

Anti-Homophony Effects in Dakelh (Carrier) Valence Morphology

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1. Introduction

In Dakelh (Carrier), as in many other Athapaskan languages, valence prefixes and “inner subject” prefixes interact in a complex pattern involving a combination of consonant deletion and/or fusion and, in certain conditions, what looks like epenthesis. In this paper we investigate this apparent epenthesis effect, which is otherwise unexpected in this environment in Dakelh and is problematic in several aspects (Gessner 2003). We propose that the epenthesis should be understood as an *anti-homophony effect* (Crosswhite 1999; Blevins to appear a, b) serving to systematically maintain a surface distinction between paradigmatically related forms differing in valence. We demonstrate how the anti-homophony effect is best understood in a *diachronic-evolutionary* context rather than a synchronic-phonological one: “epenthesis” is really the blocking of syncope (as a regular historical sound change). The account constitutes a striking parallel to the explanation of so-called antigemination effects as the result of syncope blocking through homophony avoidance, as proposed by Blevins (to appear a, b).

2. Background

2.1. Language background

The focus of this paper is the Lheidli dialect of Dakelh (a.k.a. Carrier), a Northern Athapaskan language of central interior British Columbia.¹ The Lheidli dialect is not extensively documented (Poser 2001, 2002, Bird 2002, Gessner 2003) and is extremely endangered, with fewer than 10 fluent native speakers. Lheidli is one of 12 Dakelh dialects; the language as a whole is estimated to have 1000 speakers (Yinka Déné Language Institute 2004). All cited Dakelh data derives from the first author’s fieldnotes, except those marked P01 which are from Poser (2001).

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2.2. Valence prefixes

The Athapaskan verb consists of a root, carrying the main lexical meaning, and multiple prefixes serving to mark subject and object agreement, tense, aspect, voice and valency, as well as adverbial and more abstract “thematic” notions. Traditionally, the verb word has been analyzed as consisting of three components: the *root* (usually called ‘stem’ in the Athapaskanist literature), and two discrete prefixal domains known as the *conjunct* and *disjunct* domains (terms attributed to Li 1946). The verb root (typically /CV(C)/) is immediately preceded by one of a set of voice or valence prefixes traditionally known as “classifiers”; their position is indicated by the shaded box in (1).

(1) Dakelh verb template:²

| DISJ. # | Obj | Con | S _o | W/D/Nq | Cng | Inc | Neg | Mod/Asp | S _i | Val | =ROOT |
|----------|-----|--------------------------|----------------|--------|-----|-----|-----|----------|----------------|-----|-------|
| D-Stem ↑ | | C-Stem (conjunct domain) | | | | | | ↑ V-Stem | | | |

In Dakelh, the phonological forms of the valence prefixes are Ø-, /d̥-/ and /l-/; an example of each is illustrated in (2).

(2) Valence prefixes (“classifiers”) in Dakelh verb forms:

| | | | | |
|-------|----------|--------------------------------|-----------------------|-----|
| Ø- | nλb̥e | /n # Ø - Ø = b̥e/ | ‘s/he is swimming’ | |
| | | cur#3sgS- val =swim | | |
| /d̥-/ | naɖai | /na # Ø - d̥ = ai/ | ‘s/he ate’ | P01 |
| | | hab#3sgS- val =eat | | |
| /l-/ | jrɪtʃud̥ | /j - ɪ - Ø - l = tʃud̥/ | ‘s/he is grabbing it’ | |
| | | obv-asp-3sgS- val =grab | | |
| /l-/ | nλl̥gai | /n # Ø - l = ɣai/ | ‘s/he is running’ | |
| | | cur#3sgS- val =run | | |

The /l-/ valence can serve as a transitivizer or causativizer, *adding an argument* to a verb, while the /d̥-/ valence marks functions such as the passive, reflexive, reciprocal and iterative, *removing an argument* from a verb. The /l-/ valence is usually seen as a portmanteau morph, combining the syntactic and semantic properties of the /l-/ and /d̥-/ prefixes (see, e.g., Young and Morgan 1987, 1992.)³

