SPECULATIONS ON [χ]-ELISION AND INTERSONORANTIC [ʊ]
IN AFRIKAANS[1]y

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1. Introduction

The present paper addresses in the first place the diachrony of [χ]-elision in Afrikaans, as evidenced in such pairs as *oog* (*oo[χ]*) 'eye' – *oë* 'eyes'. However, it will be suggested that this phenomenon may be related to the substitution of Afrikaans [ʊ] (written <w>) for Dutch [v] (written <v>).

As regards [χ]-elision two hypotheses can be found in the literature. On the one hand there is the hypothesis in Raidt (1983) – due to a suggestion by the Belgian linguist Jan Goossens –, according to which [χ]-elision may be a Dutch dialect phenomenon. On the other hand there is the hypothesis put forward by Ponelis in de Villiers/Ponelis (1987) and in Ponelis (1990, 1993), according to which [χ]-elision should be analyzed as the deletion of a [g] which developed out of an earlier Dutch posttonic [ɣ]. Since there are various problems with Raidt's (in fact Jan Goossens's) proposal, this hypothesis cannot be upheld. Ponelis's proposal, however, which partly goes back to an earlier suggestion by le Roux & Pienaar (1927), seems to me to be on the right track, although I would like to modify it in accordance with earlier suggestions of mine in den Besten (1987a). I would like to suggest that [χ]-elision, or rather [g]-elision, is the side-effect of a lenition phenomenon which is also responsible for the creation of Afrikaans [ʊ] (written <w>) out of a [b] which derives from a Dutch [v] or [f]. In my view, these historical developments, which gave rise to '[χ]-elision' and posttonic [ʊ] respectively, may be attributed to the Khoekhoen, although there may also have been some influence from speakers of certain varieties of German (cf. Ponelis 1990, 1993).

This paper will proceed as follows: section 2 will treat of the various changes that Dutch posttonic [χ] and [ɣ] underwent in Afrikaans, i.e. elision and strengthening. Section 3 will discuss hypotheses put forward by Raidt and Ponelis, which will lead up to my own lenition

hypothesis. The latter will be compared with the hypothesis concerning the origins of Afrikaans posttonic [ʊ] of den Besten (1987a) (section 4). Section 5 will discuss diachronic and dialectal data that seem to argue for influences from Khoekhoe, at least in the case of posttonic [ʊ], to which will be added some speculative thoughts as to why these changes may have come about (section 6).

However, before I start I would like to point out to my readers, especially to those who are acquainted with phonological and phonetic descriptions of Afrikaans, that I will not make use of the symbol [v] to represent Afrikaans written <w>. The IPA symbol [v] indicates a voiced labiodental fricative, whereas the Afrikaans <w> – just like <w> in Dutch and German – stands for a labiodental nonfricative continuant, also known as a labiodental approximant (apart from some contexts where <w> may or must be pronounced as a bilabial [w]). This labiodental approximant will be represented by means of the IPA symbol [ʊ], while [v] will be reserved for the voiced realization of Dutch <v>.[2]

2. [χ]-elision and strengthening: some data

In this section I shall give an overview of elision and strengthening phenomena as regards Afrikaans [χ] by making a comparison between Dutch and Afrikaans forms. For subtler subdivisions see Ponelis (1990, 1993) and le Roux & Pienaar (1927).

Note that in the forms given below Dutch medial <g(g)> may be pronounced as [ɣ] even by some of the speakers of presentday Hollandic Dutch, where, however, a voiceless pronunciation of <g(g)> in all positions is preferred. Therefore, it is possible that 17th century Dutch, from which Afrikaans is derived, still had a [ɣ] in medial position, as in presentday southern Dutch dialects.

2.1. [χ]-elision: a first set of data

In the following set of data illustrating the phenomenon of [χ]-elision (which – from a Dutch point of view – might also be called [χ/ɣ]-elision) the first column is reserved for forms common to Dutch (D) and Afrikaans (A), i.e. for singular nouns and uninflected adjectives,

while the next two columns will compare Dutch and Afrikaans forms respectively. An asterisk indicates that more will be said about the pertinent form in one of the following subsections.

As (1a) shows the Dutch/Afrikaans plural ending *-e(n)* creates a context for $[\chi]$-elision in Afrikaans:

(1)   D/A   D   A

   a. Nouns + infl. dag   dagen   dae   'day'

                oog   ogen   oë   'eye'

                brug   bruggen brûe(ns)* 'bridge'

                wig   wiggen   wîe*   'wedge'

However medial < g > also deletes in front of a shwa inside nominal stems:

(1) b. Nominal stems   spiegel spieël   'mirror'

                       vogel   voël   'bird'

                       wagen(s)wa(ens) 'waggon(s)'

Furthermore < g > and < ch > also delete in front of the adjectival inflexional ending *-e* and in front of a shwa inside adjectival and verbal stems:

(1) c. Adj.s + infl. laag   lage   lae   'low'

                 hoog   hoge   hoë   'high'

     d. Adj. stems   mager   maer   'thin'

     e. Verbal stems   ver-   ver-   'deny'

                      loochen- loën*

A lexical exception is the 'learned' word *nege* 'nine', which may even be pronounced with a 'Dutch' $[\chi]$:[3]

