The sub-types of initial lenition in Scottish Gaelic
Thomas W. Stewart

1   Introduction

One of the most frequently remarked upon features of the Celtic languages is the family-wide phenomenon of grammatically significant sound correspondences at the left edge of words, word-like entities, and initial constituents of (potentially) larger syntactic constructions. The relevance of speech-sounds, part-of-speech classes, inflectional and derivational processes, and the formation of syntactic phrases in the context of initial mutation, however, has led to a fragmented and territorial theoretical literature.

I define **initial mutations** as *systematic first-sound correspondences that can serve to distinguish morphologically related forms*. Traditional descriptions of Scottish Gaelic (SG) mutation identify the following initial mutation 'states':

(1)   Radical   *baile*   /paʎə/   '(a) town' (m.)
        Lenited   (*anns a'*) *bhaile*   /vaʎə/   '(in the) town'
        Nasalized   (*am*) *baile*   /maʎə/   '(the) town'

The present focus is on the range of initial alternation patterns that are clustered together under the misnomer **lenition**. I start from the perspective that the diachronic phonological sources of the mutation patterns found in modern SG have altered to the degree that they can no longer be considered as phonologically conditioned (Green 2007; cf. Rogers 1972, Lieber 1983, Pyatt 1997). The modern initial mutations are therefore not to be represented as one or more quasi-phonological processes, but rather as functions mapping static correspondence patterns which hold between root (Radical) initials and, depending on context, one (or more) potentially phonologically-distinct Lenited initial correspondents.

The correspondence pattern most generally recognized as Lenition is laid out in (2), pairing the relevant sounds with their orthographic representations. Where a graphemic representation is paired with two phonemes, the former phoneme is the 'broad' value (when adjacent to so-

called 'broad' vowels, which are [+back] and/or [+round]), and the latter is the 'slender' value (when adjacent to front, unround 'slender' vowels).

(2)   SG basic Lenition mutation correspondences, both orthographic and phonological[1].

RADICAL		LENITED	
Grapheme	**Phoneme(s)**	**Grapheme(s)**	**Phoneme(s)**
b	/p, pʲ/	bh	/v, vʲ/
c	/kʰ, cʰ/	ch	/x, ç/
d	/t, dʒ/	dh	/ɣ, ʝ/
f	/f, fʲ/	fh	Ø
g	/k, c/	gh	/ɣ, ʝ/
l	/l̪, ʎ/	l	/l̪, l/
m	/m, mʲ/	mh	/ṽ, ṽʲ/
n	/n̪ˠ, ɲ/	n	/n/
p	/pʰ, pʰʲ/	ph	/f, fʲ/
r	/rˠ, ɾ̥/	r	/r, ɾ̥/
s	/s, ʃ/	sh[2]	/h, ɕ/
		s[3]	/s, ʃ/
t	/tʰ, tʃ/	th	/h, ɕ /

For the sake of presentation, I will treat vowel-initial words (including Lenited words that begin with <fh> followed by a vowel) as phonologically having a 'null' onset. Many phonological analyses are possible for the interaction of initial consonant mutation and vowel-initial words, but for the present purposes, finer-grained distinctions in vowel quality beyond the broad/slender split mentioned above are unnecessary.

In Stewart (2004a), I sought to highlight the uneasy territorial battle over the form and distribution of initial mutation patterns, reviewing the partial accounts available in the phonological and syntactic literature in

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[1] System synthesized and adapted from those given in Bauer (2011), Bosch (2010), Gillies (1993), and Watson (2010).
[2] Before sonorants: vowels, <l, n, r>.
[3] Before obstruents: <p, t, g> and, surprisingly, <m> (for the special mixed phonological character of which see Rogers 1980).

particular. My intended contribution at that time was to draw attention to the morphological functions and implementation of the SG initial mutations, with the understanding that significant involvement of the Phonology-Morphology and Morphology-Syntax interfaces is required to reach a coherent account of the synchronic facts.

