses conforming to <br> the masculine cadence | 28 | 21 | $\mathbf{4 9}$ |
| \# of masculine verses that <br> do not conform | 30 | 27 | 57 |
| \# of verses conforming to <br> the trisyllabic cadence | 6 | 20 | $\mathbf{2 6}$ |
| \# of trisyllabic verses that <br> do not conform | 2 | 9 | 11 |

(8) $\mathbf{2 1 8}$ out of 322 fit a cadence $\quad \Rightarrow 67.7 \%$

104 out of 322 do not fit a cadence $\Rightarrow 32.3 \%$
The data presented in (7) and (8) show the number and percentage of verses that conform to one of the three cadences, as well as the number and percentage of verses that do not fit the expected metrical patterns. To get a sense of what the former set of verses looks like and how they fit the rhythmic constraints of the cadences, let us consider the following examples.

## (9)Feminine cadence óoóoóò

Attested form théist ju sar giménit that-is already also meant That already also is meant

Masculine cadence óoóoóoó

After scansion
théist ju sár giméinit II 12, 84

Tház ih íamer drúhtin mín I 2,55

## Trisyllabic cadence (o)óoóoóoò

| Attested form | After scansion |
| :--- | :--- |
| theiz állaz si so sámalih | (theiz) állaz sí |

( (heiz) allaz si so sámalih V 25, 65
that-it all be-PRES.SBJV so alike
That it all be so alike

The verses in (9) illustrate the various ways in which a verse may conform to one of the metrical cadences. The first and last of these forms, the feminine and trisyllabic verses, exhibit cliticization of thaz ist and thaz iz, respectively. Unlike the feminine verse, the trisyllabic verse also shows an initial unstressed syllable. In the masculine example, the full form variant, non-cliticizing variant is attested and the verse still conforms to its cadence.

As indicated in (7), however, there are a number of verses that do not fit any of the identified patterns. Yet we may still categorize them according to a particular cadence type, even if the expected rhythm is not fully realized, as is illustrated in (10).
(10) Feminine cadence óoóoóò

Attested form
theist drúhtin Krist gúater
that-is lord Christ good
That is a good Christ
Masculine cadence óoóoóoó
Attested form
theist allaz fléisg so thu wéist that-is all flesh as you know That is all flesh as you know

Trisyllabic cadence óoóoóoò Attested form thaz iz mág so ih rédinon that it could as I say That it could, as I say

After scansion
(theist) drúhtin Kríst gúatèr I 12, 14

After scansion
théist állaz fléisg so thu wéist II 12, 34

After scansion
tház iz mág so ih rédinòn $\quad \mathrm{V}$ 12, 34

These verses do not neatly fit into the patterns set by the cadences, though one may still infer what the target rhythmic structure was, based on the shape of the verse-final word (bolded in the figure). As shown in the above figure, an attempt at scansion was made, though one could certainly argue for an alternate placement of the stress accents. Regardless of how one decides to place the four stressed lifts, all of the verses in (10) cannot conform to their cadence type. In the case of the feminine verse, we must allow for a monosyllabic metrical foot (Krist) with no unstressed dip separating it from the following lift (gúatèr). Similarly, the masculine verse must also necessarily comprise one monosyllabic metrical foot. The trisyllabic verse, on the other hand, breaks from the alternating stress-dip pattern and exhibits two unstressed syllables.

Having considered what the attested verses look like vis-à-vis the cadences, we return to the initial argument presented above, i.e., that the poetic meter, to a certain extent, influences which variant of the relevant forms is attested. We will illustrate this point in the next series of examples, beginning with figure (11).
(11) (o)óoóoóò - verses conforming to the feminine cadence
(o)óoooóo (accentual pattern attested in the text)
a. theist góuma filu réini I 1, 20
that-is meal very pure
That is (a) meal (that is) very pure
theiz thír irge zi gúate II 21, 4
that-it you-DAT may fare well
That it may fare well for you
theist gótes thang joh síner III 20, 50
that-is God-GEN mercy and his
That is the mercy of God and his
Theiz wári so gispróchan
IV 29, 17
that-it is-PRET.SBJV so spoken
That it would have been so spoken
theih híar gidue in ríche V 24, 8
that-I here do-PRES.SBJV in kingdom-DAT
That I may do here in the kingdom
b. (o)ooóooo (accentual pattern attested in the text)
theih thuruh thíno guati
II 14, 46
that-I through your virtue
That I through your virtue
theiz wari sín gilicho
III 20, 36
that-it be-PRET.SBJV his equally
That it might have been equally his
theiz innan érdu stenit V 1, 25
that-it in earth-DAT stands
That it stands in the earth
theiz selbo drúhtin wari
that-it same lord be-PRET.SBJV
That it would have been the same lord
theist al fon thémo brunnen V 23, 292
that-is all from the fountain
That is all from the fountain
c. variable accentual pattern attested
theih sí thin scálk giwisso III 1, 41
that-I be-PRES.SBJV your servant certainly
That I certainly be your servant
theist mannes lúst zi líbe I 1, 17 that-is man-GEN tendency in life
That is the tendency of man in life
theiz scóno thoh gilute
I 1, 37
that-it beautifully yet sound-PRES.SBJV
That it might yet beautifully sound
theiz únfarholan wari
that-it unconcealed be-PRET.SBJV
That it might have been revealed
theist lébentero richi
that-is living-GEN.PL kingdom
That is the kingdom of the living ones

II 3,6

V 23, 86

Though the author's placement of the accents in the examples in (11) is characteristically spotty, those that are present, in addition to the shape of the verse-final word, indicate that these verses all conform to the feminine cadence as outlined in Bostock. Notably, it is only through cliticization that the attested verses attain this metrical pattern. If the forms had surfaced as their non-cliticizing variant, the verses still would have exhibited the alternating stress-dip pattern (e.g., tház ih sí thin scálk giwissò, III 1, 41) but would not have matched the prescribed cadence. It it possible that, at least in these cases, conformity to the feminine cadence, which restricts the number of lifts to four per verse, was the overriding imperative. The entire work contains seventy-five such verses that exhibit this exact metrical pattern. There are an additional eleven verses that also exhibit cliticization and conform to the feminine cadence, in this case without the initial unstressed syllable.


In each of these eleven tokens, cliticization yields verses that conform to the feminine cadence. Without cliticization they would not fit any of the identified cadences, nor the alternating stress-dip rhythm.

Similar patterns can be found for the other two cadences, though, as can be seen in the table in (7), their rate of occurrence is significantly lower than is the case with the cadence exhibited in (11) and (12). A sample of verses conforming to the masculine and trisyllabic cadences is presented in (13) and (14).
(13) (0)óoóoóó - verses conforming to the masculine cadencea. (o)ooóoooó (accentual pattern attested in the text)
Theist thaz mínaz heila múat ..... II 13, 15that-is the my holy dispositionThat is my holy disposition
theist ouh fésti ubar ál ..... V 11, 14
that-is also fast over allThat is also fast over all
theiz ouh ínan ni firgéit ..... III 24, 24
that-it also him-ACC NEG passed overThat it also passed him over
b. (o)ooóoooó (accentual pattern attested in the text)theiz thuruh ínan ist gidánII 2, 19that-it through him is doneThat it is done through him
theih mit gilóubu werde sín ..... III 20, 175
that-I with belief become be-INFThat I will become with belief
theist filu jámerlichaz thíng ..... V 19, 10that-is very pitiable thingThat is a very pitiable thingc. Variable accentual pattern attestedóbaz theih hiar fóra quadII 6, 4
when-it that-I here before saidWhen it what I said here before
nust thrítto dág theiz ist gidán ..... V 9, 38now-ist third day that-it is doneNow is the third day (on) which it is done
theiz was fon wázare gidán ..... II 8, 40that-it was from water producedThat it was produced from the water
(14) (0)óoóoóoò - verses conforming to the trisyllabic cadence
a. (o) óoooóoo (accentual pattern attested in the text)
theih zálta nu hiar óbana II 9, 1
that-I related now here above
That I now, here above related
theist álles guates fúrista
that-is all-GEN good-GEN the first
That is the first of all (that which is) good
theiz thír io wese lóbosam IV 1, 39
that-it you-DAT ever be-PRES.SBJV praiseworthy
That it ever be praiseworthy unto you
theist ávur therer wóroltring
that is again this universe
That is again this universe
b. Variable accentual pattern attested
theiz dúit thia mína redina
V 23, 228
that-it makes the my speech
That it makes my speech
Joh theiz ni wás ouh bóralang
II 3, 13
And that-it NEG was also not-all-too-long
And that it was not all too long
firnim nu wíb theih rédino
II 14, 35
recognize-IMP now, woman, that-I say
Recognize now, woman, that (which) I say
III 22, 29

V 1, 33

,

II 14, 35

As we see in (13) and (14), only after cliticization do these verses conform to the masculine and trisyllabic cadences. Without cliticization many of the verses would comprise one lift too many (e.g., tház ih zálta nú hiar óbanà, II 9, 1) or fail to exhibit the undulating stressdip pattern that seems to be the rhythm for which the author strove (e.g., Joh tház iz ni wás ouh bóralàng, II 3, 13). In total, the work contains forty-one verses that feature cliticization of thaz ih, thaz iz, and thaz ist and conform to the masculine and trisyllabic cadences. If we expand the dataset to include all attestations of thaz ih, thaz iz, and thaz ist, either as a cliticized or non-cliticized variant, we find that 218 verses (roughly two-thirds) of the 322 total verses are consistent with the cadences outlined in Bostock (refer back to (7) and (8) for a breakdown of these data).

Yet those verses that conform to the cadences, with the non-cliticized variant attested, warrant closer inspection. Consider the following verses in (15). Also note that the figure displays the inferred accents, not just the accents attested in the text.

| (15) | The attested full form | The unattested cliticized variant | Citation |
| :---: | :---: | :---: | :---: |
| Fem. cadence | (thaz) íh giwár si hártò that I heedful be very That I be very heedful <br> (Thaz) íst quad ér nu wúntàr that is said he now wonder That is, he said, now a wonder <br> (thaz) íh es thóh giscríbè that I it-GEN yet write-PRES.SBJV That I may yet write of it <br> (thaz) íh mih úntar thínàn that I Refl in yours That I (always must rejoice) in yours | théih giwár si hártò <br> Théist quad ér nu wúntàr <br> théih es thóh giscríbè <br> théih mih úntar thínàn | I 2, 8 <br> III 20, 145 <br> IV 1, 37 <br> V 24, 18 |
| Masc. cadence | (Thaz) íh ni scríbu thúruh rúam that I NEG write because of glory That I do not write because of glory <br> (thaz) íh thir zálta ní then sún that I you-dat counted Neg the sun That I did not count the son unto you <br> (Thaz) íst nu wúntarlíchaz thíng that is now wonderful thing That is now a wonderful thing <br> (thaz) íh giscríb in únser héil that I write-PRES.SBJV in our holy That I may write in our holy (gospels) | Théih ni scríbu thúruh rúam <br> théih thir zálta ní then sún <br> Théist nu wúntarlíchaz thíng <br> théih giscríb in únser héil | $\begin{aligned} & \hline \text { I 2, 17 } \\ & \text { II 9, } 87 \\ & \text { III 26, } 37 \\ & \text { V 25, } 10 \end{aligned}$ |
| Trisyll. cadence | (thaz) íh thoh thés gihógetì that I still this-GEN think-PRET.SBJV That I still would have thought of this <br> (Thaz) íst uns híar gibílidòt that is us here depicted That is here depicted for us <br> (thaz) íh bigínne brédigòn that I begin-PRES.SBJV to preach That I may begin to preach <br> (thaz) íh io wárd so frávilì that I ever became so foolhardy That I ever became so foolhardy | théih thoh thés gihógetì <br> Théist uns híar gibílidòt <br> théih bigínne brédigòn <br> théih io wárd so frávilì | $\begin{aligned} & \text { II 23, } 26 \\ & \text { II 3, } 57 \\ & \text { II 12, } 60 \\ & \text { V 25, } 31 \end{aligned}$ |

These forms, as they are attested in the text, first appear to belong to the larger group of verses that benefit metrically from the occurrence or non-occurrence of cliticization. Yet, it is clear from the figure that the cliticized, though unattested, variant would also conform to
its respective cadence. In these cases, then, we cannot point to the poetic meter as the impelling force behind whether the cliticized or non-cliticized form surfaced. Instead, we must look to prosody to explain why the full form is attested; i.e., the pronoun received sentential, or metrical, stress postlexically, which prevented the cliticization of $i h, i z$, or ist onto thaz. How this process unfolds is illustrated in (16).
(16) Lexical $\quad[t h a z]_{\sigma} \quad[i h]_{\sigma} \quad-$ unfooted syllables emerge from the lexicon output

Postlexical output

As seen in (16), the assignment of sentential stress to both of the pronouns (thaz and ih) allows these constituents to recursively form pwords postlexically. As a result of having become an independent prosodic unit, the pronoun ih is able to stave off cliticization. In all, forty-two verses fall into this category in that they exhibit the full form but would also conform to the cadences if they contained the cliticized variant ${ }^{3}$.

