Vocalisation in Three English Dialects[1]

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1. Introduction

This paper presents the phenomena known as L-Vocalisation and Sandhi L in English. The first phenomenon leads to the loss of the contact between the tongue and the alveolar ridge, thus it turns the lateral into a vowel. Therefore it affects the vowel system, leading to the appearance of new sound sequences and to the neutralisation between some sequences. The second phenomenon is an /l/ sound that is inserted morpheme finally if the next morpheme begins with a vowel. Thus it affects the consonant system and the distribution of /l/, leading to an identical pronunciation of *paw is* and *Paul is* in certain dialects. These changes seem to affect several varieties of English at the same time, for example Cockney and London English, certain areas of England, such as the Fenns, and the Cambridge area, and Scotland.[2] They appear in certain dialects of American English such as the Pennsylvanian and the Southern accents. In the southern hemisphere they can be found in New Zeeland and Australian English. As can be seen from this list L-vocalisation and Sandhi L can be found in a variety of English dialects. However, these dialects have developed independently from each other since the middle of the 19th century (Britain and Johnson 2007:302), but the environment in which L Vocalisation can be found is the same in each of these dialects, namely it appears before consonants, with the exception of /j/, and before a pause.

In this paper I am going to compare and contrast the presence and the effects of L-Vocalisation and L Sandhi in Cockney, Cambridge, and Pennsylvania speech. First I will present L-Darkening, which is the necessary prerequisite for L-Vocalisation, its environment, and possible formalisations of the L-Darkening rule. Then I will move on to the analysis of L-Vocalisation in these dialects, and present its effect on the vowel-inventory of the English dialect in question. In the next section I will analyse L-Insertion in the same dialects, and I

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[2] Bristol L, however, is not a sandhi /l /, but an ephentetic one, because it is always inserted word finally after certain sounds (Wells 1982: 344).

will examine if it is a Sandhi Phenomenon, or an L-Clearing rule. In the last section I will present my conclusions.

1.1 Dark L: The prerequisite of L-Vocalisation

In terms of articulatory phonetics Dark L [ɫ] is a velarised sound, made by a contact between the tip of the tongue and the alveolar ridge and by the back of the tongue being raised towards the soft palate (Cruttenden 2001: 203). Therefore the difference between Clear L and Dark L lies in the position of the back of the tongue, which is not raised during the articulation of Clear L. Phonologically speaking, in certain dialects of English, for example in General American and Standard Scottish English, there is no distinction between Clear L and Dark L, because Dark L occurs in all positions (Cruttenden 2001: 204). However, in RP and in Cockney, both Clear and Dark L are present. When /l / is morpheme final, there is an alternation between the two because the underlying /l / can be realised both as a [l] or as [ɫ]. The rule is formulated by Wells as follows (Wells 1982: 258):

$$(1) \qquad . \, l \rightarrow ɫ \, / \, \_ \, \{ \, \| , \#_0 \, C \, \}$$

This rule is post-lexical (or structure independent), that is to say it is not affected by word boundaries, therefore there may or may not be a strong boundary between the Dark L and the following consonant. It also has to be noted that if the following consonant is /j /, the sound remains clear (Wells 1982: 258, Cruttenden 2001: 201). However, that /j / patterns with the vowels does not change the fact that in RP Clear L and Dark L are in complementary distribution, and the L-Darkening rule is a low-level allophonic rule. However, in London dialectal speech, in Estuary English, and lately in RP, Dark L can become a vowel, and when it does it has an influence on the distribution of /l / and on the distribution of the vowels as well.

1.1.1 Dark L defined in Terms of the Syllable Structure

The L-Darkening rule presented by Wells can be generalised, and formulated in terms of syllable structure. The phoneme /l /, as a lateral, has a high degree of sonority "and it is followed only by approximants and vowels on the sonority scale" (Giegerich 1992: 133). The environment of L-Darkening shows that /l / becomes dark when the following sound is either less sonorous3 than /l /or there is no following sound. Both cases lead to a sound sequence

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[3]Gimson presents an alternative sonority scale, in which approximants are presented as less sonorous than laterals.[Gimson 2001: 49] However, he also notes that this is "somewhat awkward" because /j

with a falling sonority, therefore, /l/ will be in the rhyme of the syllable, not in the onset. Therefore, the L-Darkening rule can state that /l / is dark when it is in the rhyme of the syllable (Britain, Wyn, 2007: 295). This rule could offer an explanation for the fact that /j / patterns with the vowels and not with the consonants, and it does not treat it as an exception to the rule. However, /w / is also more sonorous than /l / and it patterns with the consonants, therefore an additional rule is needed that excludes */lw/ from the possible onsets.