This article builds out from that earlier work, with a concrete proposal comprising the following assumptions:

1. There are five (5) partially parallel but ultimately uncollapsible correspondence patterns that fall under the rubric of Lenition in SG (cf. Janda 1982, Janda and Joseph 1986, 1991).
2. Synchronically, alternations with distinct diachronic sources have come to be distributed in parallel with the canonical Lenition (spirantization and/or voicing) alternants.
   a. Lenition correspondence pairings comprise relations of *substitution* (primarily), but also *deletion* <f>, *augmentation* <dh'>, and *identity* (so-called 'non-mutating initials') with respect to the corresponding Radical initial sound (cf. Bybee 1988, Köpcke 1988; see also Blevins 2006).
   b. Despite the technical meaning of the term *lenition* in phonology (i.e., 'weakening'; cf. Hock 1991, Bauer 1988), certain 'Lenited' correspondents in SG are neither articulatorily nor acoustically weaker than their Radical counterparts, and they may in fact be phonetically stronger.
3. The mutation correspondences are best represented in terms of functions, mapping from a domain of Radical-initials to a range of Lenition-initials.[4]

In what follows, I introduce the proposed Lenition sub-types with example contexts for their respective distributions. From the sub-types, I induce classes of initials that pattern together for the purposes of Lenition. A hierarchy for the sub-types is thence derived, in order to give a sense of how the prevailing convention of binding the different patterns together under a single name (i.e., Lenition) makes a degree of sense, but at the same time creates confusion (descriptively, pedagogically, computationally, typologically, etc.).

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[4] Radical-to-Nasalization pairings must be addressed separately, so as not to compose the mutation functions as if they necessarily mediated each other (see, e.g., Hannahs (2013)).

2 Lenition sub-types with example contexts for their distributions

In this section, I describe five distinct alternation patterns that are associated in SG under the rubric of initial Lenition. Although not all of the alternation patterns are standardly accepted as 'Lenition proper,' close attention to the membership and distribution of these patterns reveals that it is inaccurate and misleading to exempt certain alternations on untenable phonological or diachronic grounds. In short, if an alternation pattern distributes alongside Lenition, it is part of Lenition, with the consequence that Lenition in SG is not a unitary phenomenon.

2.1 The reference variety

The Lenition pattern that will serve as a baseline for comparison is, not coincidentally, the easiest and most systematic of the sub-patterns to identify, describe, and present (see (2) above). This is likely to be the first mutation-type learners encounter, because of its orthographic iconicity, that is, every Lenited initial that <u>can</u> show an orthographic <h> does so. Given the exemplary status of this pattern in SG, the pattern will be referred to as **LEN[base]**.

(3) The LEN[base] pattern.

ORTH	B		P		D		T		G		C		F		S[+son]		M		N		L	R
PHON	p	pʲ	pʰ	pʰʲ	t	ʤ	tʰ	ʧ	k	c	kʰ	cʰ	f	fʲ	s	ʃ	m	m	n̪̊ʏ	ɲ	ʎ	rʏ
LEN	v	vʲ	f	fʲ	ɣ	ʝ	h	ɕ	ɣ	ʝ	x	ç	Ø		h	ɕ	ṽ	ṽ	n		l	r

Initial segments for which there is no phonetic change under Lenition[base] conditions[5] include all vowels, S before obstruents (including M), broad L, and slender R. The range of morphological contexts in which this pattern appears includes the following:

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[5] In a function-based analysis, such cases would correspond to identity functions, rather than standing as exceptions or exemptions to the operation of Lenition (cf. Stewart and Stump 2007).

a. Particular combinations of inflectional categories for nouns and adjectives

(4) Genitive plural indefinite nouns
     ***bh**alach* 'of boys' (*balach* 'boy' (m.))
     ***ch**raobh* 'of trees' (*craobh* 'tree' (f.))