Let us then reexamine the numbers and percentages initially presented in figure (8), but this time we will take into account the last group of forms we just discussed.
(17) Out of 322 total verses:
a. 176 conform to a cadence ONLY through occurrence or non-occurrence of

| cliticization | $\Rightarrow 54.7 \%$ |
| :--- | :--- |
| b. 42 conform to a cadence either way | $\Rightarrow 13 \%$ |

c. 104 do not conform to a cadence one way or the other $\quad \Rightarrow 32.3 \%$

We can now take a closer look at those verses that fall within the parameters outlined in (17c). In contrast to the sets of examples presented above, these verses do not conform to any of Bostock's patterns. The verses illustrated in (18) show only those lifts that are attested in the text.
(18) Verses exhibiting non-conformance to the cadences
a. (o)óoóoóò - feminine cadence theiz ein gidróg wari III 8, 24
that-it a ghost is-PRET.SBJV
That it would have been a ghost
theist drúhtin Krist gúater
I 12, 14
that-is lord Christ good
That is a good lord, Christ

[^35]Théiz ni wurti
irfúntan
IV 37, 28
that-it NEG become-PRET.SBJV discovered
That it would not have become
discovered
theist avur thaz hímilrichi
that-is but the Kingdom of Heaven
That is but the Kingdom of Heaven
thaz ih zi thíu quami
that-I with that come-PRET.SBJV
That I, with that, would have come
Thaz íst ouh dag hórnes
that is also day horn-GEN.SG
That is also the day of the horn
b. (o)óoóoóoó - masculine cadence
theiz thiu zít was in wár
that-it the time was in truth
That it was indeed the time
Theist es állero meist
V 12, 91
That-is it-GEN.SG all especially
That is especially of it all
theiz sun sin éinogo was
II 3, 49
that-it son his own was
That it was his own son
theist sconi férs sar gidan I 1, 48
that-is pretty verses initially performed
That is pretty verses initially performed
thaz ih rúahti bi tház IV 13, 44
that I consider-PRET.SBJV for this reason
That I might have considered for this
reason
thaz ih iz ázi mit íu
IV 10, 3
that I it eat-PRET.SBJV with you-PL
That I might have eaten it with you
c. (o)óoóoóoò - trisyllabic cadence
theiz bithékitaz
V 25, 86
that-it covered
That it covered
tház iz mag so ih rédinon
V 12, 34
that it can as I say
That it can, as I say
$\begin{array}{ll}\text { theist imo thíomuati } & \text { I 3, 41 } \\ \text { that-is him-DAT subordinate } & \\ \text { That is subordinate unto him } & \end{array}$
theist dages héizesta II 14, 10
that-is day-gen hottest
That is the hottest (part) of the day
theih thin firlóugneti
IV 13, 48
that-I deny-PRET.SBJV yours
That I might have denied yours
Though the cadences are not fully realized, one may still categorize the verses according to the shape of the verse-final word, though in some cases different classifications are possible. For example, the verse, theiz sun sin éinogo was (II 3, 49, presented in 19b), could be interpreted as a feminine cadence, though to do so would require a certain amount of distortion of the line: theiz sún sin éinogó wàs. In most of the examples presented in (18), however, we note that the occurrence or non-occurrence of cliticization does not effect conformance with the cadences; i.e., these verses, with three notable exceptions, would defy the paradigmatic patterns regardless of whether the cliticized or non-cliticized variant surfaced (19).
(19) With cliticization (attested in the text) théiz ein gidróg wárì that-it a ghost is-PRET.SBJV
That it would have been a ghost
théiz thiu zít wás in wár that-it the time was in truth
That it was indeed the time
théiz bithékitàz
that-it covered
That it covered

Without cliticization (not attested) thaz íz ein gidróg wárì III 8,24 thaz íz thiu zít wás in wár

III 2, 35
thaz íz bithékitàz
V 25, 86

The verses in (19) show the assumed lifts, which could be placed on different syllables, depending on how one chooses to interpret the lines. Regardless of how one assigns the lifts, though, the verses defy the metrical cadences, either in their attested form or with the non-cliticized variant. This is not the case for all of the verses presented in (18). The last three verses of (18c), in fact, would conform to the trisyllabic cadence, were it not for cliticization. Note that figure (20) displays the inferred accents, as well as those attested in the text.
(20) With cliticization (attested)
théist ímo thíomuatì

> Without cliticization (not attested)
that-is him-DAT subordinate
That is subordinate unto him

| théist dáges héizestà <br> that-is day-GEN hottest <br> That is the hottest (part) of the day | $\Rightarrow$ | tház ist dáges héizestà | II 14, 10 |
| :--- | :--- | :--- | :--- |
| théih thín firlóugnetì <br> that-I deny-PRET.SBJV yours <br> That I might have denied yours | $\Rightarrow$ | tház ih thín firlóugnetì | IV 13, 48 |

As seen in (20), the cliticized variant is attested, and, as a result, the verses do not fit the expected trisyllabic cadence. What is more, cliticization in these cases has disrupted the alternation between monosyllabic stresses and dips and has, thereby, effected a lessdesirable rhythmic pattern.

Which conclusions may we then draw from these data? As was illustrated in those verses that fit the parameters outlined in (17a) and (17b), roughly two-thirds (67.7\%) of the verses containing theih, theiz, or theist, or the full form variant, conform to the feminine, masculine and trisyllabic cadences. These data suggest that the metrical models outlined in Bostock, to a certain degree, aptly describe the rhythmic patterns attested by the verses of the Evangelienbuch. They also indicate that the occurrence or non-occurrence of a clitic group could have certainly been motivated by metrical considerations. Yet out of those 218 verses that fit the cadences, forty-two of these ( $13 \%$ of the total 322 ) comprise full forms that could also surface as the cliticized variant without rendering the verse inconsistent with its cadence. Subtracting these numbers from the total leaves us with 176 verses that conform to a cadence only in their attested form. Were the relevant constituents to surface in their alternate form, these verses would not conform to the cadence. It is for these verses, roughly half of the total number of attestations, that one might make the argument that the occurrence or non-occurrence of cliticization was influenced by the imperatives of the poetic meter. In the case of the remaining $32.3 \%$ of the total verses, the exhibited rhythmic pattern does not fit a cadence, regardless of which variant surfaces. In these cases, as well as the $13 \%$ of verses that conform no matter which variant is attested, one cannot point to the meter as the primary impetus behind cliticization. As was argued to be the case with the verses presented in (15), we may look to prosody to explain why one variant might be preferred over the other; i.e., the pronoun receives sentential stress, can form its own independent pword and avoids cliticization, or the pronoun remains unfooted and is integrated into the prosodic structure through cliticization, as outlined in chapter three. There is no evidence to suggest that we should treat the attestations of theih, theiz, and theist as a primarily metrical phenomenon.

### 4.3 Cliticization or metrically-licensed elision? The case of wolt er

The analysis now turns to those forms that exhibit the elision of an unstressed vowel in a hiatus environment, as is the case in a form such as wolta er 'he wanted,' which often shows elision of the verb-final unstressed vowel. The verses comprising this group of data include those that contain a third person singular preterit indicative verb that ends in an
unstressed vowel ${ }^{4}$ and is followed by a vowel-initial pronoun. A small sample of these verses is presented in (21).
a. Fráget er nan sáre

Asked he him immediately
He asked him immediately
b. Wer horta ér io thaz gimáh

Who heard before ever the fitting explanation
Who heard ever before the fitting explanation
c. ni giéiscota er thaz wóroltman

III 20, 157
III 20, 147
,

NEG studied before DET man-NOM
Man did not study before
The forms in (21) serve as instructive examples of the types of verses that have been included in the data-set. In (21a) we see that the verb-final unstressed vowel has been elided (Frágeta $>$ Fráget), as has the initial vowel of the second pronoun (inan $>$ nan). Both elisions change the rhythmic pattern of the verse. In contrast, the verb-final vowel in (21b) is retained. In the case of (21c), the verb-final vowel is marked for elision through the use of the dot diacritic. As this analysis has already discussed, we treat this dotted segment as elided. In describing the elision evident in these verses, we may refer to two separate, though not unrelated, phenomena. Synaloepha, the figure of metaplasmus discussed in the literature on Otfrid, as well as in Otfrid's own preface to the work, is often cited to explain the attested forms. Taken to the extreme, this view, as represented in Baesecke (1910), holds that the author's regular elision of unstressed vowels before a vowel-initial pronoun is purely a metrical phenomenon and not a feature that would have been evident in Otfrid's regular speech. Other scholars, such as Kappe (1909) and (1910) and Schweikle (1967), assert that all of the patterns of elision attested in the text reflected those of the spoken language. According to this view, we would treat forms that exhibit elision as cases of cliticization that are motivated entirely by speech patterns. The objective of this section, then, is to extricate the additional effects of the poetic meter on the relevant verses from the natural effects of prosody.

Before engaging in a closer analysis of individual attestations, we begin by considering the data in the aggregate. Let us again assume the same metrical parameters in this section as we did in the last; i.e., verses may conform to one of three potential cadences. Also of interest is the alternating stressed lift-unstressed dip pattern for which Otfrid seemed to have strived. The figure below displays the numbers and percentages of verses that conform to a cadence, as well as those that do not.

[^36]| (22) | no elision | elision | Total |
| :--- | :---: | :---: | :---: |
| \# of verses conforming to the <br> feminine cadence | 0 | 114 | $\mathbf{1 1 4}$ |
| \# of feminine verses that do not <br> conform | 54 | 42 | 96 |
| \# of verses conforming to the <br> masculine cadence | 7 | 21 | $\mathbf{2 8}$ |
| \# of masculine verses that do not <br> conform | 31 | 31 | 62 |
| \# of verses conforming to the <br> trisyllabic cadence | 1 | 14 | $\mathbf{1 5}$ |
| \# of trisyllabic verses that do not <br> conform | 3 | 8 | 11 |

(23)

157 verses match a cadence $\quad \Rightarrow 48.2 \%$
169 verses do not match a cadence $\quad \Rightarrow 51.8 \%$
As shown in (22) and (23), not quite half of the relevant verses conform to one of the metrical patterns outlined in Bostock. Examples from the group of verses that fit the feminine cadence are presented in (24), which shows the attested as well as the assumed accents.
(24) (0)óoóoóò - verses conforming to the feminine cadence
a. ja kúndt er úns thia héilì I 6, 18
yes announced he us-DAT DET salvation
Yes he announced to us salvation
b. Zált er ín tho fóllòn

III 13, 3 told er them then exhaustively He told them then exhaustively
c. er détaz híar nu féstì

IV 27, 16 he did-it here now fast
He reinforced it here now
d. Rédinótær súntàr H 143
said-he especially
He said especially
e. Ni máchotạ ér thio dátì

IV 35, 3
NEG did he the deeds
He did not do the deeds

In all of the verses in (24) some alteration of the expected handbook form is attested in the text. In (24a) and (24b) the unstressed vowel $a$ has been elided. In (24c), however, the unstressed $a$ is retained, and, instead, the initial vowel of the pronoun has been dropped. Drawing from the Latin poetic tradition, this form is more accurately described as a case of aphaeresis, which is another form of metaplasmus and entails the omission of a wordinitial letter. In the verse presented in (24d), the form attested in the manuscript is

Rédinótcer, ${ }^{5}$ which provides an example of yet another figure of metaplasmus, in this case synaeresis. Synaeresis refers to a merging of two syllables into one. In the final example in (24), the dot diacritic is used in order to indicate the elision of the unstressed vowel. Regardless of the method employed, however, the effect is the same for all of the verses that fall into this category. Through the elision of one of the unstressed vowels, the verses are able to conform to the feminine cadence. If the unstressed vowel had been retained, the verses would not fit the cadence. We also note that elision in these cases allows the structures in (24) to conform to the paradigmatic stress-dip pattern.

Similar to the forms just examined, we have a number of verses that conform to the masculine and trisyllabic cadences, a few examples of which are presented below in (25) and (26) showing assumed and attested accents.
(25) (0)óoóoóoó - verses conforming to the masculine cadence
a. thó inthábet ér sih sár III 23, 26 then refrained he REFL immediately The he refrained immediately
b. Zált er ín sum síban wé

IV 6, 47
counted he them-Dat many seven pains
He counted them, many seven pains
c. ni móht ih míh intháben sár II 7, 29

NEG able to-PRET.IND I REFL refrain immediately
I was not able to refrain immediately
d. Joh óffonótaz íro múat

V 23, 63
and opened-it her heart
And her heart opened it
e. Wer hórta ér io tház gimáh

III 20, 147
Who heard before ever the fitting explanation
Who heard before ever the fitting explanation
In the first three verses of (25), elision of the word-final unstressed vowel of the finite verb enables the structures to fit the masculine pattern. In (25d), aphaeresis provides the means for ridding the verse of an unwanted unstressed syllable. (25e), on the other hand, conforms because the non-elided variant is attested. In all of these examples, however, the verse fits the prescribed cadence only because their particular variant is attested; i.e., the first four verses would exhibit non-conformance if both unstressed vowels were retained, and the final verse, if one of the unstressed vowels were elided.
(26) (0)óoóoóò̀ - verses conforming to the trisyllabic cadence
a. Sánt er míh fon hímilè

I 4, 63
Sent he me from heaven
He sent me from heaven

[^37]b. gisídalt ér in hímilè

I 7, 16
settled he in heaven
He settled in heaven
c. Tház bigónd er rédinòn

IV 1,15
that began he talk-INF
That he began to talk
d. Er kúndta uns tház in álanòt

II 3, 21
He announced us-DAT that thoroughly
He announced that to us thoroughly
e. déta únsih úrwisè

II 6, 38
made us-ACC banished
(He) banished us
Similar to the masculine verses in (25), the verses presented in (26) all conform to the trisyllabic cadence, but only do so in their attested forms. (26a-d) all exhibit elision of the verb-final unstressed vowel. Had the vowel not been dropped, these structures would not fit their cadence. In contrast, the verse in (26e) retained the unstressed vowel in order to fit the cadence.

This pattern of conformance, but only with the attested variant, applies to the overwhelming majority of the 157 structures referred to in figures (22) and (23). The six exceptions to this rule, however, are worth a closer look and are presented in (27). For the first three verses in the figure, both inferred and attested accents are shown. For the last three verses, only the attested accents are marked.
(27) (0)óoóoóò - verses conforming to the feminine cadence
attested form unattested variant
a. joh óugt er ímo fóllòn joh óugta ér mo fóllòn

III 20, 136
and showed he him-dat exhaustively
And he showed him exhaustively
(o)óoóoóó - verses conforming to the masculine cadence
attested form
b. Scóno zált er ímo tház
finely told he him-dat that
He told him that finely
c. thaz wára zált er ímo sár
that indeed told he him-DAT immediately
Indeed he told him that immediately
unattested variant
Scóno zálta ér mo tház II 12, 51
thaz wára zálta ér mo sár
IV 15, 18

## Attested - conforms to <br> feminine cadence

d. zi théru steti fúart er to the city went he He went to the city
e. génan so bifált er
that so vanquished he
He vanquished that in this manner
f. Irquíct er ouh so móht er revived he also as able to-PRET he He revived also, as he was able to

## Not attested - conforms to masculine cadence

 zi théru stéti fúarta érgénan só bifálta ér

Irquíct er óuh so móhta ér

I 11, 26

II 5, 14

III 14, 7 dealing with the individual structures, we should discuss the ways in the which (27d), (27e), and (27f) were scanned, as these are examples of relatively non-canonical feminine cadences. Working within the accentual pattern indicated in the text, one could potentially scan these verses as masculine cadences, though none of the tokens would actually fit the pattern, and they would require the presence of a monosyllabic metrical foot with a primary lift placed on the pronoun that immediately follows (zi théru stéti fúart ér). A better metrical result is achieved when one assumes a feminine cadence for the three verses and attaches secondary stress to the verse-final pronoun. In prosodic terms, this is also the preferred option in that the pronoun, as a function word, is likely to bear a lesser degree of stress than the verb, a lexical word, that precedes it. More will be said about these forms below.

Returning to our discussion of the six verses in (27), the first three tokens, (27a), (27b), and (27c), all conform to their respective cadences in their attested form. Yet, as (27) shows, they also have a alternative form that would fit the prescribed pattern. In the unattested variants imo becomes mo, a regularly occurring reduction in the Evangelienbuch, which we illustrate in the following two verses.
(28) kert er mo álleswio thaz múat turned he him-dat differently the heart He turned his heart in a different direction

Sliumo ságeta er mo tház II 7, 61 quickly said he him-dat that Quickly he said that to him

IV 15, 30

Given the perfectly legitimate alternate forms presented in (27), it is more difficult to point unequivocally to the poetic meter as the central motivation behind elision for these forms. Prosody, once again, accounts for the crucial difference between the attested and unattested structures. In the case of the former, the pronoun er does not receive postlexical sentential stress and is integrated into the larger prosodic structure as a clitic. In the case of the latter, the pronoun er does receive sentential stress, allowing it to form a foot and pword and, thereby, stand on its own as an independent unit.
(29)

Attested variant


## Unattested variant

Lexical $\quad\left[\begin{array}{llll} & {[\mathrm{ug}]_{\omega}} & {[\mathrm{er}]_{\sigma}} & {[\mathrm{imo}]_{\sigma}}\end{array}\right.$ - syllables emerge from the lexicon output

Postlexical output

Similar to the analysis offered in chapter 2, in which I argue that cliticization is prompted by the prosodic deficiency of the pronoun rather than the reduction of the pronoun and that the latter process could only occur after the pronoun has cliticized onto and triggered umlaut in the host verb, I assume the same sequence for the forms above in (29) and below in (30)-that cliticization occurs first, followed by resolution of the hiatus. More will be said on the issue of sequencing later in this chapter.