Apart from these productive uses, there are also many instances where the appearance of a valence prefix with a particular verb seems to be idiosyncratic; in those cases, the prefix must be specified in the lexicon as part of that verb’s sub-categorization. Because of their puzzling nature, valence prefixes are a common

² Obj = object agreement; Con = conative; S_o = outer subject agreement (1p, 3dp); W/D/Nq = Wh-class/D-class/N-class absolutive argument qualifier; Cng = conjugation prefixes marking aspect; Inc = inceptive; Neg = negative; Mod = mode; Asp = aspect; S_i = inner subject agreement (1/2/3s, 1d, 2dp); Val = voice/valency. The symbols ‘#’ and ‘=’ indicate the disjunct-conjunct and prefix-root boundary, respectively. The disjunct domain prefixes are not shown in detail in (1).

³ Alternatively, /l-/ valence can be interpreted as underlying /d̥-l-/ with D-Effect (Howren 1971).

topic of investigation in the Athapaskan literature (see Hoijer 1946; Krauss 1969; Kibrik 1993, 1996; Thompson 1996; Hale 1997; Rice 2000a, b; Gessner 2001).

Recall that /ʔ-/ marks transitivity or increased valence (e.g. causativity), while /d̥-/ is typically valence-decreasing (passive, reflexive). This, and the status of /l-/ as being (in some sense) a combination of /ʔ-/ and /d̥-/, means that the opposition /l- / : /ʔ-/ is parallel to the opposition /d̥- / : Ø-, as well as to Ø- : /ʔ-/, as illustrated in (3). Thus a great number of active vs. passive or causative vs. base form pairs are distinguished solely by a morphological alternation in /ʔ-/ vs. /l-/, as in (3b).

(3) Examples of valence alternations:

a. Ø- ~ /ʔ-/ alternations:

| <u>Intransitive</u> | <u>Transitive</u> |
|--|--|
| t ^h et ^h Λn | jΛt ^h εt ^h Λn |
| t ^h e-Ø-Ø=t ^h Λn | j-t ^h e-Ø-ʔ=t ^h Λn |
| fut-3sS-val=freeze _{IA} | obv-fut-3sS-val=freeze _{IA} |
| ‘It is going to freeze.’ | ‘S/he is going to freeze it’ |
| Λtso | jΛʔtso |
| Ø-Ø=tso | j-Ø-ʔ=tso |
| 3sS-val=cry _{IA} | obv-3sS-val=cry _{IA} |
| ‘S/he is crying’ | ‘S/he is making him/her cry’ |

b. /l- / ~ /ʔ-/ alternations:

| <u>Intransitive</u> | <u>Transitive</u> |
|-----------------------------------|---------------------------------------|
| x ^w enΛlmΛl | x ^w e:nΛʔmΛl |
| x ^w e#n-Ø-l=mΛl | x ^w e#j-n-Ø-ʔ=mΛl |
| inc#nq-3sS-val=roll _{IA} | inc#obv-nq-3sS-val=roll _{IA} |
| ‘It is rolling’ | ‘S/he is rolling it’ |
| d̥ΛnΛlmΛʔ | jΛd̥ΛnΛʔmΛʔ |
| d̥-n-Ø-l=mΛʔ | j-d̥-n-Ø-ʔ=mΛʔ |
| dq-cng-3sS-val=boil _{IA} | obv-dq-cng-3sS-val=boil _{IA} |
| ‘It is boiling’ | ‘S/he is boiling it’ |

3. Valence-subject interaction

3.1. Fusion, deletion, epenthesis

The valence prefix is in turn directly preceded by one of the so-called “inner subject” prefixes, marking person and number: 1Sg /s-/, 2Sg /in-/, 1Du /id̥Λd̥-/, 2Du/Pl /h-/ (3Sg is Ø-; 1Pl /ts’-/ and 3Du/Pl /h-/ are the “outer subject” prefixes, located further away from the root). The positions of these two prefix classes in the verb template are highlighted in (4), repeated from above.