(5) *mòr* 'big, great':

	Masc.		Fem.	
	Sg.	Pl.	Sg.	Pl.
Direct[6]	*mòr*	*mòra*	***mh**òr*	*mòra*
Genitive	***mh**òir*	*mòra*	*mòire*	*mòra*
Oblique	*mòr*	*mòra*	***mh**òir*	*mòra*

b. Nominal expressions following 1st-, 2nd-, and 3rd (m.)-person singular possessive and possessive-prepositional determiners

(6) *mo **th**aigh* 'my house' (*taigh* 'house' (m.))
     *nad **th**aigh* 'in-your (sg.) house'
     *ga **th**aigh* 'at-his house'

c. Adjectives with **certain** (not all) intensifying adverbs

(7) *glè **fh**uar* 'very cold'
     *ro **th**rang* 'too busy'
     (cf. *cho brèagha* 'so lovely'; *uamhasach math* 'awfully good')

d. Derivation with certain prefixes

(8) ***àrd**-* 'high':
     *àrd-**bh**reitheamh* 'chief justice' (*breithamh* 'judge, umpire')
     *àrd-**sh**agart* 'high priest' (*sagart* 'priest')
     ***neo**-* 'un-':
     *neo-**ch**ronail* 'harmless' (*cronail* 'offensive, hurtful')
     *neo-**fh**urasda* 'difficult, tough' (*furasda* 'easy')
     *neo-**sh**alach* 'unpolluted' (*salach* 'dirty, foul')

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[6] Alternate case names (Stewart 2004a; but cf. Stewart and Joseph 2009).

2.2 'N protects D and T from Lenition'

The second Lenition sub-type is very similar to LEN[base], with the exception of the coronal stops. For this reason, the pattern is here called **LEN[-DT]**. This pattern shows a stronger phonological sensitivity than other Lenition patterns in SG, namely that the coronals do not show Lenition when immediately preceded by an <n>-final word. In the same context, all the other obstruents do show Lenition, and so this pattern correlates with the somewhat imprecise yet nevertheless memorable pedagogical slogan, 'N protects D and T from Lenition.'

(9)   The LEN[-DT] pattern.

Orth	B		P		G				F		S[+son]		M		N		L	R
Phon	p	pʲ	pʰ	pʰʲ	k	c	kʰ	cʰ	f	fʲ	s	ʃ	m	mʲ	n̪ˠ	ɲ	ʎ	rˠ
Len	v	vʲ	f	fʲ	ɣ	ʝ	x	ç	Ø		h	ɕ	ṽ	ṽʲ	n		l	r

A small number of so-called 'Lenition triggers' that happen to end in /n/ correlate with this pattern, e.g., the preposition *gun* 'without':

(10)   *gun duine* 'without (a) man'
        *gun **ch**ù* 'without (a) dog'

Mark (2004) sees this as a dying pattern in practice:

> '…this old rule is…not always strictly obeyed. For example, *mòran daoine* ['many men'] and *is urrainn domh* ['I am able'] are now more commonly *mòran **dh**aoine* and *is urrainn **dh**omh*.' (Mark 2004: 686; emphasis added)

2.3 Breaking off a fossil from the earlier definite article

The **LEN[tʃ]** pattern differs from LEN[base] only with respect to the Lenited alternant for s+[son]-initial nominal expressions. This particular alternation is not traditionally counted as Lenition on the formal criterion that on purely phonological grounds, Lenition 'rightly' includes only relative weakening with respect to Radical initials. The stop and affricate correspondents /t, tʃ/,

however, require tighter constriction and engender higher air compression than their fricative Radical counterparts /s/ and /ʃ/, respectively. On distributional grounds, it is clear that this correspondence occurs alongside the same Lenition correspondences in contexts that otherwise correlate with Lenition in the other mutating initials.

(11)   The LEN[tS] pattern.

ORTH	B		P		D		T		G		C		F		S[+son]		M		N		L	R
PHON	p	p$_j$	p$_h$	p$_{hj}$	t	ʤ	t$_h$	tʃ	k	c	k$_h$	c$_h$	f	f$_j$	s	ʃ	m	m$_j$	n̥$_ɣ$	ɲ	ʎ	r$_ɣ$
LEN	v	v$_j$	f	f^j	ɣ	ɟ	h	ɕ	ɣ	ɟ	x	ç	Ø		t$_h$	tʃ	ṽ	ṽ$_j$	n		l	r

The LEN[tS] pattern is observed in the genitive and oblique singular of definite masculine nominals and the direct and oblique case forms of singular definite feminine nominals:

(12)   *ainm an **t**-seòladair* /ʧoːl̪ateɾ̥/ 'the name of the sailor' (m.)
*anns an **t**-srath* /t̺ɾa/ 'in the valley' (m.)
*an **t**-sùil* /tuːʎ/ 'the eye' (f.)
*air an **t**-sròin* /t̺ɾoːɲ/ 'on the nose' (f.)