The final three verses of (27) also have an unattested variant that would conform to a cadence. In this case, however, the non-occurrence of elision would allow the verse to fit the masculine cadence. So once again, we cannot appeal to the poetic meter to explain why one variant surfaces over the other but, instead, must look to prosody for an explanation.

Attested variant

| Lexical output | [fúarta] ${ }_{\omega}$ | $[\mathrm{er}]_{\text {o }}$ | - syllables emerge from the lexicon |
| :---: | :---: | :---: | :---: |
|  | 1. [ó] | - | - assignment of sentential stress |
|  | 2. [ $\omega$ ] | - | - recursive assignment of pwords |
|  | 3. [fúarta | $e r]_{\omega}$ | - integration of pronoun through cliticization |
| Postlexical output | 4. [fúart | $e r]_{\omega}$ | - resolution of the hiatus |

Unattested variant

| Lexical output | [fúarta] ${ }_{\omega}$ | ${ }_{[\mathrm{er}}^{]_{\text {o }}}$ | - syllables emerge from the lexicon |
| :---: | :---: | :---: | :---: |
|  | 1. [ $\sigma$ ] | [ ${ }^{\text {¢ }}$ ] | - assignment of sentential stress |
|  | 2. [ $\omega$ ] | [ $\omega$ ] | - recursive assignment of pwords |
| Postlexical output | 3. [fúarta] ${ }_{\omega}$ | [ér] ${ }_{\omega}$ | - integration \& reduction of the stray prosodic material |

In the attested structure the pronoun er does not receive sentential stress, cannot form its own foot and pword, and is, consequently, integrated into the prosodic structure as a clitic. As represented in (30), as well as (29) for that matter, the elision of the unstressed vowel of the finite verb results from the resolution of the hiatus environment effected through
cliticization. In the unattested variant, er does receive postlexical sentential stress, which allows the pronoun to form its own independent prosodic constituent. This prosodic analysis of these forms is consistent with their attested metrical patterns. In the attested feminine verse, the clitic pronoun fails to receive sentential stress and bears a metrical lift that amounts to secondary stress. In the unattested masculine variant, the pronoun receives sentential stress, as well as a metrical lift that amounts to primary stress. ${ }^{6}$

Removing these six verses, we are left with 151 (or $46.3 \%$ of total) verses that conform to their respective cadence, but only in their attested form. In these cases, one could make an argument that elision of one of the unstressed vowels (or a merging of the two) was prompted by the author's desire to have the verses conform to one of the three cadences. However, there are 169 (or $51.8 \%$ of total) verses remaining that do not fit any of the patterns. These forms may be further broken down into two subgroups, the first of which comprises structures that do not fit a cadence regardless of whether or not elision takes place. A sample of these verses is presented in (31), which displays only the attested accents. Also provided in (31) are the three rhythmic paradigms, so that the reader may compare the attested verses against the model cadences.
(31) Verses exhibiting non-conformance to the cadences

Feminine cadence - attested Unattested variant
(o)óoóoóò

Firságet er in thaz gizámi Firságeta er in thaz gizámi III 15, 27
forbid he them the wonderful habit
He forbid them the wonderful habit
thoh thúlt er ofto in wára
still suffered he often in truth
Still he suffered often indeed
Korata er thía warba
Korat er thía warba
III 6, 19
tried he in this way
He tried in this way
Ih hábeta iz io giwíssaz Ih hábeta iz io giwíssaz III 24, 93
I had it ever safe
I had it ever safe
Masculine cadence - attested
Unattested variant
(o)óoóoóoó
joh kert in frámmort thaz múat joh kerta in frámmort thaz III 22, 36
and turned them furthermore the heart múat
And furthermore (he) turned their heart
West er sélbo ouh so iz zám Westa er sélbo ouh so iz zám IV 11, 9

[^38]Er ougta in ío filu frám he showed them ever very far He showed them ever very far

Hábeta er in war mín had he in truth my He had, in truth

Trisyllabic cadence - attested (o)óoóoóoò

Ni hábat er in thía redina NEG had he in this way He did not have in this way
thaz zélit er allaz thánana that told he all from there He told that all from there

Er zalta in óuh tho in alawár he told them also then in truth He told them also then in truth
ni giéiscota er thaz wóroltman NEG studied ${ }^{\text {* }}$ before DET man-NOM Man did not study before

Er ougt in ío filu frám
III 14, 113

Hábeta er in war mín
I 27, 48

Unattested variant
Ni hábata er in thía redina
IV 12, 57
thaz zélita er allaz thánana
IV 28, 24

Er zalt in óuh tho in alawár
IV 6, 35
ni giéiscota er thaz wóroltman
III 20, 157

The verses in (31) fit their respective patterns neither in their attested form, nor as their opposite, unattested form. It is, therefore, difficult to argue that, in the case of this group of verses, the occurrence or non-occurrence of elision was motivated by any imperative to conform to the cadences. A total of 109 verses fit into the group of forms presented in (31).

The second sub-group of verses that do not fit any of the cadences provides additional evidence that one cannot merely appeal to the poetic meter when attempting a comprehensive description of elision patterns throughout the Evangelienbuch. (32) below displays only the attested accents in column a., but presents both attested and inferred accents in column b.
a. Feminine cadence - attested
$\Rightarrow$ non-conformance
ráfst er nan hárto scolded he him-ACC severely He scolded him severely
béitota er thar súazo waited he there placidly He waited here placidly
er kérta iz iogilícho he turned it in the same way He turned it in the same way

| b. Unattested variant <br> $\Rightarrow$ conformance <br> ráfsta ér nan hártò | IV 31,6 |
| :--- | :--- |
| béitot ér thar súazò | I 15,4 |
| er kért iz íogilíchò | II 4,62 |

b. Unattested variant $\Rightarrow$ conformance
ráfsta ér nan hártò IV 31,6
er kért iz íogilíchò
II 4, 62

Irkánta ih thino gúati recognized I his virtues
I recognized his virtues
bigónda er inan scówon began he him-ACC regard-INF He began to regard him

Masculine cadence - attested
Sliumo ságeta er mo tház
quickly said he him-DAT that Quickly he said to him that

Tho folgeta ímo thuruh tház then followed him through that Then followed him through that
ther wíllo deta iz filu scin the will made it very apparent The will made it very apparent
tho doufta er ínan thuruh nót then baptized he him urgently Then he baptized him in urgency

Trisyllabic cadence - attested so ílt ih sar hérasun so hurried I immediately here So I immediately hurried here

Er zéigota in in alawár he showed them-dat in truth He showed them in truth

Irkánt ih thíno gúatì
bigónd er ínan scówòn

Unattested variant
Slíumo ságet ér mo tház
II 7, 61

Tho fólget ímo thúruh tház
ther wíllo détaz filu scín
tho dóuft er ínan thúruh nót

Unattested variant
so ílta íh sar hérasùn

Er zéigot ín in álawàr
II 7, 65

IV 18,42

III 7, 21

IV 2, 8

I 25, 14

I 22, 49

III 19, 21

Each verse presented in column a. of (32) does not conform to its respective cadence as it is attested in the text. Yet, each verse has a variant form which would fit the prescribed pattern (column b.). More specifically, those verses that show elision in column a. would conform if the extra vowel were retained, and those verses that show retention of the unstressed vowel in column a. would conform to their prescribed metrical pattern, if only the unstressed vowel were elided. 60 verses in total fit into this particular sub-group of forms.

In assessing the overall impact of the poetic meter on elision patterns in the third person preterit singular indicative (of weak and preterit-present verbs) we note the following. Though there are a number of cases ( 151 forms or $46.3 \%$ of the total) for which it may be argued that the occurrence or non-occurrence of elision was influenced by the poetic meter, we also see synaloepha, synaeresis, or aphaeresis employed in a number of cases, 115 verses (roughly $35 \%$ of the total forms) ${ }^{7}$ with no metrical gain whatever. Additionally, there is a group of 60 verses (roughly $18 \%$ of the total forms), for which the production of

[^39]the unattested, opposite variant would have effected conformance to a metrical pattern. We, therefore, cannot simply appeal to the meter when explaining elision patterns throughout the work and must look to prosody in order to tell a comprehensive story.

These data also, as a result, argue against Baesecke's (1910) conclusion that the process of elision represented in the text is a purely metrical elision, wholly ungrounded in the phonological realities of the spoken language. Rather, the fact that the poetic meter fails to aptly describe the elision patterns evident in the majority of the relevant attestations suggests that these forms represent cases of pronominal cliticization and subsequent phonological hiatus resolution. Additional textual evidence supports this assertion. Let us first consider the cases of synaeresis, which only become apparent if one returns to the manuscript itself. These forms are presented in (33).


These cases of synaeresis, which disappear entirely in the published Erdmann edition, show that there is graphemic variation and, indeed, graphemic uncertainty in the representation of the unstressed vowel. This variation indicates that these forms are the product of an active

[^40]phonological merging of the two unstressed vowels. As noted in works such as Picard (2003) and Hock (1986), hiatus sequences are diachronically unstable, and different languages employ different strategies to resolve them (see Casali 1997 for a taxonomy of cross-linguistic strategies for hiatus resolution). In the case of our forms, the prosodic deficiency of the pronoun induces cliticization, which, should the pronoun be vowel-initial, effects a hiatus environment. Hiatus resolution is generally indicated in the text through the omission of the word-final unstressed vowel of the verb (synaloepha), but the structures in (33) show that the graphemic representations of the result of this process vary.

More graphemic variation can be found in the cases of aphaeresis, which is yet another strategy employed by the author when graphemically representing the phonological product of hiatus resolution. Examples of aphaeresis are presented in (34).

| (34) a. | b. |  |  |
| :--- | :--- | :--- | :--- |
| thar zaltaz ér ubarlut <br> there said-it he loudly <br> He said it there loudly | I 20, 26 | Er zált iz ín ouh hártò <br> he said-it them-DAT also keenly <br> He also said it to them keenly | IV 1, <br> 17 |
| er détaz híar nu féstì <br> he did-it here now nearly <br> He nearly did it now here | IV 27, <br> 16 | tho dét es drúhtin éntì <br> then made-it-GEn lord end-ACC <br> Then the lord made an end of it | I 17, 8 |
| er sáztaz wídar héilàz <br> he placed-it in turn hale <br> He, in turn, placed it hale | IV 17, <br> 24 | Ér yrrícht iz scíaro <br> he erected-it at once <br> He erected it at once | II 11, <br> 49 |
| Joh óffonótaz íro múat <br> and opened up-it her mind-NOM <br> And her mind opened it up | V 23, <br> 63 | ni móht-iz sín in ánder <br> NEG was able it-NOM to be different <br> It was not able to be different | IV 32, <br> 4 |
| er áltaz sós er scóltà <br> he delayed-it, as he should have <br> He delayed it, as he should have | III 15, 4 | Gihórt iz fílu mánag fríunt <br> heard- it very many friend <br> Very many a friend heard it | I 9, 3 |
| joh lóbota nan zíoro <br> and praised-him delicately <br> And praised him delicately | II 7, 54 | Nu folget imo thuruh thaz <br> now followed-him through the... <br> Now followed him through the... | I 20, |

As we see above, in some cases the author chooses to retain the word-final unstressed vowel of the verb (column a.), in other cases that vowel is dropped and the pronominal unstressed vowel is retained (column b.). More variation of this nature is found if we expand our dataset to include other hiatus environments effected by cliticization, as seen in (35).
a. First person singular present indicative

Nu will ih scríban unser héil
now want-I write our well-being
Now I want to write our well-being

I 1, 113

Thoh scríb ih hiar nu zi érist
I 3, 47
Still write-I here now first
Still I write here now first
Thir zell ih híar ubarlút
III 23, 7
you-DAT tell-I here very loudly
I tell you know very loudly
Thes zelluh íu quad er giwánt this-GEN tell-I you-PL said he reason I tell you of this, he said, the reason

Giwísso thaz ni híluh thih certainly that NEG conceal-I you Certainly I did not conceal you
thes zíhuh inan báldo III 20, 73
this-GEN give-I testimony him-ACC boldly
I boldly give testimony of this
b. Second person singular imperative thaz gizél uns hiar nu sár that tell-us here now immediately Tell us that here now immediately!

Símon húg es ubar ál IV 13, 13
Simon consider-it-GEN above all
Simon, consider it above all!
c. Third person singular present optative

Kríst lóko mo thaz múat sin
Christ may attract him-DAT the mind his Christ may attract unto him his mind
rúere mo thaz blida múat
III 22, 14
may reach the happy mind-ACC
...may reach the happy mind
In cases of cliticization involving the first person singular present indicative (35a), the structures vary with regard to which unstressed vowel is retained. We even see this variation within one particular form; the sequence zellu $+i h$ is attested as both zell ih and zelluh. This oscillating trend continues in (35b) and (35c), the former of which is a case of synaloepha (húgi es > húg es), the latter a case of aphaeresis (lóko imo > lóko mo).

If we were to argue that the elision patterns observed throughout the text were the product of purely metrical synaloepha, as Baesecke does, we would not expect to see such evidence of phonological hiatus resolution, i.e., the aforementioned cases of synaeresis and aphaeresis, most particularly those structures presented in (33). Rather the data indicate that the hiatus resolution attested in these forms is an active phonological process, not a metrical one. This is not to say that the poetic meter does not influence attestation patterns. Indeed, it would be reasonable to conclude that the number of cliticizations found in the text is bolstered due to the alternating stress-dip rhythm of the cadences. However, the processes that yield these structures are best characterized as fundamentally phonological
and entirely authentic to the spoken language. This argument is consistent with Otfrid's own words on the topic of synaloepha contained in the preface, the Ad Liutbertum. He writes:

> And because of this [figure of metaplasmus] it [Frankish] very often tolerates synaloephic elision, not only between vowels but even between other letters; and unless this is effected, a protraction of the letters quite often results in a sound unsuitable to the utterance of the words. This [elision] we find, if we pay proper attention, we effect very often in our ordinary speech.

Scholars have interpreted this passage in various ways, even to the extent that, according to Baesecke (1910) and Neumann (1957) for example, the passage means the very opposite of what Magoun writes in his translation, and that synaloepha was not a feature of spoken language but was confined to poetic verse. The data, however, support the translation offered in Magoun, as well as the conclusions of Kappe and Schweikle, both of whom assert that attested elision patterns in the text reflected those of the spoken language.