(4) Inner subject and valence prefixes in the Dakelh verb template:

| DISJ. # | Obj | Con | S _o | W/D/Nq | Cng | Inc | Neg | Mod/Asp | S _i | Val | =ROOT |
|---------|-----|-----|----------------|--------|-----|-----|-----|---------|----------------|-----|-------|
|---------|-----|-----|----------------|--------|-----|-----|-----|---------|----------------|-----|-------|

As shown in (5), the /ʔ-/ and /l-/ prefixes interact with the consonant of a preceding subject prefix, if any, by a complex pattern in the Lheidli dialect (Poser 1999); illustrative examples follow in (6).

(5) Interaction of “inner subject” prefixes with valence prefixes /ʔ-/ vs. /l-/:

| | /s-/ (1Sg) | /m-/ (2Sg) | ∅ (3Sg) | /id _o Λd _o -/ (1Du) | /h-/ (2Du/Pl) |
|------|------------|------------|---------|---|---------------|
| /ʔ-/ | s- | ʔ- | ʔ- | id _o Λl- | ʔ- |
| /l-/ | ʔΛ- | l- | l- | id _o Λl- | ʔΛ- |

(6) Examples of subject-valence interactions in Lheidli Dakelh:

a. /ʔ-/ valence:

| Prefixes | Transcription | Morpheme Gloss | Gloss |
|---------------------------------------|--|---|-------------------------------------|
| /s-ʔ-/ | d _o ΛnΛsmΛʔ | ∅-d _o -n-s-ʔ=mΛʔ 3sO-dq-cng-1sS-val=boil _{IA} | ‘I am boiling it.’ |
| /m-ʔ-/ | d _o ΛnʔmΛʔ | ∅-d _o -n-m-ʔ=mΛʔ 3sO-dq-cng-2sS-val=boil _{IA} | ‘You _{sg} are boiling it.’ |
| /∅-ʔ-/ | jΛd _o ΛnΛʔmΛʔ | j-d _o -n-∅-ʔ=mΛʔ obv-dq-cng-3sS-val=boil _{IA} | ‘S/he is boiling it.’ |
| /id _o Λd _o -ʔ-/ | d _o Λnid _o ΛlmΛʔ | ∅-d _o -n-id _o Λd _o -ʔ=mΛʔ 3sO-dq-cng-1dS-val=boil _{IA} | ‘We _d are boiling it.’ |
| /h-ʔ-/ | d _o ΛnΛʔmΛʔ | ∅-d _o -n-h-ʔ=mΛʔ 3sO-dq-cng-2dpS-val=boil _{IA} | ‘You _{dp} are boiling it.’ |

b. /l-/ valence:

| Prefixes | Transcription | Morpheme Gloss | Gloss |
|---------------------------------------|------------------------------------|---|----------------------------------|
| /s-l-/ | nΛʔΛg _{ai} | n#s-l=g _{ai} cur#1sS-val=run _{IA} | ‘I am running.’ |
| /m-l-/ | nʔl _{gai} | n#m-l=g _{ai} cur#2sS-val=run _{IA} | ‘You _{sg} are running.’ |
| /∅-l-/ | nΛl _{gai} | n#∅-l=g _{ai} cur#3sS-val=run _{IA} | ‘S/he is running.’ |
| /id _o Λd _o -l-/ | nid _o Λl _{gai} | n#id _o Λd _o -l=g _{ai} cur#1dS-val=run _{IA} | ‘We _d are running.’ |
| /h-l-/ | nΛʔΛg _{ai} | n#h-l=g _{ai} cur#2dS-val=run _{IA} | ‘You _d are running.’ |

Of particular interest is the apparent *epenthesis* in 1Sg and 2Du/Pl forms with /l-/ valence, which is otherwise anomalous within Lheidli phonology (Gessner 2003). The 1Sg vs. 3Sg pairs in (7) give further illustration of the mapping /s-ʔ-/ → [ʔΛ-].