Note that the orthographic rendering of the correspondences in question has diachronic legitimacy in the earlier shape of the definite article (i.e. *ind-*), but it is synchronically misleading. At the phonological level this is not an augmentation–it is a substitution by /t, ʧ/ (cf. the orthographic clusters used to represent eclipsis mutation of consonants in Irish).

'Nominal' is more accurate here than 'noun' because the locus for this shape alternation is the left edge of so-called N-bar (**N'**; i.e., the noun phrase minus any determiner). In a typologically head-initial language like SG, the first word in N' usually <u>is</u> the head N. When it is not, however, Lenition –the LEN[tS] sub-pattern in particular– is nevertheless required at the **left edge of N'**:

(13)   *an **t**-seann* /ʧaʊn̪/ *duthaich* 'the old country' (f.)

2.4 Onsets for everyone!

The pattern which has the broadest effect on initials in SG is the pattern that I term **LEN[dh'V]**, in acknowledgement of the augmentation that appears on phonologically vowel-initial forms, which includes both words beginning with an orthographic vowel and those beginning with <f> followed by a vowel. Whereas <f> generally is phonetically null under Lenition, in LEN[dh'V] contexts this nullification effectively promotes the second sound of the word to initial position. Thus, in words that begin with <f>+[vowel] in their Radical shape, the same <dh'> augmentation is used to bring the now-initial vowel into line with the general vowel-initial pattern.

(14) The LEN[dh'V] pattern.

ORTH	B			P		D		T		G		C		F			S[+son]		M		N		L	R	Vowel	
																									broad	slender
PHON	p	pʲ	pʰ	pʰʲ	t	ʤ	tʰ	ʧ	k	c	kʰ	cʰ	f	fʲ	fC	s	ʃ	m	mʲ	n̪ʲ	ɲ	ʎ	rʲ	rʲ		
LEN	v	vʲ	f	fʲ	ɣ	ʝ	h	ɕ	ɣ	ʝ	x	ç	ɣ	ʝ	Ø	h	ɕ	ṽ	ṽʲ	n	l	r	ɣ +	ʝ +		

Many SG verb forms use a stem which follows the LEN[dh'V] pattern.

(15) *fàg* 'leave' (compare *freagairt* 'answer'), *cluich* 'play', *buail* 'strike, hit', *snàmh* 'swim', *tog* 'lift, build', *òl* 'drink'

		Past	Conditional	Relative Fut.	Past Passive	Cond. Passive
'F'	+V	*dh'fhàg*	*dh'fhàgadh*	*dh'fhàgas*	*dh'fhàgadh*	*dh'fhàgte*
	+C	*fhreagair*	*fhreagradh*	*fhreagras*	*fhreagradh*	*fhreagairte*
Velars		*chluich*	*chluicheadh*	*chluicheas*	*chluicheadh*	*chluichte*
Labials		*bhuail*	*bhuaileadh*	*bhuaileas*	*bhuaileadh*	*bhuailte*
s+[son]		*shnàmh*	*shnàmhadh*	*shnàmhas*	*shnàmhadh*	*shnàmhte*
Dentals		*thog*	*thogadh*	*thogas*	*thogadh*	*thogte*
Vowels		*dh'òl*	*dh'òladh*	*dh'òlas*	*dh'òladh*	*dh'òlte*

Note that the Conditional and the Past Passive are systematically syncretic in the second and third persons, but can be distinguished in the first person (sg. and pl.), where only the Conditional shows special endings (-*ainn* and -*amaid*) and subject pro-drop.

2.5   The pattern that almost isn't

The fifth and final sub-type of Lenition is perhaps easy to miss because the only initial that participates is <f>, and only if the <f> is immediately followed by a vowel. I propose **LEN[FV]** as the most suitable name for this sub-type.

(16)   The LEN[FV] pattern.