In the syllable rhyme /l / can occupy two positions. When it is preceded by a less sonorous sound, it constitutes a sonority peak, and therefore it is in the nucleus of a syllable. Examples are *middle, metal, sickle* and *people.4* When it is preceded by a more sonorous sound, namely a vowel /l / it is in the coda. (The sequence /Vjl / does not seem to exist in English, and phonologically the sounds /eɪ ɔɪ aɪ/ are analysed as diphthongs not as a sequence of a vowel and yod.) Examples are *milk, feel, call, wild,* and *cold.*

Dark L tends to be vocalised in both positions. However, when it is followed by a consonant in the same word, the vocalisation is straightforward and the /l / is unrecoverable. Once the pronunciation of *milk* has become /mɪɤk/, because the Coda L has been vocalised, as it happened in Cockney, there will be no environment that could make this vowel turn into the lateral again. However, when /l / is morpheme final, as for example in *peeled* and *peeling* in which the /l /can be realised as [piːɫd] [piːɤd] or [piːlɪŋ] because its clearness depends on the first sound of the following morpheme. In this environment a clear /l / appears; however, this can be analysed as an L-Clearing or an L-Insertion rule.

1.2 Vocalised L as a phoneme

In order for the vocalised /l / to be treated as a phoneme the change should become unrecoverable. This is already the case for vocalised l in the _C environment, as words such as *milk* cannot show alternation, but word-final vocalised /l / ought to become a word-level rule, and the rule ought to be reformulated as follows:

(2) l → ɫ /_ {C, #}

(3) ɫ → ɤ / _{C, #}

That is to say, it would be irrelevant for a word-final /l / what follows it, a consonant or a vowel, and *bell* would be pronounced as [bɛɤ] both in the phrase *bell is* and *bell was.*

/and /w/ are short versions of closed front and closed back vowels respectively.

[4]According to the Longman Dictionary of Pronunciation a schwa *can be* inserted before the /l /.

However, this is not the case in any of the three English dialects that I examine, because an /l /is always present if the following word begins with a vowel. However, if *bell is* is pronounced as [bɛl ɪz], /l / has to be analysed as an L-Clearing rule, but if it is pronounced as [bɛɤl ɪz], that is to say, both the vowel and the consonant are present, the Clear L has to be analysed as a Linking L, and [ɛɤ] as a diphthong. If this process of Linking L is further generalised, then an Intrusive L can appear at the end of those words whose word-final vowel is the same as those resulting from L-Vocalisation. 5

Although real-life examples do not show such clear-cut and simple stages of this process, I believe that the three dialects I examine reflect different stages. Namely, in the London dialect it is at the first stage, when it is a structure independent allophonic rule, although certain traces of phonemicisation and structure dependence can be found. In the Cambridge dialect, there is indirect evidence for that there is a Linking L in the _#V environment, and in Pennsylvania, Intrusive L appears.

2. L-Vocalisation in London English

Dark L is frequently vocalised in the London dialect, both in broad Cockney, and in the dialect that is called Popular London, which is closer to RP. It is also important to note that RP has its roots in the London dialect, and it is influenced by London speech. Therefore it is not surprising that whereas in 1982 Wells wrote that "L-Vocalisation is Near-RP or Non-RP" (Wells 1982: 295), in 1994 he claimed that this statement might be in the need of a revision, because Dark L is frequently vocalised by speakers of RP (Wells 1994: 3). In 2000 he goes even further, and suggests that teachers of English as a foreign language, although they teach RP, should accept a vocoid in place of Dark L (Wells 2000).

Phonetically, this vocoid is described as a usually rounded [o] or [ʊ] or rarely unrounded [ɤ] (Wells 1982: 313) or as a centralised [ö] (Cruttenden 2001: 203). Phonologically, this vowel is expected to appear in the same environment as Dark L, namely in the nucleus and in the coda. However, Vocalised L seems to be extended to pre-vocalic environments in the case of a word-final Dark L. Moreover, the vocalisation of a Coda L also affects the preceding vowel, and its influence is not always recoverable. These two changes in the London dialect might lead to the phonemicisation of the vocalised Dark L.

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[5] A similar idea is presented by Brian Gick in his article *The American Intrusive L* (2002), but I do not entirely agree with that vocalised /l/ has to merge with another vowel of the vowel system in order to be reinterpreted as a vowel.