(1) f. Numerals   negen   nege*   'nine'

Note that [χ]-elision has sometimes given rise to restructured forms in Afrikaans. Thus, Afr. *wa* 'waggon' derives from Du. *wage(n)*, while the plural retains *-en-*, as in Dutch. Similarly, syncopated Dutch infinitives have given rise to restructured verbal stems in Afrikaans, e.g. *kry* 'to get', which derives from Du. *krijgen* via an intermediate form *krye*, or *kla / klae* 'to complain', which derives from Du. *klagen* via an intermediate form *klae*. Note that – apart from the cases in (1b) and (1d-e) – there are no such restructured stems in the case of nominal and adjectival stems, i.e. it is *oog* 'eye' and *laag* 'low' and not *o or *la respectively. Also compare Afr. *vraag* 'question' vs. *vra* 'to ask' as against Du. *vraag* and *vragen* respectively. As for Afr. *moeg* 'tired', which corresponds to Du. *moe*, this may be a case of inverse restructuring, but it may also derive from a Dutch dialectal form, since forms like *moeg* are attested for dialects spoken in the Netherlands.[4]

Besides these diachronic considerations the following remarks are in order. First of all, note that adjectives ending in *-ig* do not drop <g> when they are inflected. Thus, the inflected form of *vinnig* 'fast' is *vinni[χ]e*. Similarly, *-erig* derivations of adjectives ending in <g> do not necessarily yield syncopated forms (*moeg* 'tired' > *moe([χ])erig* 'slightly tired'). Secondly, Coetzee (1985:7, 52, 87, 102) notes that a slight [h] may function as a hiatus filler, as in the following inflected forms:

(2) da^{h}e 'days' – la^{h}e 'low'
    o^{h}e 'eyes' – ho^{h}e 'high'

Thirdly, there are quite a few lexical exceptions besides the one already mentioned above (*nege*). Compare the following (very incomplete) list:

(3) laggend   'laughing'   boggel 'hump'

    swy(g)e   'silence'   kaggel 'stove'

    dreigement 'threat'   oggend 'morning'

    wiggel   'to foretell'

    riggel   'ridge'

These words, whose $<g(g)>$ must be pronounced as a voiceless velar fricative, may be Dutch loans, also in view of the fact that present participles are not particularly strong in Afrikaans. However, other factors may be at play here, especially in the case of words with an intervocalic $<gg>$, which will be discussed in subsection 2.4 below.[5]

2.2. Strengthening [χ] after sonorant consonants

Things become more complicated when we consider what happens to Dutch $<g>$ between a sonorant consonant and a shwa. In that position $<g>$ is either strengthened or elided. Thus, Du. *burger* 'citizen' corresponds to Afr. *bur[g]er*, while the Afrikaans plural of Du./Afr. *ber[χ]* (*berg*) 'mountain' is *ber[g]e* (written *berge*) or, in nonstandard Afrikaans also *b[ɛ:]re*. Similarly, the inflected form of *er[χ]* (*erg*) 'bad, evil' is *er[g]e*, while its comparative is *er[g]er* 'worse'.

Note that [χ/γ]-elision after sonorant consonants is particularly strong in restructured stems. Thus, the Dutch infinitives such as *bergen* 'to store' and *zorgen* 'to care' have given rise to the restructured Afrikaans verbal stems *bêre* and *sôre* respectively. Also compare Afr. *môre* 'tomorrow', *êrens* 'somewhere' and *nêrens* 'nowhere' as well as *gorrel* 'throat, to gurgle' and *orrel* 'organ' (instrument), which derive from Du. *morge(n)*, *ergens*, *nergens*, *gorgel(en)* and *orgel* respectively.

An interesting exception is *volgens* 'according to' (related to *volg / vol[g]e* 'to follow'), which is *vol[χ]ens / vol[g]ens* in the standard pronunciation (with *vollens* as a historical and dialectal variant). In view of the general pattern observed above, I am inclined to interpret the variant *vol[χ]ens* as a loan from Dutch. Something similar may apply in the case of the plural of *gevolg* 'consequence', which is *gevol[χ]e / gevol[g]e*. (As for *wilgerboom / wilkerboom*

'willowtree', which has four possible realizations, see section 2.4 below.)

2.3. Strengthening [χ] after vowels

After the preceding section it will not come as a surprise that [χ] may also be strengthened after vowels. However, not all cases of strengthening are accepted as Standard Afrikaans. Here the quality of the preceding vowel is the decisive factor.[6]

Strengthening [χ] after tense vowels is restricted to dialectal and older Afrikaans. Compare the following forms with those in (1) and (2):

(4) da[g]e 'days'   —   la[g]e   'low'

  o[g]e 'eyes'   —   ho[g]e 'high'

An exception is the numeral *nege* 'nine' (compare (1e) above), which has two variant pronunciations in the standard language: *ne[χ]e* and *ne[g]e* — with *neë* as a dialectal and historical variant. The retention of the Dutch <g> — or rather of the older/dialectal [g] — may be due to the fact that *neë* 'nine' (now known as a dialectal variant) is homophonous with *nee* 'no', while the variant *ne[χ]e* may be a Dutch loan or a case of spelling pronunciation (or both).