- (7) Additional examples contrasting 1Sg and 3Sg:

| <u>1Sg Subject</u> | <u>3Sg Subject</u> |
|--|--|
| x ^w ΛnawdɛɬΛnoh | x ^w Λnawdɛlnoh |
| /x ^w -na#u-de-s-l=noh/ | /x ^w -na#u-de-Ø-l=noh/ |
| inc-hab#con-thm-1sS-val=forget _{PA} | inc-hab#con-thm-3sS-val=forget _{PA} |
| ‘I forgot’ | ‘s/he forgot’ |
| nadɛɬΛdΛz | nadɛldΛz |
| /na#de-s-l=dΛz/ | /na#de-Ø-l=dΛz/ |
| down#thm-1sS-val=fall _{PA} | down#thm-3sS-val=fall _{PA} |
| ‘I fell down’ | ‘s/he fell down’ |

Epenthesis in 1Sg and 2Du/Pl forms with /l-/ valence is a characteristic shared by all dialects in the Southern branch of Dakelh (Poser 1999); in the Nak’alibun-Dzinghubun branch (including the Nak’azdli dialect described by Morice 1932) we find *fusion* without any concomitant epenthesis:

- (8) Epenthesis with /l-/ valence; no corresponding epenthesis with /ɬ-/:

| | | | <i>Lheidli</i> | <i>Nak’azdli</i> |
|---------|-----------------|---|----------------|------------------|
| 1Sg | /...+s+l+CV(C)/ | → | ...ɬΛCV(C) | ...zCV(C) |
| 2Du/Pl | /...+h+l+CV(C)/ | → | ...ɬΛCV(C) | ...ɬCV(C) |
| cf. 1Sg | /...+s+ɬ+CV(C)/ | → | ...sCV(C) | ...sCV(C) |
| 2DuPl | /...+h+ɬ+CV(C)/ | → | ...ɬCV(C) | ...ɬCV(C) |

Epenthesis cannot be a purely prosodically driven phenomenon here, for two reasons. First, in the output form, [Λ] is breaking up what would otherwise simply be a *biconsonantal* cluster (coda+onset); such ɬC or lC clusters are otherwise not prohibited or avoided in any way at the valence-root boundary, cf. the 2Sg and 3Sg forms in (5)-(6) above. Secondly, other triconsonantal SUBJ-VAL-ROOT input sequences are always resolved by fusion of C1 and C2, or deletion of C1 or C2, without resorting to epenthesis, e.g. /s+ɬ+C/ → [sC] and /(i)n+l+C/ → [(i)lC].⁴

3.2. Epenthesis as an anti-homophony effect

We propose that the apparent epenthesis effect should be understood in relation to the function it plays within the paradigm of morphological oppositions. Were it not for epenthesis, 1Sg and 2Du/Pl intransitive forms with /l-/ valence would have a surface realization identical to that of the corresponding transitive forms with /ɬ-/ valence. The epenthetic [Λ] can be viewed as serving the purpose of

⁴ For an Optimality-Theoretic analysis of consonant fusion in similar contexts in a related Northern Athapaskan language, Dené Soun’liné (previously known as Chipewyan), but without any of the epenthesis effects observed in Dakelh, see de Lacy (2002).

systematically maintaining a surface distinction between related verb forms differing in valence alone (active vs. passive, causative vs. base). Epenthesis is thus a paradigmatic homophony avoidance effect (cf. Crosswhite 1999; Blevins to appear a, b).

Given the regular strategy used to resolve CCC clusters at the SUBJ-VAL-ROOT boundary, /s-/ and /l-/ should fuse into [s-], and likewise /h-/ and /l-/ should fuse as [ʰ-]. The expected vs. the observed outcomes of subject-valence interactions are outlined schematically in (9), accompanied by relevant examples in (10).

