

# The inflectional poverty of the Faroese past tense

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## 1 Introduction

The RICH AGREEMENT HYPOTHESIS (henceforth RAH) proposes that if a language has ‘rich’ verbal inflectional morphology, that morphology will require overt movement of verbs to associated inflectional positions (*i.e.*,  $I^o$ ,  $T^o$ ,  $Agr^o$ ,  $Asp^o$ , amongst others; I will generally refer to these collectively as  $I^o$  unless the distinction is relevant). Thus, the RAH attempts to explain a purported link between inflectional complexity and syntactic verb movement. There is no current consensus on the correct definition ‘rich’, but it has typically been proposed that the number of distinctions in the verbal inflectional paradigm plays a key role.

Faroese, a North Germanic language closely related to Icelandic and western dialects of Norwegian, plays a frequent role in discussions of the RAH.<sup>1</sup> Unlike Icelandic and like the standard mainland North Germanic languages (Danish, Norwegian, and Swedish), Faroese has lost  $V^o$ -to- $I^o$  movement. However, unlike the mainland languages but more like Icelandic, it retains distinctions in verbal number morphology. Thus, while it behaves like the mainland languages syntactically in lacking verb movement, morphologically it is somewhat closer to Icelandic. Since the RAH proposes to link distinctions in inflectional morphology to verb movement, Faroese’s position between Icelandic and mainland North Germanic has made it a controversial case study for understanding the definition of *rich*.

The morphological bracketing of the past singular suffix *-ði* and past plural suffix *-ðu* have been especially controversial. Many authors assume that the suffixes are MONOMORPHIC, representing a single morpheme that expresses tense and number agreement. However, some authors have proposed a BIMORPHIC analysis, dividing each suffix into a past tense suffix *-ð* and number suffixes *-i* and *-u*.

Under certain definitions, the bimorphemic analysis counts as rich inflection. Under Bobaljik’s (2002) approach to the RAH, separate tense and agreement affixes require separate syntactic heads, and in order for the verbal morphology to be correctly expressed on the verb, Faroese would require  $V^o$ -to- $T^o$ -to- $Agr^o$  movement, contrary to fact (see also Bobaljik and Thráinsson 1998 and Vikner 1995). Consequently, Bobaljik argues that the suffixes are monomorphemic. Some authors, however, propose the bimorphemic analysis of Faroese as an argument that the RAH is false, (see, for instance, Alexiadou and Fanselow 2002). Others, such as Koenenman and Zeijlstra (2014), use the bimorphemic analysis to argue against Bobaljik’s proposal.

The main problem is that these authors present no independent empirical evidence in favor of the morphological bracketing they each adopt. Koenenman and Zeijlstra (2014:596) point out that we lack “an independent algorithm that determines whether an inflectional ending is morphologically simplex or complex”; most authors claim the bracketing that best fits their proposals. Bobaljik (2002:146–148) presents a theory-internal argument that the

1 For discussion of Faroese with regard to the RAH, see Alexiadou and Fanselow 2002; Bobaljik 2002; Bobaljik and Jonas 1996; Bobaljik and Thráinsson 1998, Heycock et al. 2012:592–597, Koenenman and Zeijlstra 2014, Pollock 1989:418–419, Roberts 1993; Rohrbacher 1994, 1999 and Vikner 1995, amongst several others.

monomorphemic analysis is superior. Alexiadou and Fanselow (2002) simply state that “the verb clearly inflects for tense and agreement” before proposing the bimorphemic account. Despite noting we lack an independent way to distinguish simplex and complex morphology, Koenenman and Zeijlstra (2014:596) simply claim that it “can be observed” that “Faroese has distinct tense and number morphemes” without providing any new evidence for that claim.