  After lax vowels, however, strengthening of [χ] is acceptable in the standard language. Compare the following nouns with their variant plural forms:

(5) brug: bru[g]e   /   brûe(ns) 'bridge'

  rug 1: ru[g]e   /   rûe(ns) 'back'

  rug 2: ru[g]e(ns) /   rûens   'ridge'

  wig: wi[g]e   /   wîe   'wedge'

  [where [g] is orthographically rendered as <gg>]

(As for *akkedis* 'lizard', which must derive from an earlier form *a[g]edis* (i.e. *aggedis*), see section 2.4 below.)

2.4. Additional remarks

The above sets of data present us with a confusing picture of the phenomena of $[\chi]$-elision and $[\chi]$-strengthening. The confusion can be partially reduced, though, if we introduce some further concepts from historical phonology and from morphology.

Let us start with the incomplete list of lexical exceptions to the phenomenon of $[\chi]$-elision given in (3) above, which is repeated here as (6):

(6) laggend   'laughing'   boggel 'hump'

swy(g)e   'silence'   kaggel 'stove'

dreigement 'threat'   oggend 'morning'

wiggel   'to foretell'

riggel   'ridge'

As I pointed out above, these may be Dutch loans. However, note that < gg > in all of these words corresponds to < ch >, i.e. an historical voiceless fricative $[\chi]$, in Dutch. If $[\chi]$-elision may be reconstructed as the deletion of a 17th century intervocalic Hollandic Dutch $[\gamma]$, that would immediately explain why the above < gg > words are exempted from the elision process. Furthermore, if $[\chi]$-strengthening may be reconstructed as the substitution of a voiced stop [g] for a 17th century Hollandic voiced fricative $[\gamma]$, that would also explain why *wiggel, riggel*, etc. are exempted from strengthening, unlike words like *brugge* 'bridges', *rugge* 'backs', etc. (cf. (5) above), whose < gg > continues an historical Dutch $[\gamma]$. This would mean that only the $[\chi]$ in *swyge* and *dreigement* might be indicative of loan phonology (i.e. spelling pronunciation), which does not exclude the possibility that one or more of the < gg > words in (6) are Dutch loans as well.[7]

However note that these considerations leave words like *waggel* 'to stagger' (from Du. *waggelen*) and *verloën* 'to deny' (from Du. *verloochenen*) unexplained. As for *verloën*, this may be a late adaptation of a possible loanword to the wide-spread phenomenon of $[\chi]$-elision after tense vowels, since *verlo[χ]en* can (or could) also be heard. *Waggel*, which is *wa[χ]el*, and

not *wa[g]el or *wâel, is more difficult to explain. Either we have to assume that it is a Dutch loan, which has been adapted to the pattern of words like *wiggel*, *riggel*, etc. or we have to assume *waggel* was *wa[χ]elen in Early Cape Dutch. Both hypotheses seem to be adventurous and I don't know how to choose between them.[8]

Finally, something must be said about the distributional relationship between [χ]-elision and [χ]-strengthening. If we compare *ber[g]e* 'mountains', *er[g]e* 'bad, evil' (an inflected adjective) and *er[g]er* 'worse' with *môre* 'tomorrow', *êrens* 'somewhere', *nêrens* 'nowhere', *gorrel* 'throat, to gurgle' and *orrel* 'organ', in which a Dutch <g> has been deleted (cf. section 2.2 above), [g] seems to be a phonological marker of inflexion, as is noted by le Roux & Pienaar (1927:108-109). A restructured verbal stem like *bêre* 'to store' (from the Dutch infinitive *bergen*) seems to confirm that. Furthermore, le Roux & Pienaar point at the opposition between *têre* 'tease, irritate' (from Du. *tergen*) in the West Cape and in the Northwestern Cape and *terg / ter[g]e* in the rest of the country, where *ter[g]e* may have been perceived as a semi-inflexional variant of *terg*. (Whether this still holds for presentday Afrikaans, I do not know.)

Now note that [χ]-strengthening in intervocalic position, as in *da[g]e* 'days', *o[g]e* 'eyes', *ho[g]e* 'high' (infl.), *bru[g]e* 'bridges', *wi[g]e* 'wedges', etc. is also restricted to inflexional environments (le Roux & Pienaar 1927:108). That is to say, a stem-internal intervocalic Dutch <g> may not be strengthened and is consequently deleted. Compare *spieël* 'mirror', *voël* 'bird', *maer* 'thin', etc. The same applies to the [g] of German *Lager* 'camp, encampment', which yields Afr. *laer*. However, note that this word may have reached Afrikaans in a Dutch form (*la[ɣ]er*) through Early Modern Dutch military speech.[9]

This seems to imply that [g] can be dispensed with if it is not needed for inflexion. However, this leaves the [g] in *bur[g]er* 'citizen', *ne[g]e* 'nine' and *wil[g]erboom* 'willow-tree', the [k] in *akkedis* 'lizard' as well as the variation in the use of [g] after vowels unexplained. The latter problem will be discussed in section 3.2 below, and as for *bur[g]er*, *ne[g]e*, *wil[g]erboom* and *akkedis*, each of these lexical exceptions seems to have its own explanation.