(9) Expected vs. actual outcome in 1Sg and 2Du/Pl with /l-/ valence:

| | | |
|-----------------------|------------------|----------------|
| | <i>expected:</i> | <i>actual:</i> |
| 1Sg: /-s-l-CV(C)/ | → **_-sCV(C) | -ʰΔCV(C) |
| 2Du/Pl: /-h-l-CV(C)/ | → **_-ʰCV(C) | -ʰΔCV(C) |
| cf. 1Sg: /-s-ʰ-CV(C)/ | → -sCV(C) | |
| 2Du/Pl: /-h-ʰ-CV(C)/ | → -ʰCV(C) | |

(10) Examples of /ʰ-/ ~ /l-/ valence alternations where ambiguity would result:

a. Transitive (/ʰ-/ valence)⁵

| | | |
|------------------------------------|------------------------------------|-----|
| <u>1Sg Subject</u> | <u>3Sg Subject</u> | |
| nʌnʌsʔi | nʌnʌʰʔi | P01 |
| n#n-s-ʰ=ʔi | n#n-Ø-ʰ=ʔi | |
| thm#imp-1sS-val=hide _{IA} | thm#imp-1sS-val=hide _{IA} | |
| ‘I am hiding [object]’ | ‘S/he is hiding [object]’ | |

b. Reflexive (/l-/ valence)

| | | |
|------------------------------------|------------------------------------|-----|
| <u>1Sg Subject</u> | <u>3Sg Subject</u> | |
| nʌnʰʌʔi ⁶ | nʌnʌlʔi | P01 |
| n#n-s-l=ʔi | n#n-Ø-l=ʔi | |
| thm#imp-1sS-val=hide _{IA} | thm#imp-1sS-val=hide _{IA} | |
| ‘I am hiding myself’ | ‘S/he is hiding her/himself’ | |

cf. if no epenthesis:

**nʌnʌsʔi (= 1Sg trans.) or **nʌnʌʰʔi (= 3Sg trans.)

Assuming that the presence of epenthetic [ʌ] is in fact motivated by a pressure to maintain a valence distinction, an account viewing this as a genuinely *synchronic* effect (phonological epenthesis triggered by constraints on paradigm homophony avoidance) is still faced with three fundamental problems:

⁵ These examples are extracted from a sentence with an overt NP object, so no object agreement (/j-/ obviative) is marked on the verb, unlike those 3Sg transitive forms shown in (2), (3) and (6a).

⁶ The actual entry in Poser (2001) is *nanlhu’i* (= [nanʰʌʔi]), glossed as ‘I am hiding out’; the [a] is unexpected given that the related forms all have [nʌ...].

- (11) Problems for a synchronic-phonological account:
- a. Since fusion of /s-/ and /ʃ-/ produces [s], preserving [strident] over [lateral], why would fusion of /s-/ and /l-/ yield [ʃ] (plus the epenthetic vowel), apparently preserving [lateral] over [strident]? (Cf. the account of fusion effects in Dené Soun'liné proposed by de Lacy 2002.)
 - b. Why does /s-l-/ not yield [z-] as it does in the Nak'azdli dialect, cf. (8)? This would preserve the contrast with /s-ʃ-/ → [s-] without resorting to epenthesis, while also circumventing the markedness paradox in (a) above.
 - c. If homophony avoidance is of such great importance in the synchronic grammar, why is a contrast between transitive and intransitive forms *not* upheld in the 1Du, where we find [iɖʌl-] for both /iɖʌɖ-ʃ-/ and /iɖʌɖ-l-/?

The account we propose in the following section provides something of a “Gordian Knot” solution to all of these problems. In our view, /ʃʌ-/ is simply an unanalyzable portmanteau allomorph from the synchronic point of view, simultaneously an exponent of subject agreement and valence. The presence of [ʌ] in that allomorph is indeed to be explained as being due to paradigmatic homophony avoidance, but only from a strictly *diachronic-historical* perspective.

4. Paradigmatic homophony avoidance as a diachronic effect

As argued above, the full details of the homophony avoidance effect seen in subject-valence interactions in Dakelh cannot adequately be explained from a synchronic standpoint. However, we contend that the facts *can* be accounted for under a diachronic-historical analysis, as outlined in (12).