In this remark, I address Koenenman and Zeijlstra’s initial criticism and provide an independent argument that Faroese verbal inflectional morphology is in fact simplex. I argue that the Faroese past tense morphemes *-ði* and *-ðu* cannot be decomposed into separate tense and number morphemes, *contra* Alexiadou and Fanselow (2002) and Koenenman and Zeijlstra (2014). The argument is based on the phonology of the language: There is no phonological material underlying the letter ⟨ð⟩,<sup>2</sup> and so the phonological forms of these past tense suffixes must be /-i/ and /-u/. This means they cannot be decomposed further and that the bimorphemic analysis is not tenable. The suffixes must be monomorphemic, clarifying a long-running debate in the literature. The theoretical implications of this vary depending on the view of the RAH that is adopted, but I argue that Faroese is consistent with the influential split-Infl view of Bobaljik (2002) and Bobaljik and Thráinsson (1998).

This paper is organized as follows. I discuss the morpho-phonology of the Faroese past tense in Section 4. I review the paradigm in the context of other north Germanic languages, and argue that the phonology of Faroese does not support the hypothesis that the past tense suffixes can be divided into tense and number morphemes. Specifically, I show that the ⟨ð⟩ cannot be construed to represent any morpho-phonological material, supporting the view that Faroese past tense suffixes must be monomorphemic. In Section 6, I discuss some theoretical consequences of this conclusion, arguing that this result is consistent with Bobaljik’s (2002) conception of the RAH.

## 2 The Rich Agreement Hypothesis

The Rich Agreement Hypothesis is a proposed link between inflectional morphology on verbs and whether a language has V<sup>o</sup>-to-I<sup>o</sup> movement: If a language has rich inflection somewhere in its verbal inflectional paradigm, it must have V<sup>o</sup>-to-I<sup>o</sup> movement. The idea dates back at least as far as Pollock 1989 and has taken various forms in the literature; a representative example, from Bobaljik 2002, is given in (1).

- (1) THE RICH AGREEMENT HYPOTHESIS (RAH):  
 ‘Rich’ agreement is the cause of (overt) verb movement to Infl.  
 Corollary: The loss of rich agreement entails the loss of verb movement.

Although this is usually called the *Rich Agreement Hypothesis*, most conceptions deal with *inflectional* morphology more generally, and for this reason I will refer to RICH INFLECTION throughout the rest of this paper.

Much of the discussion regarding this hypothesis centers around the correct definition of the term RICH, while a parallel discussion questions how strong (1) actually is. There is currently no consensus on these issues (for discussion, see Alexiadou and Fanselow 2002;

2 To distinguish letters from phonological segments, I enclose letters in ⟨angle brackets⟩.

Bobaljik 2002; Bobaljik and Jonas 1996; Bobaljik and Thráinsson 1998; Heycock et al. 2012:592–597, Koenenman and Zeijlstra 2014; Pollock 1989:418–419; Roberts 1993; Rohrbacher 1994, 1999; Vikner 1995:132–136).

The first of these questions usually focuses on how much morphology is necessary to count as rich. The intuition here is has long been that morphology in a language is richer if there is a greater number of inflectional distinctions made in a paradigm; however, identifying a numerical threshold of distinctions is problematic (Vikner 1995:133). On a model like the one proposed by Bobaljik (2002) and Bobaljik and Thráinsson (1998), the number of distinct affixes is what matters. A language that uses only a single inflectional affix to mark tense and agreement morphology throughout its paradigms counts as inflectionally poor, but a language with separate tense and agreement affixes somewhere in its verbal paradigms counts as rich.

The other end of this debate is about how strong the correlation between rich inflection and verb movement is. There are broadly two variants. The **STRONG RAH** is biconditional: There is verb movement to Infl iff there is rich inflection. The **WEAK RAH**, however, is a one-way implication: There is verb movement to Infl if there is rich inflection (if there is weak inflection, there may still be verb movement).

In both cases, rich inflection entails verb movement, so the loss of verb movement therefore requires the loss of rich inflection.<sup>3</sup> Consequently, if a language loses verb movement, it must be the case that the language lacks rich inflection. As we will see in the next section, it is generally agreed that Faroese has almost completely lost  $V^o$ -to- $I^o$  movement. Thus, on either formulation of the RAH, Faroese must have lost rich inflectional morphology.