Beyond the verses already discussed in this chapter, we also have evidence of cliticizations occurring in cases in which there is no possibility of metrical gain. The clitic groups examined in chapter two comprise one set of forms that evince cliticization entirely independent of the effects of a poetic meter. The verses in (36) display both inferred and attested accents.
(36) a. Attested cliticized form
ném iz fón ther brústì took-it from the breast
Took it from the breast
ni drénk ih thés gimáchòn NEG drank I of the same type I did not drink of the same type

Er wérf iz állaz thánana úz he threw it all from there out He thres it all from there out
b. Unattested non-cliticized form nám iz fón ther brústì I 20, 18
ni dránk ih thés gimáchòn

Er wárf iz állaz thánana úz

II 8, 52

II 11,19
(36) shows that the occurrence or non-occurrence of cliticization in these cases has no effect whatever on the rhythmic structure of the verse. The tokens in columns $a$. and $b$. are metrically identical. In other words, there is nothing to be gained, in metrical terms, from the cliticization processes attested in these forms. Further evidence that the poetic meter does not affect cliticization patterns in this group of forms is provided in (37).

| ni mág iz thoh irkóboron | V 23, 1 |
| :--- | :--- |
| NEG can it still overcome |  |
| It cannot still overcome |  |
| ni még in thaz irkórboron | V 7, 35 |
| NEG can I that overcome  <br> I cannot overcome that  |  |

[^41]In (37) we have two attested verses that are metrically and nearly lexically identical. Yet in the first verse cliticization did not occur, whereas in the second it did. Clearly, we cannot appeal to the meter at all when accounting for these forms. A similar argument may be advanced for another set of clitics, i.e., the second person singular indicative [verb + pronoun] sequences, which also show evidence of cliticization in cases in which there is no obvious metrical gain. Attested and inferred accents are marked in (38).
a. Attested cliticized form

Quístu bí thio síuchì
say-you regarding the illnesses
You say regarding the illnesses
so gúat bístu io in nótì so good are-you ever in need You are ever so good in (times of) need Wíb ziu kúmistú thár woman to-whom come-you there Woman, to whom are you coming to
wénan súachistú sár whom seek-you presently Whom do you seek presently
thaz lísistu óuh in búachòn that read-you also in books You also read that in books
b. Non-cliticized form

Quíst thu bí thio síuchì
so gúat bíst thu io in nótì
I 5, 67

Wíb ziu kúmist thú thár
V 7, 19
wénan súachist thú sár
V 7, 19
thaz lísist thu óuh in búachòn
H 40

In terms of syllable and metrical structure, the attested forms in column a. are identical to those in column b. Tokens such as those presented in (38) comprise yet another group of cliticizations that exists entirely independent of the meter.

This analysis has thus far presented four sets of forms that exhibit pronominal cliticization onto a preceding finite verb. Chapter two presented a formal account of pronominal encliticization in Otfrid. Chapter three argued that one cannot claim that these forms have been fossilized or grammaticalized in any way. And, finally, chapter four presented data supporting the assertion that these structures are appropriately classified as cliticizations, as opposed to manifestations of the poetic meter. If we expand our dataset yet again to include a heretofore unexamined group of forms, we may find one last bit of evidence that establishes the pronoun's status as a clitic. Consider the following examples involving consonant-initial pronouns.
(39) Attested verse
a. joh bráhta sa afur thánne and brought-her again then And brought her again then
joh warf se álle thanana úz and threw-them all from there out And threw them all from there out

Unreduced form
sia I 8, 8
sie
II 11, 11

Íh bin quad si gótes thiu siu $\quad$ I 5, 65
I am said-she God-GEN servant
I am, she said, the servant of God
so wárun se alle sámant thar $\quad$ sie $\quad$ I 9, 6
so were-they all together there
So they were all there together
firwarf si sár io thaz fáz siu II 14, 85
threw-she at once in any case the vessel
In any case she threw away the vessel at once
Tho bót si mit gilústi siu
I 11, 37
then offered-she with delight
Then she offered with delight...
Irthíonotun se hárto
earned-they really
They really earned...
b. thaz se thára wollent
sie
that-they thither want
That they want (to go) thither
thaz se érdrihes níezen
sie
that-they earth-GEN enjoy-PRET.SBJV
That they might have enjoyed earth
tház si thes giflízzi siu III 24, 46
that-she DEM-GEN.SG strive-PRET.SBJV
That she might have striven for that
thaz si chínd bari
siu
I 11, 30
that-she child bear-PRET.SBJV
That she might have borne a child
In (39), the pronouns sie, sia, and siu surface as $s e, s a$ or $s i$, respectively, which may be interpreted as evidence of cliticization. In these examples the pronouns sie, sia, and siu, located in the same prosodic positions as other pronominal enclitics analyzed in this chapter (and others), lacked the pword status required to avoid integration into the prosodic structure of the preceding lexical word, the finite verb. They have cliticized onto the preceding host and also show evidence of phonological reduction.

In addition to signs of phonological reduction, further evidence of these structures' status as clitic groups can be found in modern German, in which structures that resemble those in (39) are attested. Hall (1999: 121-122) discusses the prosodic status of consonantinitial enclitics, some examples of which are shown here in (40), drawn from Hall's (30) and (31).
(40) kann sie 'can she' wenn du 'if you' soll sie 'should she'
a. $\left((\mathrm{kan})_{\omega} \mathrm{ZI}\right)_{\phi}$
$\left((\mathrm{ven})_{\omega} \mathrm{du}\right)_{\phi}$
$\left((\mathrm{zol})_{\omega} \mathrm{zI}\right)_{\phi}$
b. $(\text { kanzo })_{\text {© }}$
(vendə) ${ }_{\omega}$
(zolzo) ${ }_{\text {๒ }}$
c. ${ }^{*}(\mathrm{kanzI})_{\omega} /(\mathrm{kan})_{\omega}(\mathrm{ZI})_{\omega}$
$*(\text { vendu })_{\omega} /(\mathrm{ven})_{\omega}(\mathrm{du})_{\omega}$
$*(\text { zolzi })_{\omega} /\left(\text { zol }_{\omega}\right)_{\omega}(\mathrm{zI})_{\omega}$

Returning to the issue of sequencing raised earlier in this chapter, Hall's account of the examples in (40) does not explicitly state whether it is an already reduced pronoun that cliticizes onto the host, that is, if reduction occurs before cliticization or vice-versa. We can, however, infer an answer to this question. According to Hall, the pronoun, reduced or not, is necessarily an enclitic, as it is a function word and, as a result, prosodically deficient. The unreduced pronominal enclitic cannot be integrated into the pword of the host without yielding an ungrammatical form (40c) and must, in a similar fashion to proclitics, adjoin to the higher prosodic node, the phonological phrase (40a). With a reduced pronoun, however, host and enclitic may form one pword. Hence, cliticization occurs first, though the integration of the pronoun into the preceding pword of the host cannot occur until after reduction. On the basis of the modern German data, we could argue for the same sequencing for the similar OHG forms.
(41)
a.

b.

c.


The larger point to be made regarding this final set of forms is that they provide additional evidence of the widespread attestation of pronominal encliticization throughout the Evangelienbuch. Any treatment of the wolt er forms that does not consider the possibility of cliticization is ignoring the context within which these structures are found.

## 5 Conclusions

### 5.1 The current analysis

The main objective of this volume was to identify and gather evidence of cliticization processes from one historical text and then describe and explain the processes that yielded these forms within modern synchronic frameworks. In order to establish that the isolated forms were clitics, we had to ensure that the structures were not fossilized (or grammaticalized). We further had to take into account the effects that the poetic meter may have had on the representation of apparent clitics in the text. What we found is that phonological pronominal encliticization is attested throughout the Evangelienbuch and that the prosodic deficiency of pronominal function words and the processes that result from their prosodically impaired status shape the text in significant and observable ways.

One way in which we can see the effects of cliticization in the text is in those forms that exhibit the occurrence of primary umlaut across apparent word boundaries. In these cases the monomoraicity of the pronoun and, in most cases, of the host as well led to cliticization that results in a postlexical re-formation of the relevant prosodic constituents. This analysis of the umlauting forms, i.e., the ném iz group of forms, as well as theih and theiz, requires that we treat OHG umlaut as a primarily active process, a point that chapter three addresses explicitly. In this chapter I argued that the umlauting forms show no signs of fossilization or grammaticalization in that the constituent parts comprising these structures exhibit a significant amount of syntactic diversity.

In conducting this investigation we gained certain insights into the phonology, prosody and syntax of Otfrid's particular variety of OHG. With regard to phonology and prosody this work established that in Otfrid's grammar, primary umlaut's domain of application was the pword. This prosodic view of the process allows for the lexical and postlexical application of the vowel harmony rule. The raising of the vowel occurs after a pword has been recursively formed in order to accommodate the new material introduced into the structure through cliticization. This treatment of umlaut in Otfrid could be seen as something of a departure from other works that argue that umlaut is lexical in OHG (Wiese 1987, 1996; Holsinger \& Salmons 1999; Iverson \& Salmons 1996). Based on the constraints of this study, which focused solely on the Otfrid text, I would be loath to apply this volume's analysis of umlaut to the broader OHG corpus. Certainly, among the OHG texts it seems that postlexical umlaut is only possible in the Evangelienbuch, which is where we find that the process can be triggered after cliticization. Whether or not Otfrid's unique application of the umlaut rule is connected to his propensity to ignore the umlaut blockers, $-h t-$, $-l t$ - and $-r t$ - and how the account presented here plays into the larger context of the literature on primary umlaut in the history of German are both potential topics of future inquiry.

This analysis also more accurately defines the prosodic word in OHG establishing that it is minimally bimoraic. It describes the formation of this constituent in primarily prosodic terms and argues that pword formation is crucially dependent upon the presence of a foot,
which, in turn, requires the presence of a lexically stressed syllable. This process of foot and pword formation is recursive and can occur both lexically and postlexically. In exploring the topic of constituent assignment within the construct of levels of grammar, the analysis sought to integrate the formation of the foot and pword within the inflectional and derivational process. This treatment was a departure from those analyses that discuss prosodic constituency and cliticization within an Optimality Theory framework (e.g., Selkirk 1995) or those that infer or assume the application of lexical and postlexical rules but are not clear on how the formation of feet and pwords occurs within a framework of Lexical Phonology (e.g., Hall 1999; Booij 1996).

With regard to the syntax of the Evangelienbuch, this analysis presented data that indicate that two different syntactic frameworks are attested in the Otfridian clause, i.e., the TP and the CP. In the past, the clausal variation exhibited in Otfrid has ensured that many scholars avoid the text as a source for syntactic investigations of OHG, despite the fact that it is a relatively voluminous work. The analysis found in chapter three argued that some variation in clausal structure may be accommodated through the use of extraposition processes, either for pragmatic purposes or for the sake of the rhyming scheme. Even more variation may be explained if one assumes the presence of the innovative and inherited framework. Because the Evangelienbuch is a work of poetry, however, a certain degree of syntactic distortion obviously remains. Notwithstanding these attested instances of distortion, this volume shows that works of poetry can and should be included in the corpus of OHG texts that are subjected to syntactic analyses.

The analysis further offered a new way to discuss grammaticalization and lexicalization theories by proposing that, before one should even consider whether a structure has been grammaticalized, one must first establish "form fossilization." This argument is based on the premise that a frequently produced syntagm comprising host and clitic may become part of the speaker's lexicon. Once the form is lexically listed, it is no longer the product of active processes of cliticization and umlaut, but rather is accessed as one fixed unit by the speaker. After form fossilization has occurred, the structure presumably becomes susceptible to other processes. It was only with the theist structures where we found the necessary syntactic unity in the constituent parts indicating that form fossilization was a possibility. It is interesting to note, though, that despite evidence of form fossilization, there were no data supporting the proposition that theist has moved toward grammaticalization. This observation induces us to question the a priori contextualization of clitics as unstable elements on the grammaticalization cline. Ultimately, this analysis questions the fundamental notion that grammaticalization is a mechanism of change in and of itself. In fact, the Otfrid data show that cliticization, and even form fossilization, can occur without any of the changes normally associated with grammaticalization; e.g., we see no evidence of any semantic bleaching of the constituent parts, nor is there any change in their syntactic function. These observations hold for the MHG data as well. Thus this volume offers something of an alternative to grammaticalization theory-it argues that the primary mechanism of this type of language change is form fossilization, not grammaticalization, which renders the fossilized form susceptible to a host of other processes.

Through this investigation of clitics we also gained insight into the Evangelienbuch's poetic meter and were able to ascertain the effects it has on its cliticized structures vis-à-vis
the effects of prosody. Working within the guidelines provided by Bostock (1976), the analysis presented evidence that the cadences outlined in that work were generally accurate in describing the attested rhythmic patterns. In cases where verses diverged from the paradigm, we could point to prosody in order to account for the deviations. Within the framework of this argument we expanded our dataset to include apparent clitics that exhibit elision of an unstressed vowel (e.g., wolt er, zell ih, zelluh, and lóko mo), as well as forms consisting of consonant-initial enclitics (e.g., feristu and bót si). In the case of the former set of clitic groups, it was found that the poetic meter does, to a certain extent, influence the occurrence or non-occurrence of elision of the unstressed vowel. However, the meter does not explain elision patterns in over half of the relevant forms. With the addition of the latter group of forms (consonant-initial pronominal clitics) we have yet another set of structures that show evidence of cliticization with no possible metrical gain; i.e., the meter could not have effected apparent cliticization in the text.

It is here with these latter sets of forms, i.e., wolt er, zelluh, and particularly bót si, that we begin to see how these structures might fit into the larger process of unstressed vowel reduction in Germanic, generally referred to as part of the Auslautsgesetze or the Laws of Finals. These terms make reference to an entire set of sound changes that involve the weakening and subsequent loss of unaccented and word-final syllables, a process that effected widespread phonological and morphological change in Germanic. More recent scholarly works, in particular Smith (2004), have begun to build a unified and comprehensive analysis of these changes by examining the role played by prosody and appealing to higher level prosodic structures, such as templates. In the case of Smith (2004), the template is defined in terms of syllables and feet. The clitic forms attested in Otfrid indicate that we may appeal to a higher constituent in the hierarchy, i.e., the pword to describe yet another manifestation of the Laws of Finals in Germanic.
(1) a .

b.


In the case of these forms, postlexical cliticization effects a resyllabification and the recursive formation of the pword, which creates yet another environment in which we might expect the reduction of an unstressed syllable, i.e., in the weak branch of the pword as illustrated in (1). We see particularly in (1b) and (1c) evidence of an active phonological reduction in that both of the reduced variants provided in the figure are attested in the manuscript. Indeed, based on Otfrid's own comments in the preface, the author struggled with the question how best to represent these unstressed vowels graphemically. Under the heading "Three Orthographic Problems" Otfrid writes:

Sometimes, indeed I have been unable to avoid writing these vowels $a$ or $e$ or $i$ or $u$ (though they ill represent the sounds I would like to express); here the Greek $y$ seemed to me (preferable) to be written. And even to this letter this (Frankish) language is sometimes ill adapted, often in a certain (reduced vowel-) sound attaching itself to no character (of the alphabet) except with difficulty (Magoun 1943: 880).

A treatment of the pword in relation to the Germanic Auslautsgesetze indicates that a number of the clitic structures in Otfrid may be contextualized within this widespread set of changes. Similarly, these data indicate that future analyses of processes falling under the rubric of the Auslautsgesetze might consider making reference to the pword, as well as feet and syllables.