- (12) Central claims:
- i. The “epenthetic” vowel in the [...ʃʌCV(C)] forms is not due to any epenthesis taking place; historically speaking, it was there all along.
 - ii. The presence of [ʌ] in these forms is instead due to a *failure of syncope*, which would otherwise have deleted that vowel (and did so elsewhere).
 - iii. Homophony avoidance has thus asserted itself by *blocking an otherwise regular sound change*.
 - iv. This is a clear parallel to the reinterpretation of “antigemination” effects by Blevins (to appear a, b); both are due to homophony avoidance blocking syncope in certain forms.

4.1. “Epenthesis” as blocking of syncope

Among the valence prefixes as reconstructed for Proto-Athapaskan (henceforth PA) by Krauss (1969), the ancestors of Dakelh /l-/ and /ɖ-/ contained a vowel following the consonant, as shown in (13a). By contrast, /ʃ-/ did not contain such a vowel (13b), nor did the relevant subject agreement prefixes like 1Sg /s-/ (13c):

(13) Valence and 1SgSubj prefixes in Proto-Athapaskan (Krauss 1969):

- a. /l-/ < *tə- b. /ʎ-/ < *t- c. /s-/ < *š-
 /d-/ < *də-

Note that both /l-/ and /ʎ-/ go back to PA forms containing a voiceless lateral. The generally voiced character of the /l-/ reflex of PA *tə- throughout most daughter languages is due to *intervocalic voicing*. In the vast majority of verb forms, one or more prefixes precede the valence prefix (cf. (1) above), and virtually all of these are reconstructed as having been vowel-final in PA. The effects of intervocalic voicing can also be seen in other prefixes in the conjunct domain, e.g. perfective [s̥(ʎ)-]~[z̥(ʎ)-] < PA *sə- (occurring in the position labelled “Cng” in (1)).⁷ In precisely the 1Sg and 2Du/Pl forms at stake here, PA *tə- was preceded by *š- or *h- and hence *not* intervocalic; thus the t remained voiceless. Subsequent to intervocalic voicing, a regular sound change of *syncope* deleted the ə of *tə- and *də-, and also in other *Cə- prefixes in similar environments (Krauss 1969).

We suggest that this syncope was blocked in the 1Sg and 2Du/Pl of *tə- valence forms, so as not to collapse these with their transitive *t- valence counterparts. We suggest, that is, that the functional pressure of homophony avoidance asserted itself by curtailing a regular sound change. The historical developments of the relevant forms are summarized in (14). On the left is the PA state of affairs, in the middle the result of intervocalic voicing (where applicable), and on the right the current state of affairs after syncope and various cluster simplifications.

(14) Sound changes from Proto-Athapaskan to present-day Dakelh (Lheidli):

- a. 1Sg *(...V)-š-tə-C... > *(...V)-š-tə-C... > (...V)-ʎ-C... [no syncope]
 2Sg *(...)-in-tə-C... > *(...)-ĩ-lə-C... > (...)-I-l-C...
 3Sg *(...V)-tə-C... > *(...V)-lə-C... > (...V)-l-C...
 2Du *(...V)-h-tə-C... > *(...V)-h-tə-C... > (...V)-ʎ-C... [no syncope]
- b. 1Sg *(...V)-š-t-C... > *(...V)-š-t-C... > (...V)-s-C...
 2Sg *(...)-in-t-C... > *(...)-ĩ-t-C... > (...)-I-t-C...
 3Sg *(...V)-t-C... > *(...V)-t-C... > (...V)-t-C...
 2Du *(...V)-h-t-C... > *(...V)-h-t-C... > (...V)-t-C...