### 3 Verb movement in Faroese

Although there is some degree of speaker variation, the current consensus is that Faroese has almost completely lost  $V^o$ -to- $I^o$  movement in embedded clauses (Heycock and Sorace 2007; Heycock et al. 2011, 2012). As with other North Germanic languages,  $V^o$ -to- $I^o$  movement is diagnosed by movement of the verb to the left of adverbs and negation in embedded clauses (Vikner 1995).<sup>4</sup> It is often asserted that there are two dialects of Faroese, one with optional verb movement in (non-bridge) contexts and one without:

(2) *Faroese dialects:* (Jonas 1996:96, cited by Heycock et al. (2012:559))

a. *Faroese 1:*

Hetta er brævið, sum Elin {hefur} ikki {hefur} lisið.  
 this is letter.DEF that Elin has not read  
 ‘This is the letter that Elin has not read.’

b. *Faroese 2:*

Hetta er brævið, sum Elin {\*hefur} ikki {hefur} lisið.  
 this is letter.DEF that Elin not has read  
 ‘This is the letter that Elin has not read.’

<sup>3</sup> On the Strong RAH, the loss of rich inflection also entails the loss of verb movement, as (1) indicates.

<sup>4</sup> As in Mainland Scandinavian, there is  $V^o$ -to- $C^o$  movement in matrix clauses. Consequently, it not possible to diagnose  $V^o$ -to- $I^o$  movement by observing matrix clauses.

Faroese 2, which does not allow movement of the verb to the left of negation, is thus the more innovative of the two. It is sometimes reported that Faroese 1, which allows verb movement to the left of negation, is thought to be more common on the southern islands (where dialects of Faroese are more conservative generally) and with older speakers. However, Heycock et al. (2010) find no effect of dialect region with regard to the distribution of these dialects and, further, that all speakers prefer the negation–verb order. In fact, as Heycock et al. (2010) discuss, speakers of Danish and Faroese do not differ statistically with regard to moving verbs past negation.<sup>5</sup> This seems to indicate that Faroese has lost general  $V^o$ -to- $I^o$  movement, though the variation indicates that the change has not yet totally completed.

Critically, since the loss of verb movement requires the loss of rich inflection, both dialects pose potential problems for the RAH if Faroese has rich inflectional morphology. In Faroese 1, verb movement is not obligatory, but if inflection is rich, it should be the case that the verb always moves. There should be no optionality at all. In Faroese 2, there is no verb movement, so the inflection cannot be rich. Additionally, both dialects are essentially the same morphologically, so it's not clear that they should behave differently under most implementations of the RAH; on the strong RAH, there should not even be two dialects.

Thus, if the RAH is true it must be the case that Faroese lacks rich inflection. The proper definition of *rich* must therefore categorize Faroese inflection as *poor*. The controversy is whether it is plausible to claim that Faroese actually has poor inflection, since its inflectional paradigms are slightly more robust than languages with obviously poor inflection. I turn to this question in the following section.

#### 4 Richness and poverty in North Germanic morphology

In this section, I review Faroese verbal morphology and why one might propose separate tense and agreement morphemes in its verbal paradigm. This is largely posited by comparison to other Germanic languages: Faroese is less inflectionally robust than Icelandic, but it shows more number distinctions than mainland North Germanic languages. This leads some authors to propose separate tense and agreement morphemes.

##### 4.1 North Germanic verbal inflection: The extremes

At extreme ends of the North Germanic inflectional cline are Icelandic and Danish. Icelandic is the most robust; the weak verb paradigm appears to utilize separate morphemes for tense and for person–number agreement in the past tense (and portmanteau morphemes in the present). Danish, at the other end, distinguishes only present and past tense.