The choice for [g] in *bur[g]er* may be due to the fact that the second syllable of the alternative form *burrer* would have an infelicitous phonological shape, i.e. [r∂r], which in fact provides us with a second reason for the use of [g] in *er[g]er* 'worse'. Furthermore, as I pointed out in section 2.3, the [g] in *ne[g]e* may be a means to circumvent homophony with *nee* 'no'.

This idea seems to be confirmed by the observation that the allomorph *neën-* is acceptable in words like *neënde / negende* 'ninth' and *neëntien / negentien* 'nineteen', where no confusion with *nee* can arise.

Unfortunately, no straightforward explanation seems to be available for the voiced stop in *wil[g]erboom*. However, note that there are four ways to pronounce the first part of this compound: *wil[χ]er-*, *wil[g]er-*, *willer-* and *wil[k]er-* (also written *wilker-*). If we put *wil[χ]er-* aside as a case of spelling pronunciation, the following remarks can be made: First of all, the 'predicted' form *willer-* is an acceptable variant. Secondly, the substitution of [k] for [g] — which resembles the substitution of [k] for [g] in English loans in older Afrikaans (e.g. *bluegum tree* > Afr. *bloekomboom*) — may be a way to get rid of the unparadigmatic [g] in *wil[g]er-*. But why *wil[g]er-* is used at all (and why we do not find **bur[k]er* or **ne[k]e*) is unclear, although one might — purely speculatively — suggest that *willer-* superficially looks like an *-er* derivation of *wil* 'to want', while *wil[g]er-* can still be interpreted as being related to *wilg* 'willow', which might be a reason to stick to the latter variant.

Finally consider the word *akkedis* 'lizard', which most probably derives from an earlier form **a[g]edis* (i.e. **aggedis*), because it is related to Du. *hagedis* 'lizard' (cf. Ponelis 1993:140). The preservation of the unparadigmatic [g] may be due to the fact that stress is on the final syllable, which makes the elision variant **âedis* fairly difficult to pronounce. And as in the case of *wil[g/k]erboom* the substitution of [k] for [g] may be a way to get rid of the unparadigmatic [g]. However, it is unclear why the variant **a[g]edis* is lost, while *wil[g]er-* varies with *wil[k]er-*.

The answer may be that the voiced pronunciation of the obstruent [g] can only be preserved as long as there is a related form which can 'justify' it. In inflexional environments [g] is justified by the presence of a [χ] in the corresponding uninflected variants. The obstruent in *ne[g]e* may be justified through the allomophic relation between *ne[g]e* and *neën-*. And the [g] in *wil[g]er-* may be justified by the presence of a [χ] in *wilg* — at least for those speakers who still know that word. Similar vague etymological feelings may have preserved the [g] in *bur[g]er*. Yet, **a[g]edis* lacks a justifying variant form and so [g] has been turned into [k].[10]

3. [χ]-elision: An hypothesis

It is clear that [χ]-elision and [χ]-strengthening are in some way related to one another and it will not come as a surprise that this idea can also be found in the literature, i.e. in le Roux & Pienaar (1927) and especially in Ponelis (1990, 1993). Raidt (1983, 1991) on the other hand only deals with [χ]-elision, although the form *ber[g]e* 'mountains' is mentioned (without further discussion) in Raidt (1983:101). Therefore, the hypothesis concerning the origins of [χ]-elision presented in Raidt (1983) is in a sense not relevant for this paper. Yet, I would like to discuss it briefly, because it is in the literature and because I consider it a typical example of a monogenetic approach to Afrikaans linguistic phenomena.

3.1. Raidt (1983) on [χ]-elision

According to Raidt (1983:83-84; 1991:201-202) [χ]-elision should be seen as one of the lenition phenomena of Afrikaans, for which compare e.g. the change from [b] to [ʋ] (as in *dubbel* 'double' > *duwwel*). Furthermore, Raidt (1983:84) quotes a personal suggestion by the Belgian linguist Jan Goossens, according to whom [χ]-elision may have a Dutch dialectal background *since a similar phenomenon is attested for southern dialects of Dutch.*

It seems to me that this hypothesis is untenable. First of all, Afrikaans is related to Hollandic (i.e. Northwestern) Dutch, and not to Southern Dutch. Furthermore, the wider linguistic contexts for Afrikaans [χ]-elision and Southern Dutch <g>-deletion are quite different, as we can derive from Taeldeman (1998:153-155).

The relevant area, East Flemish, is part of the larger Southwestern dialect area. In Southwestern Dutch initial and medial [ɣ] is laryngealized while at the same time pushing out [h].[11] Compare (6):

(7) [ɣ]oed → [h]oed 'good'   [h]oed → 'oed 'hat'

In a proper subpart of the Southwestern area, i.e. in large parts of Eastern Flanders and in a small strip of Western Flanders, intervocalic [h] deriving from [ɣ] is also dropped, which yields a phenomenon similar to [χ]-elision in Afrikaans.