ORTH	$F_{[+vowel]}$	
PHON	f	fʲ
LEN	Ø	

This pattern is observed in verbal constructions with *nach* (the negative subordinator/interrogative marker), but <u>only</u> in the future and conditional, and furthermore <u>only</u> with verbs that begin with <f> followed by a vowel:

(17)   *Nach **fh**uirich thu?* 'Won't you stay?'
        *nach **fh**ág iad* 'that they won't leave'

        Compare:
            Nach buail thu e? 'Won't you strike him?'
            nach gabh mi òran 'that I won't sing' (lit. 'take (a) song')

        and especially
            Nach freagair thu? 'Won't you answer?

Mark (2006: 220) states that this 'traditional' Lenition of /f/ only with *nach* in the future and conditional is often ignored, resulting in categorical non-Lenition after *nach*, and thus a dying out of this marginal pattern.

Although not generally mentioned in this context, the comparative marker *nas* and the superlative marker *as* correlate with initial Lenition of <f>-initial adjectives, and only these.

(18)   *nas fheàrr* 'better'   *as fhasa* 'easiest'
   *nas fhaide* 'longer'   *as fhuaire* 'coldest'

Although *fheàrr* is fully **suppletive** (i.e., based on a different root) with respect to *math* 'good', the other three forms listed here are closer to their respective roots: *furasda*, *fada*, and *fuar*. The appearance of LEN[FV] in these cases is therefore not dismissible as mere 'irregular' behavior.

3   Classes of initials that pattern together for the purposes of Lenition

Mark's (2006:263) proposed classification of orthographic initials with respect to Lenition in Scottish Gaelic – shown in (19) – is at odds with the multiple Lenition patterns identified above.

(19)   Venn diagram representation of SG initial segments for Lenition (Mark 2006).
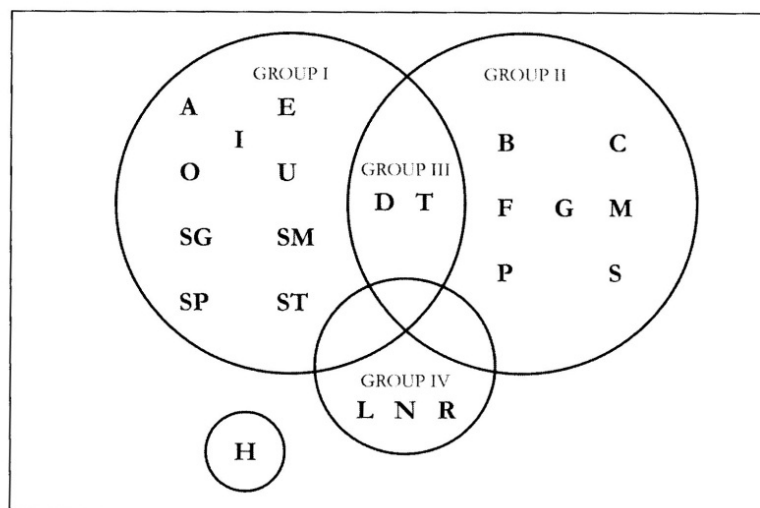
I interpret the significance of the groups as follows:

- Group I: immune to Lenition;

- Group II: subject to Lenition-as-weakening (stop-to-fricative, <s>-to-/h/, <f>-to-zero);
- Group III: patterns with Group I after /n/, but with Group II otherwise;
- Group IV: no orthographically-marked Lenition (dialects may vary at the level of pronunciation); and
- <h>: none of the above.

While this accords with the patterns seen in LEN[base] and LEN[-DT], the other Lenition sub-types described in the previous section imply the need for a more articulated hierarchy:

- LEN[dh'V] forces the bifurcation of Group I into the vowels, which participate, and the s+[obs] clusters, which do not;
- LEN[FV] requires the extraction of <f> from Group II;
- LEN[tS] implies that folding s+[son] into Group II is an oversimplification; and
- <h> is not a native <u>initial</u> grapheme, and thus is more properly exempted from the Lenition system description altogether.

This realignment of the classification of initials results in eight classes, rather than four, as rendered in (20) below.