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5 They did find, however, that Faroese speakers are more likely to move verbs across certain adverbs (like *kanska* ‘perhaps’, and *ofta* ‘often’). This suggests that the verb does move in Faroese, but not as far as  $I^o$ . Additionally, despite an apparent lack of  $V^o$ -to- $I^o$  movement, they found that embedded V2 clauses are very similar to those found in Icelandic and not Danish, suggesting that  $V^o$ -to- $T^o$  movement and embedded V2 are not as strongly correlated as typically thought.

- (3) *Icelandic paradigm for heyra ‘hear’*: (4) *Danish paradigm for høre ‘hear’*:

	PRESENT	PAST
1SG	heyr -i	heyr -ði
2SG	heyr -ir	heyr -ði -r
3SG	heyr -ir	heyr -ði
1PL	heyr -um	heyr -ðu -m
2PL	heyr -ið	heyr -ðu -ð
3PL	heyr -a	heyr -ðu

	PRESENT	PAST
1SG	hør -er	hør -te
2SG	hør -er	hør -te
3SG	hør -er	hør -te
1PL	hør -er	hør -te
2PL	hør -er	hør -te
3PL	hør -er	hør -te

These extremes play an important role in motivating the RAH. Icelandic is well-established to have  $V^o$ -to- $I^o$  movement, while Danish does not (Bobaljik and Jonas 1996; Vikner 1995). Thus, there is a purported correlation between morphological complexity and movement: Languages with relatively complex verbal morphology like Icelandic require verb movement, and languages with simplex verbal morphology like Danish do not.

#### 4.2 Faroese past tense

The past tense in the weak verb paradigm of Faroese looks very similar to Icelandic, except without the additional person agreement in the past tense (note the common *-ði/-ðu* suffixes). In that sense, Faroese retains some of the inflectional distinctions maintained in Icelandic but lost in mainland Scandinavian:

- (5) *Faroese verbal paradigm for kasta ‘throw’*:

	PRESENT	PAST
1SG	kast -i	kasta -ði
2SG	kasta -r	kasta -ði
3SG	kasta -r	kasta -ði
1PL	kast -a	kasta -ðu
2PL	kast -a	kasta -ðu
3PL	kast -a	kasta -ðu

As discussed in the introduction, there is a question of how the past tense suffixes ought to be bracketed. In (5), each suffix is presented as monomorphemic: *-ði* represents singular number and past tense, and *-ðu* represents plural number and past tense. This is the bracketing assumed by, e.g., Bobaljik (2002). The alternative view, suggested by Alexiadou and Fanselow (2002) and Koenenman and Zeijlstra (2014), is that *-ði* and *-ðu* are each bimorphemic, being further decomposed into past *-ð*, singular *-i*, and plural *-u*:

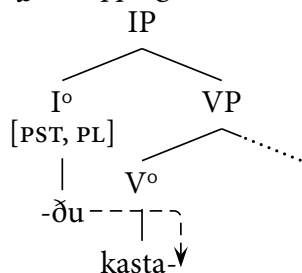
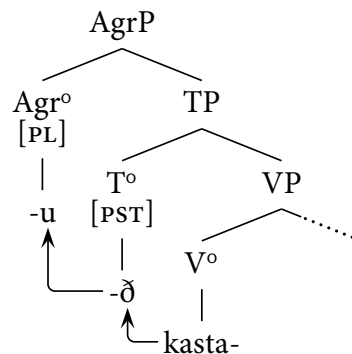
- (6) *The bimorphemic hypothesis: STEM-TENSE-AGR*

a. kasta -ð -i  
cast -PST -SG

b. kasta -ð -u  
cast -PST -PL

## 4.3 Faroese and the RAH

Identifying the correct bracketing has potential syntactic consequences if having multiple inflectional affixes requires having multiple inflectional heads, and this in turn requires verb movement to each of those heads (Bobaljik 2002; Bobaljik and Thráinsson 1998; Vikner 1995). If the monomorphemic view is correct, then we may have a single head that can affix-hop onto  $V^0$ , as shown in (7).<sup>6</sup> On Bobaljik's (2002) conception of the RAH, however, multiple inflectional affixes requires movement through each inflectional position, shown in (8). This requires verb movement, which, as we saw above, Faroese lacks.