In Afrikaans, however, initial $<g>$, as in *goed* 'good', is an unvoiced fricative $[\chi]$, as in Hollandic Dutch and initial [h] is stable – again: as in Hollandic Dutch. Therefore, the conditions for $[\chi]$-elision in Afrikaans and for the deletion of an intervocalic [h] deriving from $[\gamma]$ in East Flemish may be similar, the wider linguistic contexts of both phenomena are completely different. Since $[\chi/\gamma]$-elision is not attested for Hollandic dialects (the closest Dutch relatives of Afrikaans), the occurrence of intervocalic $<g>$-deletion in East Flemish as well as in Afrikaans must be a case of polygenesis, as Taeldeman (1998:153-155) terms it.[12]

3.2. The relationship between $[\chi]$-elision and $[\chi]$-strengthening

From a synchronic point of view '$[\chi]$-elision' and '$[\chi]$-strengthening' are appropriate descriptive terms for what seems to be going on in presentday Afrikaans. From a diachronic point of view, though, '$[\gamma]$-elision' and '$[\gamma]$-strengthening' may be more adequate.

In so far as I know we owe the idea that Afrikaans medial [g] derives from Dutch medial $[\gamma]$ to Ponelis (1990, 1993), who attributes this phenomenon to influences from (High) German – due to the many immigrants from Germany, I suppose. Ponelis furthermore proposes that at a later stage this medial [g] was dropped. Or to put it differently, according to Ponelis $[\chi/\gamma]$-elision should be reanalyzed as [g]-elision. This idea, which can also be found in de Villiers/Ponelis (1987:118-119), may have been inspired by a suggestion in le Roux & Pienaar (1927:109).[13]

Ponelis's hypothesis could be rendered as follows:

(8) Hypothesis 1

$$[+son]\text{-}\gamma\text{-}\partial \ \rightarrow \ [+son]\text{-}g\text{-}\partial \ \rightarrow \ [+son]\text{-}\partial$$

However note that (8) is purely descriptive and may contain superfluous elements. For instance, it may not be necessary to specify the environment of the voiced velar fricative, since it is quite possible that Early Modern Hollandic $<g>$ could only be voiced in a position between a sonorant segment and an unstressed vowel.

Since this hypothesis explicitly links [χ]-elision to [χ]-strengthening (now [g]-elision and [γ]-strengthening respectively), it must be on the right track, modulo the auxiliary considerations of section 2.4 above. Yet, there are some residual problems.

The first step in the hypothesis, γ-strengthening, seems unproblematic, although I have my doubts about the claim that this may be due to influences from German. Most probably, only very few German immigrants may have been true standard speakers, and in a couple of German dialects medial [g] is realized as a voiced fricative [γ] or even as a glide [j] (cf. Russ 1990). Furthermore, German speakers have a tendency to substitute [k] for initial [χ] (e.g. *[k]oed* instead of Du. *goed* 'good'), and there is no evidence for such an influence in Afrikaans.

However, the second step in the hypothesis, [g]-elision, is more problematic, i.a. because [g]-elision demonstrates differential behavior relative to the phonological context. Therefore, I would like to propose the following alternative:

(9) Hypothesis 1 (revised)

$$[+son]\text{-}\gamma\text{-}\partial \rightarrow [+son]\text{-}g\text{-}\partial \rightarrow [+son]\text{-}h\text{-}\partial \rightarrow [+son]\text{-}\partial$$

According to (9) medial [g] may undergo lenition and so does not differ from medial [b] and medial [d], which may also undergo lenition in Afrikaans yielding [υ] and [r] respectively.[14] By assuming lenition we can more easily explain why medial [g] may 'delete', since medial [h] is a better candidate for deletion than is [g] itself. However, note that there is no independent evidence for [g]-lenition, unless Coetzee's data about the hiatus filler [h] is interpreted as such (cf. section 2.1 above). Unfortunately, this hiatus filler can also occur in other environments, e.g. in *idi^hoom* 'idiom', although it cannot be excluded that the latter use is an expansion of the function of medial [h] resulting from [g]-lenition.

However, whatever the status of the evidence for intervocalic [h], [g]-lenition may help us to acquire a better understanding of the differential behavior of '[g]-elision'.

Consider the following example of strengthening and lenition in three phonological environments:

(10) [+son]-γ-∂ da[γ]e wi[γ]e ber[γ]e

   strengthening [+son]-g-∂ da[g]e wi[g]e ber[g]e

   lenition [+son]-h-∂ da[h]e wi[h]e ber[h]e

   elision [+son]-∂ ?dae ?wie b[ɛ:]re

Let us furthermore assume that originally the product of lenition was a clear [h], not an hiatus filler. This laryngeal glide is easiest to pronounce after tense vowels, where it could receive a reduced pronunciation without being deleted. This may be the reason why [g] is least acceptable after tense vowels (in Standard Afrikaans). After lax vowels, however, [h] must be ambisyllabic, which is problematic because [h] may not fill the coda of an Afrikaans syllable. This problem can be resolved by reducing the glide or by reverting to the voiced stop. This may be the reason why [g] is optional after lax vowels. Finally, after sonorant consonants [h] cannot receive a reduced pronunciation, which yields an awkward syllable. This problem can only be resolved by deleting [h] or by reverting to [g]. Apparently, the choice was dictated by the functional considerations discussed in section 2.4 above.