(20) Initial segment classification system, as motivated by the five Lenition sub-types.
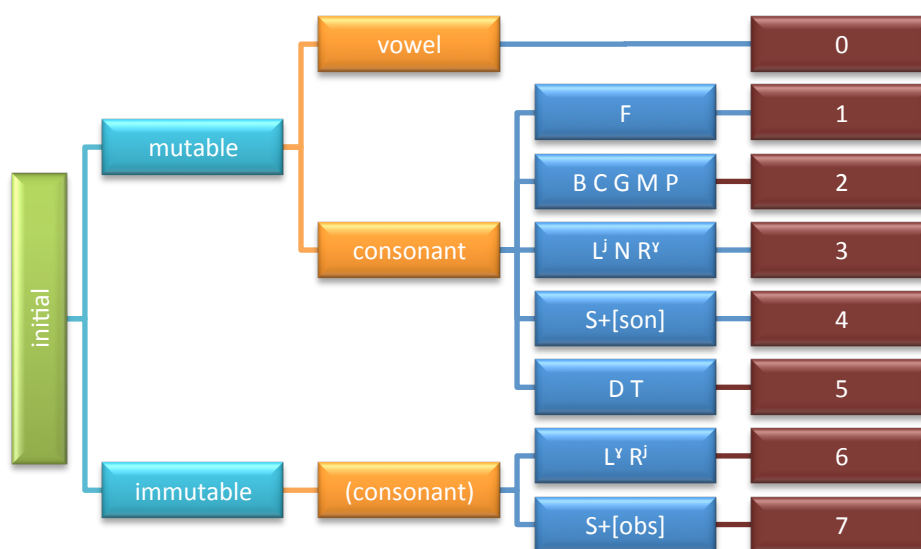
4 Hierarchy for the Lenition sub-types

Table (21) compiles the Lenition sub-types previously identified, arranging them so as to highlight the hierarchical progression of participation of initial segments in each pattern. Colored cells are those that show systematic initial distinctions that pattern distributionally (if not phonologically) together with the more conventional Lenition alternations of fricative substitutions and the deletion of /f/. The separate row beneath the table indicates the initial classes as outlined in (20) above which participate in each sub-type of Lenition.

Two issues which should not be allowed to detract from the fundamental point of the present analysis are namely (a) that the precise facts concerning L, N, and R phonemic contrasts and alternations vary widely across the dialects of Gaelic: from a reported fourth N-phoneme in at least some varieties of Lewis Gaelic to a reported categorical non-participation of these sounds in Lenition in East Sutherland Gaelic (surveyed in Watson 2010), and (b) that there exists a theoretical debate as to the status, or even existence, of palatalized labial phonemes (Bosch 2010; MacAulay 1966). In the former case, a different distribution of the sonorant consonant phonemes could necessitate a minor realignment to the classification of initials in (20) above, but would result in no new Lenition sub-types beyond the five described here. In the latter case, there would be no adjustment necessary in (20) since the impact would be internal to the graphemes in class 3, and the phonemic array in (21) below would merely be simplified by the removal of the rows corresponding to the palatalized labial phonemes, again with no additional Lenition sub-types needed. Thus, the analysis put forward here would seem to be readily adjustable as a format for describing the particularities of any Gaelic dialect.

(21) The hierarchy of participation and alternants for initials in the Lenition sub-types.