(7) *Affix-hopping:*(8) *Unattested head movement:*

Indeed, authors tend to argue in the direction that supports their proposals, but generally overlook the question whether there is any independent evidence for either bracketing. Noting that Faroese lacks verb movement generally, Alexiadou and Fanselow (2002:230) argue that “the proposal that distinct Tense/ Agreement morphology implies overt verb movement is incompatible with Faroese” since “the verb clearly inflects for tense and agreement.” Bobaljik (2002:146, 147) counters that “To inflect for tense and agreement is not a priori the same as bearing discrete morphemes marking tense and agreement, and Alexiadou and Fanselow [(2002) —NL] do not offer a theory of morphology to justify such an inference.” Koenen and Zeijlstra (2014:596) come the closest to acknowledging the issue, pointing out that “What is lacking is an independent algorithm that determines whether an inflectional ending is morphologically simplex or complex.” Despite this, they claim that Faroese has distinct tense and agreement affixes “as can be observed”.

In what follows, I argue that in fact there is an independent way to show that the morphology is simplex and that the monomorphemic hypothesis is correct. Crucially, there is no evidence that there is any morpho-phonological material represented by the letter ⟨ð⟩ in the past-tense suffix. Phonologically, there is only evidence for the *-i* and *-u* suffixes, supporting the monomorphemic analysis.

## 5 ⟨Ð⟩ is not past tense

I argue that the problem with the bimorphemic hypothesis is that it lives on a quirk of the Faroese orthography: The letter ⟨ð⟩ cannot be assumed to have any morpho-phonological correlate in this context, and therefore its orthographic presence in a word cannot be argued

6 This could be achieved by Marantz's (1984) Morphological Merger or Embick and Noyer's (2001) Lowering.



to correspond to any underlying morphology in the language at all.<sup>7</sup> I argue the proposed division of the Faroese past tense suffixes into separate tense and number morphemes is untenable, based on the phonology of the language.

### 5.1 The letter ⟨ð⟩

The current Faroese orthography was developed during the latter half 19th century and was intentionally designed to preserve historical and etymological aspects of the language that were no longer extant in the spoken variety (see the discussion in chapter 7 of [Thráinsson et al. 2004](#)). The letter ⟨ð⟩ is essentially one of these design features, added for purely etymological reasons to make Faroese appear more recognizable to those familiar with Icelandic or Old Norse. Older orthographies did not even include it:

- (9) 1820s: Gjevi liou u lujie aa / meni e man kvøa  
 Modern: Gevið ljóð og lýðið á / meðni eg man kvøða  
 ‘Give silence and listen as I recite the ballad.’ ([Thráinsson et al. 2004:376](#))

In fact, Faroese had already lost the /ð/ phoneme from Old Norse by the late 1700s. Thus, unlike its Icelandic counterpart, the letter ⟨ð⟩ is not attached to any underlying phonemic material intervocalically or word-finally; the letter ⟨g⟩ behaves similarly:<sup>8</sup>

- (10) a. *laða*, ‘pile up’ [lɛ:a]<sup>9</sup> ([Árnason 2011:32](#))  
 b. *lað*, ‘(a) stack’ [lɛ:a]  
 (11) a. *laga*, ‘make, arrange’ [lɛ:a] ([Árnason 2011:32](#))  
 b. *lag*, ‘(a) layer’ [lɛ:a]

This fact about Faroese orthography is relevant to the analysis of the past tense morphology. Although the orthography makes it look as though the suffixes *-ði* and *-ðu* could be further broken down into a past tense suffix *-ð* and singular and plural suffixes *-i* and *-u*, ⟨ð⟩ does not represent any phone in the language as it is actually spoken. There is no morphophonological material represented by ⟨ð⟩ that could be bracketed as a separate past tense morpheme.