### 5.2 Looking to the manuscript and beyond

We can uncover yet another way in which the effects of cliticization are clearly evident in the text itself, though only if we return to the manuscript. For the most part, the word breaks displayed in the manuscript, as well as in the edited versions, mirror what we find in modern German and English. There are notable exceptions to this trend that are evident in the manuscript but do not find their way into the edited texts. Piper (1882: 55) enumerates the cases in which one often finds Verschmelzung, i.e., a particular word is represented as one unit with an adjoining word. His list includes the following categories of words:
(2) a. prepositions (especially the "shorter" ones): $z i, b i$, in, ana and fon
b. the negation particle $n i$
c. pronominals of all types, demonstratives, possessive, etc. (adjoining to verbs as well as each other: ermo, sies)
d. "other" particles, including odo, inti, $n u$, tho and oba

Examples of how these categories of words are represented in the manuscript are provided in (3), which includes the tokens' edition and manuscript citation.
(3) a.


$$
\begin{array}{ll}
<\mathbf{z i}+\text { irstántnisse } & \text { I 15, 30 (27r) } \\
<\mathbf{b i}+\text { unsih } & \text { IV 14, 18 (130r) } \\
<\mathbf{b i}+\text { ira } & \text { V 17, 22 (173r) }
\end{array}
$$



$$
\begin{array}{ll}
<\mathbf{n i}+\text { irdróz se } & \text { I 27, 44 (39r) } \\
<\mathbf{n i}+\text { intríatun } & \text { IV 20, 7(137r) }
\end{array}
$$

c.


HuLET
d.

$$
\begin{array}{ll}
<\text { er + imo } & \text { II 12, 11 (58r) } \\
<\text { thu }+ \text { únsih } & \text { IV 4, 51 (117v) } \\
<\text { wio }+ \text { er } & \text { V 12, 94 (168v) } \\
<\text { nu + ist } & \text { V 9, 39 (163v) } \\
<\text { inti + iz } & \text { V 2, 17 (155v) } \\
<\text { odo + ouh } & \text { III 20, 65 (99v) }
\end{array}
$$



We immediately note that Piper's list consists entirely of function words, which are treated in this analysis as prosodically deficient and incapable of dominating their own pword. It is exactly these types of words that one expects to be susceptible to cliticization.

These data indicate that Otfrid, not bound by the strictures of a standard language and striving to recreate in written form the patterns and sounds of spoken Frankish, often represented host and clitic as one unit in the text. Clear evidence of this trend is not always confined to the manuscript; we do see the traces of cliticization processes in forms such as lisistu, Quistu, zaltaz and zelluh, all of which are written as one unit in both edited text and original manuscript, as seen in (4).
(4)


H 40 (191v)

V 23, 251 (185v)
I 20, $26(32 \mathrm{v})$

III 20, 45 (99r)
In contrast, other structures that this analysis has also treated as clitics, are not represented in the editions as comprising one graphemic unit with the host, e.g., the meg ih, wolt er forms. Cross-checking these structures with the manuscript, however, it becomes clear that the same trends of graphemic representation are attested in these cases as well. Consider those cases of cliticization involving the third person preterit indicative and elision of an unstressed vowel, e.g., wolt er, zalt er, and sánt er. Out of a total 230 attestations of the cliticized variant, host and pronoun are represented as one unit roughly $87 \%$ of the time in the manuscript, as shown in (5).


In the case of the meg ih structures, the evidence appears to be more mixed. In nine cases out of the twenty total attestations, the forms are actually written as one unit. In the majority of the instances, however, host and clitic are not connected. Figure (6) presents two forms drawn from the manuscript, the first of which shows a connecting stroke between verb and clitic, the second of which exhibits no connecting stroke.
(6)


A comprehensive treatment of the meg ih forms would require a more thorough paleographical analysis of the manuscript. For some of the umlauting structures there are issues related to the connecting pen stroke between letters. In the form wés iz (II 1, 8), for example, we might expect the shaft $s$ and $i$ to be connected by a pen stroke. The shaft $s$ grapheme, though, does not connect regularly with the grapheme that follows, as is illustrated in (7).


As such, it is difficult to ascertain if the author intended for the verb and pronoun to be read as one unit. As these questions lie beyond the scope of the current study, future investigations would have to measure the spaces between such graphemic combinations and establish a statistical baseline against which one could compare the relevant attestations. In any case, it certainly seems possible that a broader paleographical analysis of the representation of function words in the manuscript could be fruitful and provide additional evidence of their status as clitics.

Admittedly the conclusions offered in this volume have a narrower scope in that we have been focused mainly on one particular idiolect. Furthermore, the Otfrid data, as has been previously mentioned, is exceptional. Forms similar to the umlauting clitic groups of chapter two are limited to Tatian, which has but one token, ${ }^{1}$ and the Bavarian Psalm 138, in which the structure megih is attested three times (lines 5,15 , and 35 ). ${ }^{2}$
Yet, the work begun here could have broader implications if we cast a wider net. With regard to the development of German, for example, it is interesting to note that MHG shows evidence of the exact same cliticization processes that are manifest in the Otfrid manuscript. Consider the following data.
(8) snû soltû mir rehte sagen,
waz zuoversiht magich bejagen
darumbe wil ich dir din leben
und dinen lip ze miete geben
wol gesunt und wol getan:
diu magich geben unde lan, diu beidiu sint in miner hant."
so magez lihte also geschehen, daz uns da misselinget an;
er wolt mit heres krefte holn die lieben tohter sinn. ich magz niht lenger trîben:

Barlaam und Josaphat, 3241-3242 ${ }^{\mathbf{3}}$

Tristan und Isold, 7855-7859

Tristan und Isold, 14116-14117

Herzog Ernst (Hs.D, strophig), 61, 6 - 8

[^42]ich macz wol sprechen âne guft, er was noch wîzer dan der tuft.

Parzival, Absatz 240, 29 - 30
Sie gabez im er wart gemeit
Sie gap im eine salben
Liet von Troye, 1020 - 1021
daz herze sneit er halbez abe hin gegen dem spitzen ende und namez in sine hende,

Tristan und Isold, 2974-2976
These clitic groups are identical to the Otfrid clitic groups, save for one important detailthere is no trace of phonological umlaut. The data in (8) not only support the conclusion made earlier in chapters two and three that the umlauting clitic groups of Otfrid never fossilized, they also suggest that the prosodic preconditions for cliticization continue to hold in MHG. Given the fact that the corpus of MHG texts, especially prose texts, is significantly larger than that of OHG, a broader investigation of clitics in MHG would certainly be a logical extension of the current work and would answer a number of questions about the actual diachronic behavior of clitics, which would, in turn, help us refine our notions of how these linguistic entities fit within existing theoretical frameworks, notably grammaticalization.

Another avenue of inquiry that naturally flows from the analysis presented here includes the examination of similar phonological rules that have the capability of operating after cliticization has taken place, i.e., postlexically. One such rule seems to be that of open syllable lengthening in Middle Dutch (MDu).

## (9) Open syllable lengthening

ic saels $u$ so vele beraden line $96^{4}$
I shall provide you so much of it
Here, ic loeft, ic beens bedochtline $108^{5}$
Lord, I agree, I am of that mind
In the examples presented in (9), encliticization effects an open syllable and induces the subsequent lengthening of that syllable, at which point the unstressed vowel is elided.


[^43]Such an investigation might seek to establish that the MDu rule of open syllable lengthening is crucially described within the constructs of the pword, which defines its domain of application.

Though the analysis presented above focused on a relatively constrained dataset, I hope this work also makes clear that the cliticization phenomena attested in Otfrid are manifestations of broader patterns that are traceable throughout the history of Germanic, and that these patterns represent exciting directions in which future research might go. As shown by the MDu data, the role played by the pword in the diachronic morphophonological development of Germanic is one potential area of research. Additionally, this study proposes that the clitics that participate in the Otfrid structures are the same ones that are attested in MHG and NHG. Indeed, these clitic groups appear to exhibit a tremendous degree of stability: the clitic groups of chapter two are attested from Otfrid to Modern German, and the clitic groups of chapter three survive into MHG. In the case of both types of clitic groups, there seems to be no evidence of grammaticalization, and the functional and formal boundaries between clitic and host remain clear in the minds of speakers despite the fact that the two constituents together constitute one pword. Fleshing out the remaining story of cliticization in Germanic, though in and of itself a worthy goal, would also help us refine our notions of the role played by clitics in grammaticalization processes and theories. Finally, the philological component of this analysis should not only demonstrate the utility of returning to the original manuscript(s) whenever possible, but also show how a poetic text can serve as the basis for phonological as well as syntactic investigations. Given the fact that the OHG corpus of texts is relatively thin, it is important that, as historical linguists, we make the most of the texts we have.

## Appendix 1: Chapter two forms

The following forms include all clitic groups that show umlaut occurring across an apparent word boundaries, as well as the unumlauted, non-cliticizing counterparts.

| Umlauted Clitic Groups | Unumlauted Forms |
| :---: | :---: |
| 1. meg ih (I 4, 55) | 1. mag ih (I 18, 6) |
| 2. meg iz (I 5, 37) | 2. mág ih (I 22, 52) |
| 3. ih meg iz ( $\mathrm{I} 18,4$ ) | 3. mág ih (II 1, 12) |
| 4. meg ih (I 25,8 ) | 4. mag iz (II 4, 77) |
| 5. még iz (III 13, 24) | 5. mag ih (II 14, 29) |
| 6. meg iz (IV 11, 29) | 6. mag iz (II 17, 19) |
| 7. meg iz (IV 12, 58) | 7. mag ih (III 2, 4) |
| 8. még iz (V 1, 43) | 8. mag ih (III 23, 13) |
| 9. még ih (V7, 35) | 9. mag ih (IV 24, 12) |
| 10. még ih (V 25, 36) | 10. mag iz (IV 26, 24) |
|  | 11. mag ih (V 19, 30) |
|  | 12. mag ih (V 22, 8) |
|  | 13. mág iz (V 23, 1) |
|  | 14. mág iz (V 23, 17) |
|  | 15. mág ih (V 23, 235) |
|  | 16. ni mág ih (IV 23, 20) |
|  |  |
| 1. scél iz (IV 8, 16) | 1. scál ih iz (I 17, 4) |
| 2. skel iz (II 7, 16) | 2. scál ih (II 4, 78) |
|  | 3. skal iz (II 9, 16) |
|  | 4. ni scál ih (IV 26, 30) |
|  | 5. scál ih (V 16, 21 ) |
|  | 6. scal iz (V 20, 47) |
|  |  |
| 1. so wés iz (II 1, 8) | 1. ni was imo ( $\mathrm{I} 4,48$ ) |
|  | 2. was ímo iz (I 8, 2) |
|  | 3. Wás iz (II 7, 7) |
|  | 4. ni wás iz (II 11, 12) |
|  | 5. (was íru...) (IV 2, 16) |
|  | 6. was íro (V 4, 18) |
|  | 7. was in (V 11, 28) |
|  |  |
| 1. wérd iz (III 9, 4) | 1. Wio wárd ih ( 6,9 ) |
| 2. Ni wérd iz (IV 14, 3) | 2. ni wárd imo (II 4, 16) |
|  | 3. Wárd imo (II 9, 39) |
|  | 4. wárd iz (III 20, 11) |
|  | 5. wárd iz (IV 14, 2) |
|  | 6. wárd in (V 10, 21) |
|  |  |
| 1, géb imo (II 13, 30) | 1. Gáb iru (II 14, 79) |
|  | 2. gab ih (III 14, 101) |
|  | 3. gab imo (IV 20, 11) |


|  | 4. gab imo (IV 23, 21) |
| :--- | :--- |
|  | 5. ni gab imo (IV 23, 34) |
|  | 6. Firgáb in (V 11, 15) |
|  | 7. gáb in (V 11, 44) |
|  |  |
| 1. ni drénk ih (II 8, 52) | 1. dránk ih (II 9, 25 ) |
|  |  |
| 1. Er werf iz (II 11, 19) | 1. wárf iz (IV 11, 3) |
|  |  |
| 1. giréh inan (II 5, 6) |  |
|  |  |
| 1. nem iz (I 20, 18) |  |

## Appendix 2: Chapter three forms

The following forms includes those clitic groups that comprise the lexical items: thaz $+i h$, $i z$, and ist.
a. Book I - cliticization

| Thie dáti man gescríbe theist mannes lúst zi líbe $(1,17)$ |
| :--- |
| odo métres kléni theist góuma filu réini $(1,20)$ |
| thie léngi joh thie kúrti theiz gilústlichaz wúrti $(1,22)$ |
| Íli thu zi nóte theiz scóno thoh gilute $(1,37)$ |
| ni laz thir zít thes ingán theist sconi férs sar gidán $(1,48)$ |
| gizáwa mo firlíhe ginada thín, theiz thíhe $(2,28)$ |
| Joh theih thir híar nu ziaro in mína zungun thíono $(2,41)$ |
| theih thíonost thinaz fúlle with álles io ni wólle $(2,50)$ |
| Sih, thaz héroti theist imo thíomuati 3,41$)$ |
| fon hímilriches hóhi theih thir iz wís dati $(4,64)$ |
| Scépheri wórolti (theist min árunti) $(5,25)$ |
| Ther mán theih noh ni ságeta ther thaz wíb mahalta $(8,1)$ |
| in flúhti joh in zúhti theiz álles wesan móhti $(8,4)$ |
| joh theiz gidóugno wurti er síh fon iru irfirti $(8,18)$ |
| theiz wari giáfaronti then făter in ther élti $(9,12)$ |
| tho scréib er, theiz ther líut sah so thiu múater gisprah $(9,26)$ |
| theist drúhtin Krist gúater fon júngeru múater $(12,14)$ |
| Wir sculun úaben thaz sáng theist scóni gotes ántfang $(12,29)$ |
| joh hug es hárto ubar ál thu thíarna, theih thir ságen scal $(15,28)$ |
| Zi ímo ouh tho ládota thie wísun man theih ságeta $(17,41)$ |
| thiz wás sus gibari theiz géistlichaz wári $(17,68)$ |
| ja límphit mir theih wérbe in mines fáter erbe $(22,54)$ |
| theiz thír si wáhsenti in síneru gesíhti $(23,44)$ |
| ni wáne theih thir gélbo) drúhtin ist iz sélbo $(23,64)$ |
| Thaz er se híar lérit theist zi úns nu gikérit $(24,15)$ |
| wio meg ih biwánan thanne míh theiz si min ámbaht ubar thíh $(25,8)$ |
| in imo líchen ih mir ál theih inan súlichan gibár $(25,18)$ |
| Ther dóuf una allen thíhit thaz wazar theist giwíhit $(26,1)$ |
| joh warun áhtonti theiz wóla wesan móhti $(27,2)$ |
| ni giduant iz mán alle theih so hóhan mih gizélle $(27,20)$ |
| óffonota in sar tház theiz sin ámbaht was $(27,48)$ |
| theih scúahriomon síne zinbíntanne biríne $(27,58)$ |
| In hoho guallichi theist avur thaz hímilrichi $(28,13)$ |

b. Book I - no cliticization

| Thaz ih lób thinaz si lútentaz $(2,5)$ |
| :--- |
| thaz íh giwar si hárto thero sínero worto $(2,8)$ |
| Thaz íh ouh hiar giscríbe uns zi réhtemo líbe $(2,11)$ |
| Thaz ih drúhtin thanne in theru ságu ni firspírne $(2,15)$ |
| Thaz ih ni scríbu thuruh rúam súntar bi thin lób duan $(2,17)$ |
| ouh in ál gizungi in thíu thaz ih iz kúnni $(2,42)$ |
| Thaz ih in hímilriche thir drúhtin iamer líche $(2,43)$ |


| dua húldi thino ubar míh thaz íh thanne iamer lóbo thih $(2,48)$ |
| :--- |
| Thaz íh ouh nu gisído thaz thaz mir es ío mer si thiu baz $(2,49)$ |
| Thaz ih íamer druhtin mín mit themo dróste megu sín $(2,55)$ |
| Wánana ist iz fró min thaz ih er wírdig bin $(5,35)$ |
| thaz ih drúhtin sinan sún souge $(5,36)$ |
| Wio meg iz ío werden wár thaz ih werde suángar $(5,37)$ |
| thaz ih éinluzzo mina wórolt nuzzo $(5,40)$ |
| Bi thíu thaz ih irduálta thar fórna ni gizálta $(17,3)$ |
| thaz íh tharzúa githinge joh imo ouh géba bringe $(17,50)$ |
| thaz iz ni wurti mári joh baz firhólan wari $(19,14)$ |
| ni scríb $u$ ih hiar in úrheiz thaz ih giwísso ni weiz $(19,26)$ |
| Ira férah bot thaz wíb thaz iz múasi haben líb $(20,19)$ |
| thaz ih iz ér ni westa so gáhun thin firmísta $(22,48)$ |
| ih wane, thérer fulle állaz thaz ih wílle $(25,20)$ |
| Wiht ni wízut ir sín thaz ist thoh árunti min $(27,53)$ |
| tház ih iu gizálti wáz er hera wólti $(27,54)$ |
| zi thíu thaz ih inklénke thie ríomon thier gischrénke $(27,60)$ |