ORTH	PHON	LEN[FV]	LEN[tS]	LEN[-DT]	LEN[base]	LEN[dh'V]
(Vowel)	*[broad]*	V	V	V	V	ɣ+
	[slender]					j̇+
F	f	Ø[-cons] / f[+cons]	Ø	Ø	Ø	ɣ[-cons] / Ø[+cons]
	fʲ	Ø[-cons] / f[+cons]	Ø	Ø	Ø	j̇[-cons] / Ø[+cons]
B	p	p	p	v	v	v
	pʲ	pʲ	pʲ	vʲ	vʲ	vʲ
P	pʰ	pʰ	pʰ	f	f	f
	pʰʲ	pʰʲ	pʰʲ	fʲ	fʲ	fʲ
G	k	k	k	ɣ	ɣ	ɣ
	c	c	c	j̇	j̇	j̇
C	kʰ	kʰ	kʰ	x	x	x
	cʰ	cʰ	cʰ	ç	ç	ç
M	m	m	m	ṽ	ṽ	ṽ
	mʲ	mʲ	mʲ	ṽʲ	ṽʲ	ṽʲ
L	ɫ̪	ɫ̪	ɫ̪	ɫ̪	ɫ̪	ɫ̪
	ʎ	ʎ	ʎ	l	l	l
N	n̪ˠ	n̪ˠ	n̪ˠ	n	n	n
	ɲ	ɲ	ɲ			
R	rˠ	rˠ	rˠ	r	r	r
	ɾ̥	ɾ̥	ɾ̥	ɾ̥	ɾ̥	ɾ̥
S	s	s	s	tʰ[+son] / s[-son]	h[+son] / s[-son]	h[+son] / s[-son]	h[+son] / s[-son]
	ʃ	ʃ	ʃ	tʃ[+son] / ʃ[-son]	ç[+son] / ʃ[-son]	ç[+son] / ʃ[-son]	ç[+son] / ʃ[-son]
D	t	t	t	t	ɣ	ɣ
	ʤ	ʤ	ʤ	ʤ	j̇	j̇
T	tʰ	tʰ	tʰ	tʰ	h	h
	tʃ	tʃ	tʃ	tʃ	ç	ç

Alternating classes	1	1, 2, 3, 4*	1, 2, 3, 4	1, 2, 3, 4, 5	0, 1, 2, 3, 4, 5

4 = Class 4 (*S+[son]*) again patterns with other Leniting classes, but shows a distinct, stopped alternant.*

It is hoped that the above assembly of patterns that fall under the rubric of Lenition in SG demonstrates that while on the one hand there is sufficient similarity across the columns that one can speak of Lenition as a feature of the language, there is considerable variety in both the internal 'population' of the columns and the respective distributions of the different Lenition sub-types that it may in fact be counterproductive to speak too lightly of Lenition as if it were a single phenomenon.

5   Conclusions

What emerges from this approach is an explicit statement of form correlated with distribution, both dimensions of which are complex (yet quite finite) systems. In this description, similar but not identical patterns of correspondences are used in multiple morphological capacities (Zwicky 1987), instantiated physically in derived lexemes, inflected forms of lexemes, and shapes of inflected forms from multiple grammatical categories (Stewart 2004a).

Whatever the size of the units of structure involved, a treatment in terms of *constructions* – i.e., conventional pairings of form and meaning – make clearer generalizations than are possible when phonology, morphology, and syntax work separately on the portions of the phenomenon that they find convenient. It is no doubt tempting to section off a well-behaved slice of initial mutation, and the literature is replete with many such parochial descriptions, but it is only from a fine-grained, 'full-disclosure' statement that we can:

1. design **teaching materials** that are not oversimplified, structurally fragmented, or, from the learner's perspective, inconsistent, incoherent, or otherwise bewildering (Stewart 2004b);
2. create computational **parsers and translators** that give (more) accurate results at a detailed level (Scannell 2006);
3. account for the **regularity and productivity** of the mutations – marking-systems that would seem to be otherwise cognitively and structurally disfavored and prime targets for elimination through analogical leveling and/or replacement by affixes (e.g., Natural Morphology); and

4. gain insight into **possible synchronic states** and **diachronic trajectories** for morphologized sound-structural phenomena (Maiden 1992; Dorian 1977).

The first steps in moving from the empirically inadequate picture of Lenition in Scottish Gaelic as a language-specific (or Celtic language-family-specific) quirk consist in decomposing the false unity that the single name 'Lenition' implies, and in refusing to take the name itself in its literal phonological sense of 'weakening'. The provisional names that I have given to the five distinct patterns that make up the family of Lenition sub-types are intended to decouple the patterns from such untenable expectations. The *ad hoc* superscripts are mnemonic aids, but the status of the sub-type distinctions in the synchronic grammar of modern Scottish Gaelic is purely morphological. The Lenition sub-types are invoked as nothing other than the formal markers of certain (families of) morphological constructions.

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