Two potential counterarguments should be addressed here. First, it might be argued that the “blocking” merely reflects the *phonological* conditioning of a sound change, e.g. that syncope was phonotactically restricted so as not to apply in CC_C or C_CC contexts. This interpretation cannot be correct, as the CCC clusters which syncope was prevented from creating, such as *š-t-C, were in fact phonotactically permissible in the language. Secondly, it is conceivable that

⁷ When /l-/ < *tə- is initial, its reflex remains voiceless in Dakelh, e.g. Lheidli [ʎʎjʎ], Nak’azdli [ʎjʎ] /Ø-l=jʎ/ ‘it (generic) is white’, cf. [nʎjʎ] /n-Ø-l=jʎ/ ‘it (n-class) is white’ (Poser 1999).

homophony avoidance served not to *block* syncope (a sound change), but to *trigger* the reintroduction of the syncopated vowel based on some other form or forms elsewhere in the paradigm (an analogical change). Unfortunately, however, such forms are nowhere to be found; the only forms where the vowel remained intact (on any cogent interpretation of syncope and its conditioning) are precisely those forms where, on our account, its presence is due to homophony avoidance.

Let us now address the problems listed in (11) above. The diachronic syncope-blocking account provides a simple solution to the dilemma of why, synchronically, /s+ʔ/ yields [s] whereas /s+l/ yields [ʔ] (followed by [ʌ]), and why the latter would not instead result, e.g., in [z]. Viewed from the diachronic perspective, the difference is merely one of deleting the first vs. the second member of what was historically a *sʔ cluster, as summarized in (15).

(15) Cluster simplification patterns involving fricative-fricative sequences:

- a. $*(\dots V)\text{-s-}\cancel{ʔ}\text{-C}(V\dots) > (\dots V)\text{sC}(V\dots)$
Deletion targets *ʔ, the middle consonant in a C₁C₂C₃ cluster.
- b. $*(\dots V)\text{-s-}\cancel{s}\text{-C}(V\dots) > (\dots V)\text{ʔC}(V\dots)$
Deletion targets *s, the coda consonant in a C₁C₂ cluster.

In the case of /ʔ-/ valence forms, the valence prefix was a vowelless *ʔ-, directly abutting the root-initial consonant, so the cluster was in fact triconsonantal /sʔC/. The fact that it is the middle consonant /ʔ/ that gets deleted is hardly surprising, as it is the one lacking all perceptual cues from VC and CV transitions. In /l-/ valence forms, by contrast, the prefix was *ʔə- and the cluster was thus genuinely biconsonantal /sʔ/. Here deletion targets the coda rather than the onset, again the segment with comparatively weaker perceptual cues (Wilson 2001). In sum, the choice is not between “preserving” [strident] over [lateral] or vice versa, as it would be in a synchronic fusion/deletion account, but falls out from the C- vs. CV- shape the two prefixes had at the time when cluster simplification occurred.

What about 1Du forms, where we find [iɖʌl-] in /l-/ and /ʔ-/ valence forms alike, in apparent defiance of homophony avoidance? Though the issue cannot be fully addressed here, we suggest that the very form /iɖʌɖ-/ of the 1Du prefix is due to a secondary analogical development. Nak’alibun dialects of Dakelh, as well as closely related languages, have 1Du /iɖ-/. As one instantiation of the so-called “D-Effect” (Howren 1971) the /ɖ/ of this /iɖ-/ fuses with a following /ʔ-/ or /l-/ prefix, yielding voiced [l] in both cases and thus neutralizing the valence contrast; the same is true of the second /ɖ/ of the Lheidli /iɖʌɖ-/ variant. The original form of the 1Du prefix may well have been something like *iɖə-, which would have given rise to a syncope alternation [iɖʌ-]~[i(ɖ)-] depending on the environment (the parentheses indicating fusion with a following C). Lheidli [iɖʌ(ɖ)-] is a blend of these two alternants, levelling the [iɖʌ] sequence across all 1Du forms (cf. a similar development in Pacific Coast Athapaskan mentioned in Krauss 1969).

4.2. Syncope blocking in other paradigm slots

In addition to 1Sg and 2Du/Pl forms, the same unexpected [ʈΛ-] portmanteau morph shows up in certain 3Sg forms, where the /l-/ valence is immediately preceded by either perfective /s̥-/ or negative /s-/ with no intervening vowel. The two forms in (16) both appear to be in the /s̥-/perfective, contrasting in valence.