## c. Book II - cliticization

| Theist algiwís, nalas wán theiz thuruh ínan ist gidán $(2,19)$ |
| :--- |
| In búachon ist nu fúntan thaz wort theist mán wortan $(2,31)$ |
| thaz ward állaz mari theiz únfarholan wari $(3,6)$ |
| Joh theiz ni wás ouh bóralang thaz hériskaf mit ímo sang $(3,13)$ |
| there múater ságeta er ouh tho tház theiz állaz sines fáter was $(3,32)$ |
| Sin selbes stímma sprah uns tház theiz sun sin éinogo was $(3,49)$ |
| theiz wári mo gizámi int imo in múat quámi $(4,84)$ |
| er bifánd theiz was niwíht ni záweta imo es níawiht $(5,12)$ |
| óbaz theih hiar fóra quad thaz er mo hárto firspráh $(6,4)$ |
| Inti ér er iz firslúnti theiz wídorwort irwúnti $(6,29)$ |
| wízun ouh theiz wár ist selbon drúhtinan Krist $(7,28)$ |
| theih míthon ouh nu wésta thes wínes ist in brésta $(8,14)$ |
| ni quam min zít noh so frám theih óuge weih fon thír nam $(8,18)$ |
| es wiht ni quám imo ouh in wán theiz was fon wázare gidan $(8,40)$ |
| theiz wazzar lútaraz was tho sie fúltun thiu vaz $(8,42)$ |
| Er óugta sina kráft thar joh sina gúallichi theist wár $(8,55)$ |
| Thísu selba rédina theih zálta nu hiar óbana (9, 1) |
| Ni thúhta mih theih quámi thar sulih wín wari $(9,27)$ |
| theiz wúrti ubar wórolt lut thaz er bi réhte was sin drút $(9,40)$ |
| Lis sélbo theih thir rédion in sínen evangélion $(9,71)$ |
| giwáro ist thaz bithénkit theiz élichor ni wénkit $(11,52)$ |
| theist allaz fléisg so thu wéist bitharf thera réinida méist $(12,34)$ |
| théist ju sar giméinit thaz thémo ist giwisso irdéilit $(12,84)$ |
| Theist thaz mínaz heila múat joh óuh min fréwida so gúat $(13,15)$ |
| Ther evangélio thar quit theiz móhti wesan séxta zit $(14,9)$ |
| theist dages héizesta joh árabeito méista (14, 10$)$ |
| Quad unser drúhtin zu iru thó "firnim nu wíb theih rédino $(14,35)$ |
| Theih zes púzzes diufi sus émmizen ni líafi (14, 45) |
| theih thuruh thíno guati bimidi thio árabeiti $(14,46)$ |
| Bi then gidóugnen séginin so thúnkit mih theiz megi sín $(14,91)$ |
| theih émmizen irfúlle so wáz so er selbo wólle $(14,102)$ |


| Indét er tho then sinan múnd theist íamer ubar wórolt kund $(15,19)$ |
| :--- |
| zi thíu ist iz thoh gimúat theiz dréten thar thie líuti $(17,10)$ |
| gidóugno in themo múate theiz thír irge zi gúate $(21,4)$ |
| Wéist thu weih thir rédinon thaz selba lób theist thaz lón $(21,13)$ |
| joh fóllon ouh theist méra thínes selbes lera $(21,34)$ |
| Bi thiu laz thia suórga (theist es gúat) themo thih súlichan giduat $(22,25)$ |
| thiz féstino uns in múate theiz úns irge zi gúate $(24,34)$ |

d. Book II - no cliticization

| thaz iz ío sus wari in érdu so mári $(3,42)$ |
| :--- |
| Thaz íst uns hiar gibílidot in Kríste girédinot $(3,57)$ |
| Thaz ih mih híar irréke inti hina nídarscrikke $(4,79)$ |
| Thaz íh thih thes gibéitti thara zi ímo leitti $(7,31)$ |
| Wanta íh thir quad er záta thaz ih thih ér irkanta $(7,69)$ |
| so thes thríten dages sár so wárd thiz thaz ih ságen thar $(8,2)$ |
| Firnim in thésa wisun thaz ih thir zálta bi then sú: $(9,87)$ |
| thaz íh biginne brédigon fon hímilriche rédinon $(12,60)$ |
| ni ságen iz nu ouh thes thiu mín), tház ih selbo Kríst ni bin $(13,6)$ |
| thaz ih fon niwíhte then liut zi wége rihte $(13,8)$ |
| wírd mir zi gifúare thaz íh mih nu gikúale $(14,16)$ |
| Ni wánet thaz gizámi thaz ih zi thíu quami $(18,1)$ |
| in mínes namen námati thaz ih thoh thés gihogeti $(23,26)$ |



| Tho méid er sie mit thúlti theiz uns zi frúmu wurti $(19,25)$ |
| :--- |
| Mir límphit thaz ih thénke theih sine wérk wirke $(20,13)$ |
| quádun iogilícho theiz wari sín gilicho $(20,36)$ |
| so quam gisíuni míner theist gótes thang joh síner $(20,50)$ |
| Thie búah duent thar mári theiz sámbazdag tho wári $(20,55)$ |
| thoh scówot ir nu álle theih síh $u$ al soso ih wílle $(20,148)$ |
| thaz dét er ouh tho súntar theiz wari méra wuntar $(20,158)$ |
| Wer íst iz quad er drúhtin theih mit gilóubu were sín $(20,175)$ |
| mit síneru gibúrti theiz uns zi frúmu wurti $(21,20)$ |
| Ófenemo múate theiz úns irge zi gúate $(21,35)$ |
| Ther evangélio thar quít theiz wari in wíntiriga zít $(22,3)$ |
| Thes făter min mir giónsta theist álles guates fúrista $(22,29)$ |
| Ob áh avur thénku theih sinu wérk wirku $(22,61)$ |
| Theiz io zi thíu irgiangi sus náh er uns gifiangi $(24,15)$ |
| theiz ouh ínan ni firgéit thann éllu worolt úf steit $(24,24)$ |
| So wér so in mih gilóubit theist álles guates hóubit! $(24,29)$ |

f. Book III - no cliticization

| Tház ih io mit rúachon zi góumon si in then búachon $(1,25)$ |
| :--- |
| Joh tház ih hiar nu zéllu thin gíft ist iz mit álu $(1,27)$ |
| Tház ih hiar nu zéllu thaz weiz thiu wórolt ellu $(6,1)$ |
| Tház ih hiar gizéine $\quad$ waz thiu thin góuma meine $(7,3)$ |
| Galiléa thaz ih quád theist in frénkisgon rád $(7,13)$ |
| thanne quad gibíut mir thaz ih quéme thara zi thir $(8,34)$ |
| Ni bat si thés thaz ist wár thaz er fuari thára sar $(11,9)$ |
| in allen ríchin thaz ist wár er sélbo scal iz wesan thár $(13,36)$ |
| Sar gab stál thaz ist wár mer zi rínnanne thár $(14,27)$ |
| Thaz íh ni missigánge joh zi thír io thinge $(17,65)$ |
| uns thúnkit in giwíssi thaz iz hónida si $(19,6)$ |
| Mir límphit thaz ih thénke theih sinu weerk wirke $(20,13)$ |
| Súme datun mári thaz iz thér ni wari (20, 35) |
| ih sagen íu quád er thaz ist wár er kléipta mir ein hóro thar $(20,59)$ |
| Thaz íst quad er nu wúntar thaz ir nirknáhet then man $(20,145)$ |
| thaz íh nu hiar giméine wénan ther mán bizeine $(21,2)$ |
| Ir ni gilóubet thoh thiu hált thaz ist iu ófto gizált $(22,19)$ |
| tház ih thes ginéndu mih gótes sún nennu (22,58) |
| Joh quédemes in ríhti thaz iz lóbosamaz sí $(26,13)$ |
| Tház ist in giféstit tház in es mer ni brístit $(26,69)$ |
| tház iz was ther héilant ther inan thes séres inbant $(4,48)$ |
| klagota ío thaz ira sér thaz iz irbármeti inan mér $(10,28)$ |

## g. Book IV - cliticization

Thaz déta ih bi einen rúachon theih líbi in thesen búachon $(1,33)$
Thaz ih giscríbez hiar so frám theiz thír wew lóbosam $(1,39)$
Ésil wízun wir tház theist fíhu filu dúmbaz $(5,7)$
Thaz ander ál theist niwíht theist frides fúrista gisíht $(5,39)$
Theist giscríb héilig thaz wir lésen ubar dág $(5,55)$
quad théiz ni wári bi álleswaz ni si thuruh sínan éinan haz ( 7,20 )
giwísso thaz ni híluh thih theist zítin allen úngilih $(7,30)$
Wir ni eigun sár theist er méist húses wíht, so thu wéist $(9,7)$


## h. Book IV - no cliticization

| Hiar ouh fórna biléip thaz ih iz ál ni giscréip (1,27) |
| :---: |
| al ni gizálta tház ih iz ál ni giscréip ( 1,28 ) |
| thaz iz zi suár ni zálti ther iz lésan wolti ( 1,34 ) |
| Iz drúhtin ni bilíbe thaz íh es thoh giscribe ( 1,37 ) |
| Thaz ih giscríbez hiar so frám theiz thír wew lóbosam ( 1,39 ) |
| thaz iz ál gizámi drúhtine biquámi ( 2,12 ) |
| Ther selbo líut thaz ist wár bréitta sina wát thar ( 4,27 ) |
| in himilríche ouh thaz ist wár thaz githionotun se thar (9,28) |
| Thes múases gérota ih bi thíu thaz ih iz ázi mit íu ( 10,3 ) |
| Thaz íh nu méinu mit thíu unkund hárto ist iz íu ( 11,27 ) |
| Thaz iz ío ni werde thaz ih thín githarbe ( 11,35 ) |
| rechto spréchet ir thár ih bín ouh so, thaz ist wár ( 11,46 ) |
| thaz íh ouh min giráti iu allaz kúnd dati ( 12,8 ) |
| Ni sí thir in githánke thaz íh thir io giwénke ( 13,27 ) |
| Petrus zellu ih thir tház thaz wíg thaz ist so hébigaz ( 13,31 ) |
| mit thíonostu ih biwúrbi thaz ih mit thír irsturbi ( 13,42 ) |
| odo ouh spér thehein so wás thaz ih rúahti bi tház ( 13,44 ) |
| Wáfan ni wári thaz ih in thíu firbari ( 13,45 ) |
| Nist mán nihein thaz ist wár ther quéme zi themo fáter sar ( 15,21 ) |
| Zi in spráh er tho sár ih bin iz sélbo thaz ist wár ( 16,39 ) |
| Ja ságet ih iu quad er zi ín thaz íh ther selbo mán bin $(16,47)$ |
| Thie liuti wízun quad fon ín thaz ih Júdeo ni bín (21, 11) |
| thaz íh mih nu biwérie mit mínes selbes hérie ( 21,24 ) |
| thaz ih ouh wárlichu thíng gibréitti in thesan wóroltring ( 21,32 ) |
| thaz ih úndato ni fíndu in imo thráto ( 23,4 ) |
| thaz ih scréib in alawár thaz stéit imo giscríban thar $(27,30)$ |



[^44]| Thaz íh thoh in thera dóti waz thíonestes gidáti $(7,41)$ |
| :--- |
| Ih giágaleizon thaz ist wár thaz íh inan gihólon thar $(7,51)$ |
| Joh tház ist mihil wúntar thaz síe so sazun súntar $(8,5)$ |
| Tház ist uns iróugit thaz got ist Krístes houbit $(8,15)$ |
| in muate láz thir iz héiz tház ih thinan námon weiz $(8,44)$ |
| Wío er selbo quámi thaz ist séltsani (12, 13) |
| thaz iz mág so ih rédinon wértisal irkórboron $(12,34)$ |
| ubarwúntan thaz ist wár bi thiu stúant er tho in stáde thar $(14,14)$ |
| Thú weist druhtin quad er mín thaz ih mínna haben thín $(15,5)$ |
| Thu wéist druthin gúato thaz ih thih mínnon thrato $(15,17)$ |
| thaz ih wílle so the wéist laz thir wésan thaz io méist $(15,34)$ |
| Thaz íst ouh dag hórnes joh éngilliches gálmes $(19,25)$ |
| joh ther fáter thaz ist wár gescéidit sih fon ín thar $(20,42)$ |
| Ir ni thúltut thuruh gót tház ih giangi náchot $(20,75)$ |
| Ni búaztut ir mir thaz ist wár thúrst inti húngar $(20,105)$ |
| Thaz íst in thar in líbe gihéizan zi líebe $(23,55)$ |
| sconu lútida ubar dág thaz ih irzéllen ni mag $(23,176)$ |
| Tház ist in giríhti fora drúhtines gisíhti $(23,177)$ |
| thaz guata mánagfalta thaz íh thir hiar nu zálta $(23,212)$ |
| thaz íh mih untar thínan íamer muazi blíden $(24,18)$ |
| thaz ih giscríb in unser héil evangéliono deil $(25,10)$ |
| Tház ih es bigúnni in únseraz gizungi $(25,11)$ |
| thaz ih ál dati thes káritas mih báti $(25,14)$ |
| Mínes selbes úbil thaz íh io ward so frávili $(25,31)$ |
| joh minera árgi filu frám thaz ih es góuma ni nam $(25,32)$ |
| Thaz íh in thesen rédion ni lúgi in thevangélion $(25,33)$ |
| thaz íh mir liaz so úmbiruah thio mines drúhtines buah $(25,34)$ |
| joh er iz thána scerre tház iz hiar ni mérre $(25,38)$ |