### 5.2 Faroese glide epenthesis

Nonetheless, phonological processes in Faroese can make it look as though phonetic material is associated with orthographic ⟨ð⟩. Faroese has a fairly productive process of glide epenthesis between vowels, shown in (12), inserting [j] before high front vowels and [v] before high back vowels ([Anderson 1969](#), [Árnason 2011:81–82](#), [Thráinsson et al. 2004](#)). This can be viewed as a way of avoiding hiatuses between two adjacent vowels. Critically, it does not

<sup>7</sup> I have regularized the transcriptions in this section to reflect those found in [Thráinsson et al. 2004](#).

<sup>8</sup> It is thought that the historical phones [ð] and [ɣ] (the intervocalic reflex of /g/) merged before they were lost. A vestige of this remains in the pronunciation of the letter sequence ⟨-ðr-⟩ as [ɣɹ], as in *veðrið* [vɛɣɹi] ‘the weather’. This is the only place where ⟨ð⟩ has a pronunciation.

<sup>9</sup> The sounds [ɛ] and [ɔ], as in (14a), are a slightly lowered mid tense vowels, the result of phonologically raising mid lax vowels at a hiatus. See [Árnason \(2011:82–85\)](#) for a recent discussion of this process.

occur where two non-high vowels are adjacent, as in (13), showing that these glides are not part of the stem.

- (12) a. *gleð-i*, ‘pleasure’: /gle: + i/ → [g̥le:ji] (Thráinsson et al. 2004:39)  
 b. *røð-u*, ‘speech (OBL)’: /Iø: + u/ → [Iø:vʊ]<sup>10</sup> (Thráinsson et al. 2004:40)
- (13) a. *gleð-a*, ‘please’: /gle: + a/ → [g̥le:a] (Thráinsson et al. 2004:39)  
 b. *røð-a*, ‘discuss (INF)’: /rø: + a/ → [rø:a] (Thráinsson et al. 2004:40)

Although this often happens in places where the orthography has either ⟨ð⟩ or ⟨g⟩, the ability to insert glides does not necessarily correlate with the orthographic presence of these letters. In (14), neither ⟨ð⟩ nor ⟨g⟩ appears at all.

- (14) a. *fá-a* ‘few (MASC. SG. ACC.)’ /fɔa + a/ → [fɔ:a] (Árnason 2011:85)  
 b. *fá-ir* ‘few (MASC. PL. NOM.)’ /fɔa + iɪ/ → [fɔa:jɪ]  
 c. *fá-ur* ‘few (MASC. SG. NOM.)’ /fɔa + uɪ/ → [fɔa:vʊɪ] (Thráinsson et al. 2004:40)

Thus, it is a surface-true generalization that a high vowel will never be directly adjacent to another vowel.

Crucially, the suffixes in (14) do not have glides underlyingly. As shown in (15), they do not appear when attaching to words ending in consonants.<sup>11</sup>

- (15) a. *fund-ir* ‘meeting (PL. NOM.)’ /fund + iɪ/ → [fʊndɪɪ] \* [fʊndjiɪ]  
 b. *fund-ur* ‘meeting (SG. NOM.)’ /fund + uɪ/ → [fʊndʊɪ] \* [fʊndvʊɪ]

Thus, although there is often phonetic material at the places marked with ⟨ð⟩ and ⟨g⟩ in the orthography, this material is the result of a productive phonological process and does not represent a reflex of a phoneme represented by these letters.

### 5.3 Back to the past tense

We saw above that the letter ⟨ð⟩ in Faroese has no corresponding phonology. Consequently, the fact that Faroese past tense forms are written with ⟨ð⟩ is little more than an orthographic convention, representing a historical form of the language, but not the current-day reality.