4. A parallel case

I would like to suggest that the revised hypothesis in (9) does not describe an isolated phenomenon because there may be a parallel case in the historical phonology of Afrikaans. The pertinent hypothesis was first put forward in my review article on Raidt (1983) published in 1987 (den Besten 1987a:75-76):

(11) Hypothesis 2:

   [+son]-v/f-∂ → [+son]-b-∂ → [+son]-ʋ-∂

Hypothesis 2 involves [v/f]-strengthening. In this context it is not irrelevant to note that I defended the concept of [v/f]-strengthening by referring to medial [g], however without seeing the implications for [χ]-elision. Furthermore, at the time I did not have any evidence for [v/f]-

strengthening yet. (However, now see section 5 below.)

As for the second part of this hypothesis, [b]-lenition, there is plenty of evidence for this process in Afrikaans (see the literature mentioned in note 14):

(12) dubbel   — du[ʊ]el   (duwwel) 'double'

kriebel   — krie[ʊ]el (kriewel) 'to tickle, to itch'

bybel   — by[ʊ]el   (bywel)   'bible'

Data that Hypothesis 2 is supposed to account for can be found under (13) and (14) below.[15] Under (13) can be found data on [ʊ] after vowels, while (14) presents data on [ʊ] after sonorant consonants:

(13)   D/A   D   A

a. Nouns/v + infl.   duif   duiven   dui[ʊ]e   'dove'

b. Nominal stems   duivel   dui[ʊ]el   'devil'

c. Nouns/f + infl.   filosoof filosofen filoso[ʊ]e 'philosopher'

d. Adj.s/v + infl.   lief   lieve   lie[ʊ]e   'dear'

e. Adj.s/f + infl.   dof   doffe   do[ʊ]e   'dull, faint'

(14)   D/A   D   A

a. Nouns + infl.   werf   werven   wer[ʊ]e 'yard'

b. Adj.s + infl.   half   halve   hal[ʊ]e 'half'

(Note that *filoso[ʊ]e* in (13c) may be a late addition to this inflexional pattern.)

Before we proceed to the evidence for [v/f]-strengthening, the following remarks are in order: First of all, [ʊ] can also be observed in verbal stems deriving from Dutch infinitives such as *le[ʊ]e* 'to live', *del[ʊ]e* 'to dig, to mine' and *verwer[ʊ]e* 'to obtain' (from Du. *leven, delven* and *verwerven* respectively), which are used side by side with the shorter forms *leef, delf* and *verwerf.* Secondly, a stem-internal [f] as in Du. *tafel* 'table' does not seem to undergo any change in Afrikaans. (However see section 5 below.) Thirdly, intervocalic [ʊ] (or historically intervocalic [v]) is sometimes deleted. This is an irregular process, which will not be discussed

in this paper.[16]

5. Diachronic and dialectal data

Although the idea of [v/f]-strengthening may seem nonsensical, there is some evidence supporting it. All of the evidence available points into the direction of the Khoekhoen.

First of all, in the *Neue Ost-Indische Reise ...* (Leipzig, 1715) by Christoffel Langhansz, who visited the Cape in 1693, we find the word *Dieber* 'Devil' in the context of a pidgin Dutch taunt song sung by the local Khoekhoen (Raven-Hart 1971:405). *Dieber*, which is not German, derives fom Dutch *Duivel* or rather the undiphthongized variant *Duvel*.[17]

Furthermore Rademeyer (1938:55, 61) found some stray examples of [b] instead of [ʊ] in early 20th century Orange River Afrikaans: *skrybe* 'to write' instead of *skrywe* (< Du. *schrijven*) and *berôb* 'to rob' instead of *berowe* (< Du. *beroven*).

Rademeyer is somewhat hesitant about these data. However, in de Roubaix (1930:25), a book often quoted for Orange River Afrikaans data by Rademeyer himself, I found *oorlebe* 'to survive' as a variant for *oorlewe* (< Du. *overleven*), and in de Roubaix (1929:233) there are three instances of the word *tabelmes* 'table knife' (twice in the singular, once in the plural), which is Du./Afr. *tafelmes*.

Therefore, we may assume that [v/f]-strengthening once was a feature of Khoekhoe Dutch. Furthermore, note that [b]-weakening is a phenomenon shared by Afrikaans and Khoekhoe (cf. den Besten 1987a:85).[18] This means that the change from [v] (or rather [b]) to [ʊ] may also be due to the Khoekhoen.

It would be nice if we could adduce similar evidence for [ɣ]-strengthening (and for [g]-lenition). However, there can be no historical evidence for [ɣ]-strengthening since Dutch orthography does not have a seperate grapheme for [g]. Therefore, we have to rely upon synchronic data. And from a synchronic point of view it is interesting to note that [ɣ]-strengthening is particularly strong in Orange River Afrikaans, both before inflexional endings and in stem-internal position, as in *da[g]e* 'days', *la[g]e* 'low' (infl.) and *te[g]en* 'against', as is noted by Rademeyer (1938:53-54) and Links (1989:24). Since Orange River Afrikaans is Khoekhoe Afrikaans, it is possible that also [ɣ]-strengthening was a feature of Khoekhoe Dutch

in the early period.