(16) “Epenthesis” in 3Sg perfective forms: /s̥-ʈ-/ → [ʈ] but /s̥-l-/ → [ʈΛ]

- a. jΛnɛʈʈΛS ‘S/he kneaded it’ P01
 j-n-e-s̥-Ø-ʈ=ʈΛS
 obv-nq-asp-prf-3sS-val=knead_{PA}
- b. neʈʈΛS ‘It has been kneaded’ P01
 n-e-s̥-Ø-l=ʈΛS
 nq-asp-prf-3sS-val=knead_{PA}

Forms like (16b) likely also arose by syncope blocking in the *ʈə- (> /l-/) valence prefix, motivated by homophony avoidance, though with some further complications. For example, the direct juxtaposition of /s̥-/ with the valence prefixes in 3Sg forms is itself due to syncope, as /s̥-/ < PA *sə- (Krauss 1969).

Finally, the /d̥-/ valence prefix (< PA *də-) also shows “epenthesis” (i.e. syncope) alternations [d̥-]~[d̥Λ-] in Lheidli (Gessner 2003). The occurrence of [d̥Λ-] coincides precisely with those contexts where syncope would have produced an impermissible consonant cluster, which would in turn have triggered *deletion* of the /d̥/. This is precisely what happens in the vast majority of related languages, whereas Lheidli and other Southern Dakelh dialects never syncopated such forms in the first place. As forms with /d̥-/ valence are primarily in opposition to forms with Ø- valence, blocking of syncope (and of the concomitant deletion of /d̥/) can be explained as a homophony avoidance effect here as well.

4.3. A near-parallel: antigemination effects

Our diachronic account of the mysterious “epenthesis” in Dakelh valence markers constitutes a striking parallel to many of the cases of apparent antigemination effects discussed by Blevins (to appear a, b). There too blocking of syncope, previously viewed as a phonological effect (resistance to gemination, e.g. by the OCP), is instead argued to result from paradigmatic homophony avoidance. Syncope would collapse pairs contrasting ...C₁VC₁... vs. ...C₁C₁..., or else (in languages which actively employs degemination) ...C₁VC₁... vs. ...C₁...

For example, in Tonkawa (Blevins to appear a) the syncope seen in forms like /picena-oʔ/ → [picnoʔ] ‘he cuts it’ or /ke-topo-oʔ/ → [ketpoʔ] ‘he cuts me’ is blocked when the vowel is flanked by identical consonants, as in /hewawa-oʔ/ → [hewawoʔ] ‘he is dead’ or /ke-totopo-oʔ/ → [ketotopoʔ] ‘he cuts me repeatedly’. As Blevins shows, Tonkawa resolves geminates by degemination, such that

applying syncope in the latter cases would in fact have resulted in **[hewoʔ], [ketopoʔ] (presumably subject to further syncope giving [ketpoʔ]).

Tonkawa forms where a potential syncope target is flanked by identical consonants are the result of reduplication (e.g., /hewawa-/ is reduplicated from a base /hewa-/, and /CV-totopo-/ forms contrast with nonreduplicated /CV-topo-/). Syncope, with concomitant degemination, would have completely neutralized such contrasts between reduplicated and non-reduplicated forms of the same verb.

In terms of their diachronic origin, such instances of “antigemination” effects are essentially parallel to the Dakelh developments discussed here. In both cases syncope (as a regular historical sound change) is blocked by considerations of homophony avoidance within paradigms of contrasting forms.

6. Summary

The mysterious “epenthesis” found in 1Sg and 2Du/Pl forms with /l-/ valence in Lheidli and other southern dialects of Dakelh finds a coherent explanation in a diachronic account. The synchronic V~Ø alternation results not from epenthesis but from syncope blocking, which has served to prevent crucial voice/valence distinctions from being collapsed. Our account explains not only the vowel, but also the voiceless lateral, of the seemingly unexpected [ɬΛ-] morph. Finally, the Dakelh development provides an interesting parallel to “antigemination” effects as reinterpreted by Blevins (to appear a, b), since both arise through the blocking of syncope for reasons of paradigmatic homophony avoidance.

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