## Appendix 3: Chapter four forms

The following forms include those third person preterit indicative forms that serve as the basis of chapter four's analysis.
a. Elided forms

| Nu folget ímo thuruh tház I 20, 35 |
| :--- |
| Ein kuning giéiscot iz in wár III 2, 3 |
| Firságet er in thaz gizámi III 15, 27 |
| tho inthábet(a) er sih sár III 23, 26 |
| Ságet(a) in(NP) ouh zi wáre IV 7, 27 |
| Ni hábat(a) er in thía redina IV 12, 57 |
| Wérit(a) er inan giwísso IV 17, 11 |
| Fráget(a) er nan sáre IV 19, 5 |
| thaz zélit(a) er allaz thánana IV 28, 24 |
| Gihógat(-e) er ouh thero fuazo V 8, 25 |
| thie wega ríht er imo ubar ál I 3, 50 |
| harto fóraht er mo thoh I 4, 47 |
| Sánt er mih fon hímile I 4, 63 |
| gilóubt er filu spáto I 4, 84 |
| bráht er therera wórolti I 5, 4 |
| ja kúndt er uns thia héili I 6, 18 |
| gisídalt er in hímile I 7, 16 |
| Tháht er bi thia gúati I 8, 17 |
| kúndt er imo in droume I 8, 20 |
| Gihórt iz (OBJ) filu mánag friunt I 9, 3 |
| Zi uns ríht er horn héiles I 10, 5 |
| Ríht er zi uns ouh héilant I 10, 9 |
| Sánt er filu wise I 11, 3 |
| zi théru steti fúart er I 11, 26 |
| ther engil kúndt iz er tho sár I 14, 8 |
| bitháht er siu iogilícho I 15, 24 |
| tháht er sar in fésti I 17, 40 |
| Léit er sie tho scóno I 17, 57 |
| Siu fúart er noh ni duálta I 19, 17 |
| sih fúagt er io zi nóte I 22, 34 |
| so ílt ih sar hérasun I 22, 49 |
| then fáter hort er spréchan I 25, 15 |
| joh zált er thar gimúati I 25, 16 |
| mit imo wóraht er iz thar II 1, 15; 19 (3 identical attestations) |
| ni hórt er wergin mári II 4, 26 |
| génan so bifált er II 5, 14 |
| sant er thíe tho in allahánt II 7, 4 |
| Imo ílt er sar giságen thazII 7, 25 |
| Fúart er sar tho thárasun II 9, 41 |
| bi thiu skéint(a) er iz o o hárto II 9, 46 |
| thaz wóraht er thar zi wíne II 10, 4 |
| Er yrrícht iz scíaro I I1, 49 |
| braht(a) uns sálida joh gúat II 11, 54 |


| thar tháht er filu réhtes II 12, 5 |
| :---: |
| bi thiu zalt er ál thaz imo zám II 12, 12 |
| Scono zált er imo tház II 12, 51 |
| bi thía sant er hérasun II 12, 72 |
| Ni sánt er nan zi waru II 12, 75 |
| then sánt er selbo hérasun II 13, 29 |
| Sie héilt er sos er móhta II 15, 11 |
| Bigónd er thaz tho spénton II 15, 21 |
| grúazt er sie zi gúate II 15, 24 |
| Zalt er óuh tho thuruh nót II 19, 1 |
| Gilóubt er selbo thánne III 2, 15 |
| Gilóubt er themo wórte III 2, 23 |
| tho kúmt er sina fréisun III 4, 22 |
| irkánt er (-a) in ther brústi III 10, 41 |
| Zált er in tho fóllon III 13, 3 |
| Irquíct er ouh so móht er III 14, 7 |
| Héilt er ouh ju blínte III 14, 61 |
| thie héilt er sár io alle III 14, 64 |
| thie heilt er ál so gizam III 14, 68 |
| so sánt er zuelif thégana III 14, 85 |
| yróugt er in thar filu frám III 16, 12 |
| hort(a) ál ther liut thia rédia III 17,6 |
| irríht(a) er sih mit thúltin III 17, 38 |
| Yróugt er in thar mánag guat III 17,69 |
| thes blídt er hérza sinaz III 18, 52 |
| óugt(a) in (NP) sina léra III 19, 17 |
| Wóraht er tho ein hóro in war III 20, 23 |
| thaz kléibt er ímo so er es ni bát III 20, 24 |
| Nánt er ímo ein wázar III 20,25 |
| ih riht(a) es iuih álles III 20, 123 |
| joh ougt er ímo follon III 20, 136 |
| Bigónd er in tho rédion III 20, 143 |
| joh kert(a) in (NP) frámmort thaz múat III 22, 36 |
| so irlóst(a) er unsih álle III 26, 56 |
| Tház bigond er rédinon IV 1, 15 |
| Er zált iz (obj) in ouh hárto IV 1, 17 |
| Tho sant er drúta uns sine héim IV 5, 23 |
| Zált er in sum síban we IV 6, 47 |
| bi thiu zált er in then wéwon IV 6, 52 |
| Zalt er óuh then mannon IV 6, 55 |
| Tho zált in (NP) thiu sin gúati IV 7, 13 |
| Gisázt(a) er sie tho scóno IV 7, 81 |
| Lert er dáges ubarlút IV 7, 89 |
| Thos sant er Pétrusan sár IV 9, 3 |
| yrscíuht er filu thráto IV 11, 20 |
| Súntar gruazt(a) er ouh in wár IV 13, 11 |
| thaz wára zált er imo sár IV 15, 18 |
| giloubt er únredina IV 15, 26 |
| kert er mo álleswio thaz múat IV 15, 30 |
| Er zalt in (NP) óuh tho thar méist IV 15,37 |
| Lért er sie mit wórton IV 15, 43 |
| joh bratt(a) er slíumo thaz suért IV 17, 1 |


| so áht(a) er io ginóto IV 17, 14 |
| :---: |
| Thó bigond er suérien IV 18, 29 |
| zált in (NP) in giwíssi IV 18, 30 |
| Yrhógt(a) er tho ginóto IV 18, 37 |
| Thaz thúlt(ta) er in then stúnton IV 19, 75 |
| so yrsúacht(a) ih inan thráto IV 22, 8 |
| Tho háft(a) er nan so er wólta IV 22, 17 |
| Tho irdéilt(a) er thaz sie dátin IV 24, 35 |
| so lost er wóroltrichi IV 27, 13 |
| Já héilt(a) er quadun líuti IV 30, 25 |
| ráfst er nan hárto IV 31, 6 |
| Kért er tho so er móhta IV 31, 17 |
| si gikért(a) in harto tház IV 33, 12 |
| thiu tód giscankt(-a) iu enti V 8, 55 |
| Er zalt in(NP) mánagfalto V 9, 53 |
| Zált in(NP) thes ginúagi V 9, 55 |
| Yróugt(a) uns hiar gimúato V 12, 35 |
| Mit thiu kúndt(a) er hiar ouh mánnon V 12, 71 |
| ni irzált er thaz gimúati V 12, 86 |
| Zalt er mánagfaltaz gúat V 12, 89 |
| Gágant er sar ouh zioro V 13, 29 |
| tho ráfst(a) er se erist hárto V 16, 12 |
| thoh thúlt er ofto in wára H76 |
| so móht es sin ein halb jár I 5, 1 |
| det er wérk maru I 7,10 |
| Dét er mit giwélti I7,13 |
| tho dét es druhtin énti I 17, 8 |
| thaz dét er iogilícho I 27, 40 |
| got détaz thuruh ínan al II 1, 36 |
| Thaz dét er thaz thu iz wéssis II 3, 61 |
| thia lúchun wolt er fíndan II 4, 14 |
| thaz wólt er gerno irfindan II 4, 17 |
| bi thiu móht er odo dráhton II 4, 28 |
| thoh wólt er in ther fári II 4, 46 |
| joh dét er thaz hiar ófto II 4, 92 |
| Ni móht er nan birúaren II 4, 107 |
| Themo álten det er súazi II 5, 15 |
| ni dét er iz bi gúate II 5, 20 |
| ni móht ih mih intháben sar II 7, 29 |
| Tho wólt er sar in morgan II 7, 39 |
| ni móht er iz bimídan II 7, 41 |
| wólt er sar mit wíllen II 9, 42 |
| Ni wolt ér fon níawihti II 10, 1 |
| so dét er filu nídiri II 11, 18 |
| Indét er tho then sinan múnd II 15, 19 |
| det er then líutin mit thiu dróst II 15, 22 |
| mit wóton wolt er súazen III 2,10 |
| thoh wést er sos er scólta III 6, 20 |
| tho drúhtin wolt es wáltan III 7,6 |
| giwisso er détaz thuruh tház III 8, 4 |
| ni gidórst(a) es ruaren méra III 14, 46 |
| scolt ér sin Kríst guater III 16, 58 |


| Dét er ouh tho méra III 19, 17 |
| :---: |
| Ni wólt er wiht thes spréchan III 19, 27 |
| thaz det er ouh tho suntar III 20, 158 |
| ther námo detaz mári III 22, 6 |
| Det(a) er ófan in tho sár IIII 23, 49 |
| thaz déta ru ther wíllo III 24, 39 |
| ni dét er iz bi gúati IV 2, 27 |
| wolt ér thar waz irscáboron IV 2, 30 |
| Wólt er tho bigínnan IV 4, 1 |
| Det ér in dróst tho álles IV 7, 19 |
| gidét er filu blíde IV 7, 79 |
| Dét er sos er ío duat IV 11, 3 |
| West(a) er sélbo ouh so iz zám IV 11, 9 |
| thia kúanheit wolt er wéizen IV 13, 40 |
| Det er ávur fragun IV 16, 43 |
| wólt er in then ríuon IV 18, 4 |
| ni dét er iz bi gúate IV 19, 62 |
| Dét er iz then mánnon IV 19, 63 |
| wólt er in gistíllen IV 23, 2 |
| so det er súlih mari IV 23, 26 |
| ni móht er sie io giwéichen IV 24, 24 |
| er wólt es duan thi énti IV 24, 25 |
| sih wolt er réhto ubarlút IV 24, 26 |
| Ni wést(a) er thóh tho waz er wán IV 24, 33 |
| er détaz hiar nu fésti IV 27, 16 |
| Wólt er sie gisámanon IV 29, 7 |
| thaz móht er thaz giflízan IV 30, 10 |
| thaz det er sélbo mari IV 30, 34 |
| ni móht iz sin in ánder IV 32, 4 |
| indét uns tho thiu síta IV 33, 30 |
| thaz dét er in zi gúate IV 37, 20 |
| Tho dét er selb so er wólti V 10, 3 |
| Dét er so sie quátun V 10, 13 |
| Ni dét er thes tho bíta V 11, 21 |
| ubar bédu det er tház V 12, 30 |
| ni móht er mo gistíllen V 13, 26 |
| Wólt ih hiar nu rédinon V 23, 1 |
| Ni móht ih thoh mit wórte V 23, 225 |
| Waz scolt íh thanne V 23, 239 |
| Ni móht ih thaz firlóugnen V 25, 13 |
| wólt er sar thén wílon V 25, 62 |
| Thaz lérta nan sin mílti I 3, 19 |
| thar zaltaz ér ubarlut I 20, 26 |
| Er giscéintaz filu frám I 20, 33 |
| so rúarta nan tho húngar II 4, 4 |
| ráftsa nan tho wórto III 8, 44 |
| joh zálta mo thiu wérk thar III 14, 41 |
| er altaz sos er scólta III 15, 4 |
| er sáztaz wídar héilaz IV 17, 24 |
| joh ráfsta inan thero wórto IV 19, 14 |
| si irkánta nan so er wólta V 8, 42 |
| so rúarta mo thaz hérza IV 18, 40 |


| joh lóbota nan zíoro II 7, 54 |
| :--- |
| fólgete mo githíuto II 24, 8 |
| thaz mánota nan thes wáres III 25,31 |
| Légita nan tho ther éno IV 35, 35 |
| Joh óffonotaz iro múat V 23, 63 |
| Rédinota er súntar H 143 (Rédinotær 194r) |
| er wólta nan irthuésben I 17, 52 |

b. No elision

| thaz biwánkota er sár L 19 |
| :---: |
| bi thiu béitota er so nóto I 4, 84 |
| béitota er thar súazo I 15, 4 |
| giwérota inan thes gihéizes $\mathrm{I} 15,8$ |
| Thia zít éisgota er fon in I 17, 43 |
| Er lósota iro wórto I 22, 35 |
| theru múater ságeta er(NP) ouh tho tház II 3, 32 |
| then fíngar thénita er ouh sár II 3, 38 |
| ni záweta imo es níawiht II 5, 12 |
| Hárto sageta er imo tház II 6,5 |
| Sliumo ságeta er mo tház II 7, 61 |
| inti oppherota iz góte thar II 9, 61 |
| thia worolt mínnota er so frám II 12, 71 |
| Gimuatfágota er tho in II 14, 113 |
| Korata er thía warba III 6, 19 |
| sih mérata iz ginóto IIII 6,38 |
| Tho folgeta ímo thuruh tház III 7, 21 |
| klágota ira wéwa III 10, 6 |
| Githánkota er mo hárto III 12, 27 |
| joh géreta ínan wizist tház III 12, 28 |
| Firdílota er in súntar III 14, 69 |
| thes fréwita er húgu sinan III 18,51 |
| Er zéigota in (NP) in alawár III 19,21 |
| thaz thíonoti imo in wáru IV 4, 26 |
| thiu habeta jú weist es mér IV 6, 32 |
| Mánota er ouh tho súntar IV 6,41 |
| Ságeta er tho then líobon IV 7, 63 |
| Thaz bóuhnita er giwísso IV 12, 31 |
| Tho frágeta er thio dáti IV 12, 35 |
| Gérota iuer hárto IV 13, 15 |
| thoh ni hábeta er nu lés IV 16, 8 |
| Petrus fólgeta imo thó IV 18, 1 |
| Zi erist frágeta er bi tház IV 21, 3 |
| Bisórgeta er thia múater IV 32, 11 |
| joh hábeta inan fúntan V 7, 44 |
| Frágeta er sa sáre V 7,47 |
| sageta in(NP) thó thaz si nan sáh V 7, 66 |
| Sus lókota er mit mínnon V 11, 35 |
| Mántota er sie tho álles V 11, 45 |
| mérota in(NP) thie wízzi V 11, 48 |
| er spúnota iz gimúato V 14, 25 |
| Érata er nan filu frám H79 |
| Chórota er ofto thráto H 113 |