Glide epenthesis occurs in past tense forms, as shown in (16) consistent with a high vowel directly following a non-high vowel:

- (16) a. *kasta-ði*: /kasta + i/ → [kastaji]  
 b. *kasta-ðu*: /kasta + u/ → [kastavʊ]

One might be tempted to claim that the glide is itself a reflex of an underlying past tense morpheme represented by ⟨ð⟩. However, as discussed above, the form of this segment is phonologically predictable if we assume the suffixes are underlyingly vowels. Because of this

<sup>10</sup> It is worth noting that the [v] has been analogized to other nominal forms without suffixal [-u], such as *røða* [rø:va]. This has not happened in the verbal form, as in (13b).

<sup>11</sup> It is unlikely that there are underlying glides that are deleted. There does not appear to be anything wrong with the word-internal sequences [ndv], as in *handverk* ‘crafts’, or [ndj], as in *handjarn* ‘handcuff’.



predictability, there is no reason or need to propose that the glides are exponents of an underlying tense suffix. Furthermore, the fact that the glides follow the rules of glide insertion supports the view that the suffixes are nothing more than vowels.

Put simply, then, there is no evidence of any underlying morphophonological material except the vowel. These vowels, thus, encode both tense and number:

- (17) a.  $-\text{ði} / -i/ \leftrightarrow [\text{PAST, SINGULAR}]$   
 b.  $-\text{ðu} / -u/ \leftrightarrow [\text{PAST, PLURAL}]$

This means that there is no evidence for separate tense and agreement morphemes. The bracketings  $-\text{ði}$  and  $-\text{ðu}$  are spurious since there is no evidence for morphophonological material underlying  $\langle \text{ð} \rangle$ . The presence of intervocalic glides is not a compelling argument for treating the past tense suffixes  $-\text{ði}$  and  $-\text{ðu}$  as morphologically complex.

#### 5.4 Deleting $/\text{ð}/$ ?

It has been proposed that there is, nonetheless, an underlying  $/\text{ð}/$  in the past tense morphemes (or some other dental segment). While they assume that the letter  $\langle \text{ð} \rangle$  usually has no phonological correlate, [Thráinsson et al. \(2004:134\)](#) suggest that a hypothetical  $/\text{ð}/$  phonologically distinguish the past singular forms from the first person singular present form.

They assume that the stem of the verb is the same regardless of which suffix is attached and that final  $/a/$  deletes when  $/-i/$  attaches. However,  $/\text{ð}/$ , which is not pronounced on the surface, intervenes between  $/a/$  and  $/-i/$  in the past tense, blocking deletion of  $/a/$ . This implies a rule of  $/\text{ð}/$  deletion in order to permit subsequent glide epenthesis. Their proposal implies the following derivation:

- (18) *Derivation following Thráinsson et al.'s (2004) suggestion:*

INPUT	$/\text{kasta} + i/$	$/\text{kasta} + \text{ð} + i/$
[a]-deletion	kastɪ	—
$[\text{ð}]$ -deletion	—	kastɪ
Epenthesis	—	kastajɪ
OUTPUT	[kastɪ]	[kastajɪ]

Setting aside the fact that the RAH is motivated by overt morphology, a major problem with this view is that there is no regular phonological process that deletes  $/a/$  before high vowels. This analysis would require us to posit an underlying segment to block a phonological process that is not independently attested.<sup>12</sup>

It seems more likely that the stem form simply lacks the final  $/a/$  in the 1st person singular present, which, as shown in (5), it also does in the plural present. [Petersen \(2001\)](#), for instance, proposes a morphological shortening rule (*forkortelseregel*) which shortens  $/a/$ -final verb stems in the present tense when followed by a vowel. This attempts to account for why there are different verb stems in different forms, and it does so without postulating a special underlying form of the past tense suffix.<sup>13</sup>

<sup>12</sup> If such a deletion rule existed, we would need to propose that there is an underlying segment blocking deletion anywhere we see glide insertion before  $/i/$ , as in (14b).