6. Back to the hypothesis: Language contact and internal development

Let us suppose then that [ɣ]-strengthening as wel as [v/f]-strengthening can be ascribed to the Khoekhoen. This may be due to the fact that (unlike [s]) [ɣ], [v] and [f] are not part of Khoekhoe. Therefore [g] was substituted for the voiced velar fricative [ɣ] (while its voiceless counterpart [χ] could not pose any problem for Khoekhoe speakers) and [b] was substituted for intersonorantic [v] and probably also for intervocalic [f]. However, it is clear that the latter change was only partially accepted by other varieties of Cape Dutch/Afrikaans, since it is *tafel* 'table' vs. *dowwe* 'dull, faint' (infl.).

Furthermore, note that other occurrences of [f] were never changed into [b] (or [p]) either, since it is *ffjer* 'far' (*ver*) and *lief* 'dear', as in Hollandic Dutch. This may be due to the fact that in Dutch initial [b] and [p] are distinctive, as is [p] in final position. So the Khoekhoen may have tried out *[p]er or *[b]er for *ffjer* 'far' or *lie[p]* for *lief* 'dear', but these variants must have had a very low acceptability rate among the speakers of Dutch. Intersonorantic [b] on the other hand was relatively acceptable because [b] in that position is not distinctive in Dutch (but for one or two exceptions). German speakers, in so far as they were not users of an intersonorantic [ʋ] instead of Standard German [b] (cf. Russ 1990) may have temporarily supported this [b]. (Similarly for intersonorantic [g].)

As I indicated in section 5, Afrikaans [b]-lenition can also be ascribed to the Khoekhoen. In fact, by introducing an intersonorantic [b] the Khoekhoen automatically introduced its allophone [ʋ], in accordance with their own phonetics.

Now, since Afrikaans shares both [b]-lenition and [d]-lenition with Khoekhoe, one might think that [g]-lenition is a Khoekhoe phenomenon as well. However, I could not find any evidence for that in the literature. But it may very well the case that [g]-lenition derives from attempts by Khoekhoen to approximate the Dutch velar fricative [ɣ] in its continuant aspect, which would mean that intersonorantic [h] was a compromise between Khoekhoe Dutch [g] and Cape Hollandic [ɣ].

What happened after these changes, may be interpreted in terms of further linguistic compromises between the different varieties of Cape Dutch as well as in terms of language internal phonetic requirements.

First of all, note that for Dutch speakers intersonorantic [ʋ] and [h] may have been better approximations of their own [v] and [ɣ] than [b] and [g] respectively, which may have favored the use of [ʋ] and [h]. Yet, intersonorantic [g] can still be heard in Afrikaans, while intersonorantic [b] has disappeared from the language, but for some scattered remnants in Orange River Afrikaans.

The reasons for the disappearance of intersonorantic [b] may be twofold: For Khoekhoe speakers [ʋ] may have been the preferred allophone anyway. For speakers of Dutch intersonorantic [b] may have been slightly awkward in that it was a sound with distinctive properties (even though it was not distinctive in intersonorantic position as such).

No such problems could arise with intersonorantic [g], because [g] has no distinctive value in Dutch at all. Therefore, the distribution of [g] and [h] could be decided upon on phonetic grounds, as expounded in section 3.2, modulo some extra functional considerations, as expounded in section 2.4.

I therefore conclude that both '[χ]-elision' and '[χ]-strengthening' and intersonorantic [ʋ] in Afrikaans may be due to the Khoekhoen, perhaps with a little support from German dialect speakers. Future research will have to show whether more linguistic groups were involved and whether the complex of functional and language contact related factors discussed in this paper can be dealt with in terms of a more Optimality Theory-like approach.

NOTES

1   Revised text of a talk presented at the Workshop "Harry on the HIL" (= the 2nd Phonologica Lugduno Batavorum), University of Leiden, May 6, 1999, organized by the Holland Institute of generative Linguistics (HIL).

2   I have to admit, though, that IPA (1949) does not seem to use [ʊ] at all. However, see its definition of [ʊ], which contradicts its own use of [v] (and even [w]) for the description of various languages. Also compare Pullum & Laduslaw (1986). – Furthermore, note that the Afrikaans <w>, just like its German counterpart is less 'heavy' and more v-like than the Dutch <w>. Yet, in my view it still is a labiodental approximant. Readers who do not agree may substitute [v] for my [ʊ].

3   However, also see section 2.3.

4   E.g. *muug* 'tired' in the Utrecht dialect (Ponelis 1990:36). Utrechtian, which does not delete intervocalic [χ/γ], belongs to the group of Hollandic dialects, which is the Dutch dialect group most closely related to Afrikaans.

5   Cf. Ponelis (1990, 1993) and le Roux & Pienaar (1927).

6   Cf. le Roux & Pienaar (1927, 1976). Also see Ponelis (1990, 1993).

7   As regards the importance of a 17th Hollandic Dutch [γ] in medial position I basically agree with Ponelis (1990, 1993). See Ponelis (1990:37, 59, 75-77) and (1993:140-141, 157-158). For more loans from Dutch with an undeleted [χ] see Ponelis (1990:37) and le Roux & Pienaar (1927:137).