| joh hina fúarta inan tod I 21, 1 |
| :---: |
| Wer óugta iu quad fillórane I 23,37 |
| tho doufta er ínan thuruh nót I 25, 14 |
| joh gizálta in (NP) sar tház II 2,8 |
| er óugta iz (OBJ) aftar ímo meist II 3, 51 |
| er kérta iz iogilícho II 4, 62 |
| zalta imo thia gúati II 6, 17 |
| tho irfirta uns mér ouh thaz gúat II 6, 40 |
| Irkánta ih thino gúati II 7, 65 |
| ni hángta er in iz fúrdir II 11, 16 |
| rihta úns then sín hiar filu frám II 11, 42 |
| wiht ni duálta er es sar III 8, 35 |
| zálta imo thaz ira sér III 10,8 |
| óugta in(NP) io in giwíssi III 14, 112 |
| Er ougta in(NP) ío filu frám III 14, 113 |
| joh iróugta in(NP) thaz wár III 16, 11 |
| Áfur zalta in (NP) drúhtin tház III 17, 67 |
| zálta in(NP) thia úngimacha III 20, 8 |
| Ih zalta iu nú thaz wára III 20, 125 |
| Wer horta ér io thaz gimáh III 20, 147 |
| Ih ougta iu quad gimúatu III 22, 37 |
| Ouh zálta in(NP) thiu sin qúati IV 6, 15 |
| Er zalta in (NP) óuh tho in alawár IV 6,35 |
| tho zálta in(NP) sar thio dáti IV 11,41 |
| Zálta in(NP) ouh in wára IV 15, 41 |
| inti kústa inan sár IV 16, 51 |
| so er rúarta imo thaz óra IV 17, 23 |
| bigónda er inan scówon IV 18, 42 |
| zálta in (NP) thih then rúagstab IV 21, 13 |
| jóh inslúpta in(NP) gahun V 10, 26 |
| thaz er gizálta iz(OBJ) allaz ín V 11, 46 |
| wier zálta in(NP) fon theru mínnu V 12, 94 |
| bi thiu thúlta íh thráto mánag leid H 12 |
| Bigonda er góte thankon H 29 |
| Sih kérta er zi góte ana wánk H 61 |
| ni déta er iz bi nóti II 3, 59 |
| Deta er iz scónara al so zám II 10, 11 |
| er wólta iz gerno irfindan II 12, 22 |
| Déta in thaz zi núzze III 14, 97 |
| er wolta in (NP) ío mit wíllen III 19, 20 |
| Thih deta ih míthont quad er wís III 24, 85 |
| Thaz déta ih bi einen rúachon IV 1, 33 |
| ther wíllo deta iz filu scin IV 2, 8 |
| gideta ér (NP) se filu ríche IV 7, 82 |
| deta ímo so man wízzi IV 31, 2 |
| thaz scólta in (DAT,PL) thoh in war mín IV 33, 10 |
| Er deta in(NP) óffan állaz V 11, 47 |
| c. Dotted forms (dotted segment is italicized) |
| ságet $a$ er in fróno I 5, 72 |
| gisámanota er sare I 17, 33 |
| joh wídorota iz hárto I 25, 4 |


| óffonot $a$ in(NP) sar tház I 27, 48 |
| :--- |
| giéret $a$ er se in thén sind II 2, 28 |
| thoh giéiscot $a$ er thia múater II 4, 25 |
| ni giéiscot $a$ er thaz wóroltman III 20, 157 |
| Hábeta $a$ er in war mín III 23, 23 |
| Ih hábet $a$ iz io giwíssaz III 24, 93 |
| Ni máchot $a$ er thio dáti IV 35, 3 |
| scírmt $a$ imo iogilícho L 52 |
| giliht $a$ imo éllu sinu jár L 54 |
| Er tháhta im $o$ ouh in gáhi I 8, 13 |
| ja óugta uns zi érist thaz gibót I 13, 6 |
| kúndta $a$ imo er iz wólta I 25, 10 |
| Er kúndt $a$ uns thaz in alanót II 3, 21 |
| gilóubta er sia gihéilti III 11, 12 |
| braht $a$ imo sélben guat gimáh III 20, 28 |
| want er det $a$ in (NP) dág leidan III 20, 168 |

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[^0]:    ${ }^{1}$ The term "clitic group," as it is used in this work, refers only to a phonological unit that comprises a host and a clitic, as opposed to the separate prosodic constituent proposed in Nespor \& Vogel (1986), Hayes (1989), and Vogel (1990). This point will be discussed further in chapter two.

    2 OHG umlaut will also receive a more extensive treatment in chapter two.

[^1]:    ${ }^{3}$ The many functions of the pronoun thaz are discussed in chapter three.

[^2]:    4 "Indeed, they (Franks) do not, as many other peoples, commit the stories of their predecessors to (written) record...(Ad L. 107-109)." All translations of the Ad Liutbertum presented in this analysis are drawn from Magoun (1943).

[^3]:    ${ }^{1}$ Zwicky's use of the term "word" is pretheoretical, though generally corresponds to the terms "phonological" or "prosodic word."

[^4]:    ${ }^{2}$ The other OHG texts that contain similar examples of clitics verb + clitic combinations with umlaut crossing an apparent word boundary include the work of Tatian and the Bavarian Psalm 138, which seems to exhibit a pattern of cliticization similar to that of Otfrid throughout the short text. These texts receive a more detailed treatment in chapter five.

[^5]:    ${ }^{3}$ A detailed discussion of the process of lexicalization vis-à-vis grammaticalization, as it relates to these clitic groups and others, is presented in chapter three.

[^6]:    4 Following Hall (1999), Booij (1996) and Gärtner \& Steinbach (2003), prefixes as are not integrated into the structure of the pword, but rather are attached to a higher node, the phonological phrase. This point will be discussed in greater detail below.
    5 Textual evidence points to the grammaticalization of the $t$ in the second person singular ending by the time of Otfrid (e.g., lázist thu, I 15, 15; gibádost thu, II 3, 58, and habest thu IV 11, 31), though there are still some examples which show the original -is ending (quis thú, III 20, 71 and hábes thu, V 7, 60).

[^7]:    ${ }^{6}$ According to Wiese (1996) this generalization also includes those suffixes containing schwa, which he argues is epenthetic across the board in modern German.

[^8]:    ${ }^{7}$ As is evident in (15), Hall (1999) treats word final consonants as moraic. The analysis in this study, however, will assume the opposite for OHG-that word final consonants are, in fact, not moraic. A discussion of this point will follow later in this chapter.

[^9]:    8 This table only includes those reductions of full forms that are attested in the Otfrid text.
    9 Thaz and waz can also reduce when followed by a function word, usually the pronouns ih 'I' or $i z$ 'it.' In these instances of reduction, cliticization and umlaut are also evident, yielding structures like theiz (< thaz iz) 'that it,' a form that is frequently attested in Otfrid and will be discussed in chapter three, or weih (< waz ih) 'what I,' a far less frequently attested form.

[^10]:    ${ }^{10}$ French example drawn from Berendsen (1986: 20).

[^11]:    zijn aard (zən) ${ }_{\sigma}(\text { art })_{\sigma} \quad$ 'his nature'
    een aap $\quad(\partial n)_{\sigma}(\text { ap })_{\sigma} \quad$ 'a monkey'

[^12]:    ${ }^{11}$ It is not essential for our analysis to argue for one of these two options, though data from modern German do seem to be indicative of adjunction of the clitic onto the phrasal node (cf. Hall 1999: 122). Furthermore, this option (29b) appears to be the theoretically more parsimonious and, hence, more desirable solution, working within the accepted hierarchy without having to allow for the formation of extra recursive structures.
    ${ }^{12}$ Historical accounts of umlaut have treated the process as lexical in the OHG period (cf. Wiese 1987, 1996; Holsinger \& Salmons 1999; Iverson \& Salmons 2001, among others). The account offered in the current volume treats umlaut in OHG, or perhaps more specifically in Otfrid's idiolect, as capable of operating postlexically. How this possibility fits into the larger diachronic account of umlaut will be discussed in chapter 5 .

[^13]:    ${ }^{13}$ The minimum word constraint is assumed to apply postlexically.
    ${ }^{14}$ I do not treat stress as a binary property, but rather in terms of degrees; i.e., a syllable bears greater or lesser stress than the one that follows. In this case, the modal would bear greater stress than the pronoun that follows.

[^14]:    15 The prefix gi-, just as proclitics, are not integrated into the pword of the stem and, therefore, does not contribute to the verb's weight.

[^15]:    1 Though this volume is not a treatise on grammaticalization and lexicalization processes and theories, both frameworks will be discussed, inasmuch as they are relevant to the data in question.

[^16]:    2 This conception of lexicalization vis-à-vis grammaticalization mirrors the view summarized in Brinton \& Traugott (2005). In fact, though, there is little unanimity among scholars regarding how these frameworks should be defined or how grammaticalization and lexicalization relate to one another.

[^17]:    ${ }^{3}$ Further elucidation of this point is provided below in section three of this chapter.

[^18]:    ${ }^{4}$ Some of the views of OHG syntax adopted in the present analysis are not consistent with those of Axel (2007), as will soon become evident.
    5 Hêliand references drawn from Behaghel (1965).

[^19]:    ${ }^{6}$ Apocope of the unstressed $-a$ yields the attested form Ságet ( $<$ Ságeta).

[^20]:    7 Further discussion of the development of articles from demonstrative pronouns in Germanic can be found in Abraham (1997) and Philippi (1997).

[^21]:    ${ }^{8}$ Examples drawn from Braune \& Reiffenstein (2004).

[^22]:    9 Why the verb sein should still be connected with the BE auxiliary in Modern German, despite its clear imperfective semantics is an interesting question. It is possible to attribute its initial historical classification as a verb that selects for BE to the same reason that has been cited for the similar status of the stative verbs, liegen 'to lie,' sitzen 'to sit,' stehen 'to stand,' and the continuation of state verb bleiben 'to stay;' namely, that these verbs originally had perfective semantics, meaning "to come to be lying/sitting/standing/staying." In the case of the former three verbs, the perfective BE is still in use in southern German varieties, despite the fact that they now have imperfective semantics. In the case of bleiben and sein the original auxiliary is maintained perhaps due to their frequent production. In this analysis verbs that are followed by predicate nominatives and adjectives, sein and werden, will be treated as ergative.

[^23]:    ${ }^{10}$ It is also interesting that the author places the NP $a l$ at the beginning of the second half line, rather than at the end of the first. This placement might give us a clue as to its constituency; i.e., al, the head of an NP is contained within the same half line as its CP complement. This analysis would support the figure's treatment of the second clause as a relative clause, though the relationship between syntactic constituency and the line and verse in Otfrid would have to be more firmly established.

[^24]:    ${ }^{11}$ Recall from section two of this chapter that fronted demonstratives are assumed to reside in TP structures, as a fronted DP in a CP structure would trigger verb movement from T to C .

[^25]:    ${ }^{12}$ Also note that this argument does not crucially hinge on the proposal that there were two competing clausal frameworks in OHG. Should one assume that the CP is an adequate structure that accounts for all of Otfrid's attested syntactic patterns, the syntactic diversity of the theih clitic groups would still be a reality, with thaz functioning as a relative pronoun and complementizer, located in SpecCP and C respectively.
    ${ }^{13}$ [] in this figure indicate clausal boundaries.

[^26]:    14 Drag thú gilóubi thu mir then gúndfanon anan thír in hóubite inti in brústin in thines hérzen lústin V 2, 9-10
    The neuter pronouns $i z$ and thaz are commonly used in Otfrid to refer to nouns of all genders.

[^27]:    ${ }^{15}$ An alternate, and perhaps equally valid, analysis of line 17 would be to treat the second half line as a stand-along (i.e., not subordinate) clause.
    ${ }^{16}$ An example of this phenomenon would be the English form will not versus its clitic variant won't. The latter form is no longer actively produced, but likely exists as one unit in the lexicon. Speakers of English, however, still connect the cliticized form to the uncliticized as being semantically related.

[^28]:    ${ }^{17}$ It falls beyond the scope of this book to offer a more thorough treatment of the theih, theiz, and theist clitic groups in MHG and consider the whole of that considerable corpus in this analysis.

[^29]:    ${ }^{18}$ Citations for the twelve attestations are as follow: Book I: 26, 28; Book I: 29, 11; Book IV: 189, 24; Book V: 231, 22; Book V: 264, 29; Book VI: 284, 7; Book IX: 437, 3; Book IX: 444, 29; Book X: 507, 1; Book XIII: 644, 8; Book XV: 776, 2; Book XV: 785, 15.

[^30]:    ${ }^{19}$ The exact extent to which the emphatic predicate nominative is attested, relative to other predicate nominative constructions, lies beyond the scope of this volume, and could only be determined after a more thorough investigation of clause structure in Otfrid. In the meantime, the reader may refer to Piper's index to the Evangelienbuch (1887: pg. 493), in order to reassure him-/herself that the nine structures presented in (45), (46) and (47) are, indeed, not the sole examples attested in the work.

[^31]:    ${ }^{20}$ This is another point to which the analysis will return in chapter five.

[^32]:    ${ }^{21}$ Cliticization in instances in which the $i z$ pronoun is an expletive is not categorical-six of the fourteen attestations of the full form thaz iz involve expletive pronouns. There might also be an additional phonetic motivation behind the clear preference for the clitic group variants theiz and theist. In the case of the former, assimilation is aided by the fact that the same segment, the coronal fricative $z$, is word-final in both host and clitic. In the case of theist, in which the clitic group is preferred but not at the same rate as theiz, the affected consonants are not identical, but are all coronal $(z, s t)$. In contrast, thaz ih is preferred to theih, and we note that the phonetic

[^33]:    ${ }^{1}$ Bostock states, for example, that the hymns of Prudentius and Otfrid's teacher Rhabanus Maurus are other possible Latin sources for the accentual pattern exhibited by the lines in the Evangelienbuch.

[^34]:    2 Bostock uses the terms "long" and "short" syllables, which have been translated here into "heavy" and "light" respectively.

[^35]:    ${ }^{3}$ It is interesting to note that out of these forty-two tokens, thirty-five of them comprise thaz and the pronoun $i h$, with five tokens containing ist and two $i z$. These numbers could be seen as a reflection of the greater pragmatic emphasis attached to the use of the pronoun "I." Thirty-five tokens certainly comprise a disproportionately large percentage of the total forty-two forms ( $64.3 \%$ ); i.e., the collocation thaz ih only makes up $42.2 \%$ of the total number of the "thaz" clitic groups (see figure 2 of chapter three).

[^36]:    ${ }^{4}$ Falling under these conditions are the weak class i, ii, and iii verbs, all of which build their preterit forms through affixation of a dental suffix, as well as the modal verbs.

[^37]:    ${ }^{5}$ Published editions, such as Erdmann (1973), have changed the form to Rédinota er.

[^38]:    ${ }^{6}$ As is often evinced in poetry, metrical and prosodic stress certainly do not always overlap. In fact, the former may at times exhibit patterns that are quite foreign to the latter.

[^39]:    ${ }^{7}$ Included in this number are those six forms presented in (27) that have nothing to gain from elision processes or the lack thereof, as they conform either way.

[^40]:    8 This is how the structure is represented in the manuscript before the corrector superimposed an $i$ over the $e$ and added an $a$ in the margin above the form.

[^41]:    9 The translation from the Latin is drawn from Magoun (1943: 883).

[^42]:    [...] inti nioman ni meg iz noti neman fon mines fater henti (Tatian, Gospel Harmony 134, 5).
    ${ }^{2}$ Regarding the Bavarian Psalm, it is important to consider the larger context in which this clitic group occurs-in the short text evidence of pronominal encliticization is abundant in that pronoun clitics and verb hosts are often represented as one unit: e.g., uuillih (lines 16, 19, 20, and 31) and pistû (lines 13 and 14).
    ${ }^{3}$ All text excerpts in (8) were found through the Middle High German Conceptual Database (http://mhdbdb.sbg.ac.at:8000/). I would like to thank Rob Howell for drawing my attention to the MHG forms.

[^43]:    4 Van den vos Reinaerde: Bruun's Tocht naar Maupertuus en zijn Avonturen (r. 497-876) (Bouman 1948: 92).
    5 Ferguut: De Komst van Ferguut aan het Hof van Koning Arthur (r. 579-852) (Bouman 1948: 73).

[^44]:    j. Book V - no cliticization

    Thaz ih mit thémo thuruh Kríst si úmbikirg biféstit $(3,5)$ thaz ist in giwélti ána theheinig énti $(6,60)$