<sup>13</sup> It is, in principle, possible that some typically unpronounced material is preserved in some forms. Certain verb

## 6 Consequences

To summarize the argument in this paper, the RAH proposes that if a language has rich inflection, it must have verb movement. Therefore, if a language loses verb movement, it must have lost rich inflection. Since Faroese has lost verb movement, the prediction is that Faroese inflection is not rich. I argued above that evidence from the phonology independently supports this conclusion. Although the spelling of Faroese makes it look as though there is a potential past tense *-ð* suffix, the letter ⟨ð⟩ does not actually correspond to any underlying phonological material. Thus, Faroese is consistent with theories of the RAH that require verb movement where verbs take multiple inflectional affixes.

### 6.1 Empirical consequences

This answers a controversial question about Faroese morphology: There is no evidence for a bimorphemic parse of the Faroese *-ði* and *-ðu* past tense suffixes because there is no independent evidence for morphophonological material underlying the letter ⟨ð⟩. Rather, the past tense suffixes are best analyzed as monomorphemic:

- (19) a. *-ði*: /-i/ ↔ [PAST, SINGULAR]  
 b. *-ðu*: /-u/ ↔ [PAST, PLURAL]

This is consistent with other phonologically-based claims about the Faroese past tense. Thráinsson (2007:61) notes that the Faroese weak past tense suffixes *-di* and *-du* (part of a different paradigm) are sometimes brought to bear on the RAH. Unlike the *-ði* and *-ðu* suffixes, there can be no controversy here about whether ⟨d⟩ is pronounced, but as Thráinsson points out, the majority of Faroese speakers do not distinguish between final unstressed [ɪ] and [ʊ] (see Thráinsson et al. 2004:349–351). Consequently, although they are distinguished in the spelling, *-di* and *-du* sound identical for most speakers, so there is no evidence that they are distinct suffixes in the spoken language.<sup>14</sup>

### 6.2 Theoretical

The conclusion that there is no evidence for a bimorphemic analysis of the Faroese past tense has consequences for how Faroese is used in discussions of the RAH. Faroese is consistent with Bobaljik's formulations of the RAH, *contra* Koenenman and Zeijlstra (2014:596) and Alexiadou and Fanselow (2002:230–231). If Faroese past tense suffixes were bimorphemic, then

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roots do seem to show signs of lost dental and velar fricatives in certain forms. (Thráinsson et al. 2004:388). For instance, the adjectives *bogin*, 'bent', and *boðin*, 'invited', are both pronounced [bɔːjɪn], with glide epenthesis. However, their accusative masculine singular forms are different: 'bent' is *bognan* [bɔːɣnan], with a velar stop, and 'invited' is *bodnan* [bɔːdnan], with a dental stop. However, these alternations give speakers direct evidence that there is an underlying dental or velar in the root that is not pronounced in all forms. The past tense forms do not alternate in such a way.

<sup>14</sup> In these dialects, the underlying vowel determines which glide is inserted in the *-ði* and *-ðu* forms, and thus *kallaði* and *kallaðu* are rendered [kaɭɭajə] and [kaɭɭavə], respectively (Thráinsson et al. 2004:351). For some speakers, this reduction has progressed to the point that both forms are pronounced [kaɭɭajə], with an epenthetic [j], suggesting that the underlying vowel has leveled to /i/ and these speakers do not even distinguish between singular and plural in the past. This remains consistent with Bobaljik 2002.

they would represent a legitimate counterexample to the formulation of the RAH in Bobaljik (2002), since verbs in Faroese do not move to I°. The analysis here, however, lends independent empirical support to Bobaljik's (2002:145–148) claim that Faroese past tense suffixes are monomorphemic, and Faroese does not provide evidence that the RAH is incorrect (*contra* Alexiadou and Fanselow 2002).

However, the evidence here does not support the view that the RAH is correct, either – it only tells us that Faroese is consistent with the RAH. Other putative counterexamples are known, but the argument here takes away one of them. This paper does suggest, however, that careful reevaluation of some of the key cases may yield novel insights into the nature of the RAH.

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