8   For the expansion of [χ]-elision see Ponelis (1990:77) and le Roux & Pienaar (1927:137). As for *waggel*, Ponelis (1990:37) claims without further discussion that it was *wa[χ]el* in Cape Dutch.

9   Because of the large number of factors involved, differing from suffix to suffix, I shall refrain from discussing the fate of Dutch intervocalic <g> in Afrikaans derivations.

10 *Bur[g]er* may have been felt to be related to *-burg* in toponyms.

11 Note that further east there are dialects that delete [h] without laryngealizing [ɣ].

12 However, Taeldeman tries to draw a wider perspective by characterizing the 'raspy' pronunciation of velar fricatives in Hollandic Dutch and the introduction of [g] in posttonic position in Afrikaans as attempts to stop the weakening of velar fricatives, which would establish a connection between Northwestern (Hollandic) Dutch and Southwestern (Zealandic and Flemish) Dutch. – In this context Taeldeman is referring to the old idea of a Hollandic-Zealandic basis for Afrikaans. Yet, a partly Zealandic base for Afrikaans does not seem likely, as has also been pointed out by Kloeke (1950). Zealandic has a southern lexicon and there is no trace of a partially southern lexicon in Afrikaans. Furthermore, the Zealandic pronominal system cannot be found in Afrikaans (nor in older South African sources), so that the occurrence of nominative *ons* '1PL' both in Zealandic and in Afrikaans must be coincidental, Afr. *ons* 'we' (< Du. *ons* 'us') probably being due to pidginization (cf. the data on South African Dutch pidgin in Raidt (1983, 1991) and Ponelis (1993)). Finally, the use of [y] (and an unrounded variant [i]) instead of the diphthong < ui > in Orange River Afrikaans (cf. Rademeyer (1938:49), van Rensburg (1984:346) and Links (1989:19-20)) need not be related to the use of [y] in Zealandic, since the diphthongization of [y] in 17th and 18th century Hollandic Dutch has been a slow and sociologically and regionally differentiated process. (Cf. Rademeyer (1938:49-50) and Schönfeld (1970:73).) Note that there is some evidence for the use of [y/i] instead of < ui > by 17th and 18th century Khoekhoen (e.g. Nienaber 1963: sub *wyn II*). Apparently, by retreating into the interior at a fairly early stage (in the period from ca. 1700 through 1713 or 1714) the Cape Khoekhoen could preserve this [y]. – This having been said, note that the above considerations do not invalidate Taeldeman's suggestion at all, although it has to be implemented before it can be judged.

13 Cf. Ponelis (1990:36-37, 75-77) and (1993:140, 157-158). – According to le Roux & Pienaar (1927:109) [χ]-elision after sonorant consonants should be seen as a case of assimilation: i.e. [g], which according to le Roux & Pienaar derives from [χ], is assimilated to the preceding consonant. It is unclear to me as to why they did not come up

with a more general rule of [g]-elision.

14   Cf. le Roux & Pienaar (1927), Coetzee (1985) and Ponelis (1990, 1993).

15   This presentation of data may look nonsensical for those who believe that Afrikaans <w> represents a voiced fricative [v]. However see the evidence on [v/f]-strengthening below.

16   Cf. Raidt (1983, 1991) and Ponelis (1990, 1993). Note that some instances of [ʋ]-elision, such as *gee* 'to give' (Du. *geven*), may rather be [v]-elision and may in fact go back to Hollandic dialects, for which see Scholtz (1964:89, n. 33). Note that Afr. *gee* may be attested as early as 1655 if we may analyze pidgin Dutch *geme / gemme* 'to give' as *gee* + pidgin ending *-me* (den Besten 1987a:88; 1987b:33-34).

17   Compare n. 12 on [y/i] instead of <ui> in Orange River Afrikaans. – Langhansz also gives the verb *sterbem* 'to die' in the context of a short sequence of pidgin Dutch sentences (Raven-Hart 1971:407). *Sterbem* is *sterb-* plus the well-known pidgin ending *-um/-om/-em* which the Khoekhoen usually appended to verbs. The stem *sterb-* seems to be derived from German *sterben*, which means that Langhansz may have misinterpreted a Dutch pidgin form **stervem* as *sterbem*. However, if my hypothesis about [v/f]-strengthening is right, this may as well be a genuine pidgin Dutch form.

18   According to Beach (1938:55) the result in Khoekhoe is a bilabial or labiodental fricative. The former ([β]) is attributed to one variety of Korana, the latter ([v]) to Nama as spoken by German missionaries. This suggests a nonnative, German realization of intervocalic <w>, i.e. in my view [ʋ], according to others [v]. (Compare n. 2.) However, this is also the pronunciation used by native speakers, witness Olpp/Krüger (1977:8), which equates intervocalic <w> in Nama with <w> in Afrikaans (with [β] and [b] as minoritary variants). Hagman (1973:25) describes medial /p/ (i.e. /b/) as "voiced and usually slightly spirantized, so that phonetically it is somewhere between [b] and [ʋ]." Similarly, Engelbrecht (1928:7) describes medial <b> in Korana as varying between a

plosive and an (Afrikaans) <w>.

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