2.1 Pre-vocalic L-Vocalisation

The pronunciation of a world-final /l / is determined by the following sound. However, word-final /l/ can remain dark or syllabic, even when the following word begins with a vowel, or a suffix beginning with a vowel is attached to it. (Cruttenden 2001: 203). Therefore, vocalisation is possible in the _#V environment. Wells also notes-that both Syllabic and Coda L might be vocalised in a prevocalic environment, and the examples *fall off* and *see people off* are given. (Wells 1982: 313) Altendorf and Watt also note this phenomenon and give the examples *roll up* and *peel it* (Altendorf and Watt 2008: 212). The reason for the vocalisation of a word-final Syllabic L or non-syllabic Dark L might be a glottal stop that intervenes when the following word begins with a stressed syllable. However, an intervening glottal stop does not make L-Darkening obligatory, but it only increases the likelihood of L-Darkening, and thus that of L-Vocalisation. (Cruttenden 2001: 203). Moreover, the absence of a glottal stop does not prohibit L-Vocalisation, as it can be seen from *peel it,* because *it* as a function word is never stressed. According to Wells, the syllabic status of a Dark L also increases the possibility of L-Vocalisation in a pre-vocalic environment (Wells 1982: 313), and Syllabic L is usually vocalised in the London dialect, for example *medal is* is more likely to be pronounced with a vocalised /l/ as ['mɛdɤ ɪz]than *kill Andy* as ['kɪɤ 'ændi]. The consonant preceding Syllabic L also affects the likelihood of L-Vocalisation in the dialect that Cruttenden calls London Regional RP. In this variation, if the articulation of the preceding consonant involves a labial gesture, L-Vocalisation is more likely (Cruttenden 2001: 203), so *people* [piːpɤ] and *nibble* [nɪbɤ] are more likely to have a vocalised /l/ than *metal* or *bottle.*

2.2 The effect of L-Vocalisation on the Vowel Inventory

The vocalisation of Coda L has an effect on the vowel inventory of London English, because it can alter every vowel after which it can appear. (Dark L cannot appear after the happY vowel, which is by definition word-final or prevocalic, and after broken tense vowels.) Vocalised /l/ turns monophthongs to diphthongs, and diphthongs to triphthongs or to the sequence of two vowels with a hiatus. For example *milk* turns from [mɪłk] to [mɪɤk], and *wild* becomes [waɪəd] from [waɪłd]. The only exception is the sound /ɔː/, as /l/ is absorbed, if the preceding vowels is the THOUGHT vowel /ɔː/ or /oː/ (Wells 1982:315). So *fall* is pronounced as [fɔː], *call* as [kɔː], and *small* as [smɔː]. L-Vocalisation leads to a split in the GOAT words, and merges several of the vowels. However, when L-Vocalisation is word-final, it alternates with Clear L more often than not, therefore they suggest that Vocalised L is not a phoneme in the London dialect, but it is an allophonic alternant.

L-Vocalisation in pre-consonantal environment can lead to the emergence of a new diphthong in the London dialect. Because Dark L or Vocalised L cannot alternate with Clear L if it is followed by a consonant in the same morpheme. It can be said that the underlying form of *milk* and *belt* is /mɪɤk/ and /bɛɤt/. Thus a split occurs in the set of KIT and DRESS words. However, /l / is not vocalised in all possible environments. For example *field* in London is pronounced as [fɪəɫd] and not as *[fɪɤd]. Also, when the preceding vowel is /oː/, there is no diphthongisation, but the /l/ seems to be entirely absorbed in it, therefore *sought* and *salt* become homophones.

However, even when morpheme-final L is vocalised in the _#C environment, /l/ is almost always recoverable in the _#V environment. Therefore the presence of an underlying /l/ can be argued for in all the cases, except when the preceding vowel is [ʌʊ], the GOAT vowel of London. Vocalised L also merges [ɪ] and [ɪi] to [ɪɤ], making *fill* and *feel* homophones; [ʊ] and [ʉ] to [ʊɤ], making *pull* and *pool* homophones and several others.[6] (Wells 1982: 315). However, these words are not homophones when they are followed by a vowel, as for example in their -ing form, so *fill* and *feel* are both pronounced as [fɪɤ] but *filling* is [fɪlɪŋ] and *feeling* is [fiːlɪŋ]. Therefore these monophthongs and diphthongs are in a complementary distribution and their distribution depends on the pronunciation of the following /l/. If the /l/ is vocalised the vowel is a diphthong, but if the /l/ is not vocalised it is a monophthong. As Clear L and Vocalised L are in complementary distribution, so are the vowels. Therefore they have to be treated as allophonic alternants. This can be summarised as a set of feeding rules, as it is done in *Table 1*.

	Environment	
	_ { $\parallel$, $\#_0$ C }	Elsewhere
L-Darkening	[l] → ɫ *feel* [fiːɫ] vs *fill* [fɪɫ]	–
L-Vocalisation	ɫ → ɤ *feel* [fiːɤ] vs *fill* [fɪɤ]	–
Effect on the preceding vowel	Mergers *feel*[fɪɤ] vs *fill* [fɪɤ]	–

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[6]It would be nice to state that the merged pairs form a natural class, and the resulting vowel is the result of a ɤ-insertion and a pre-ɤ laxing, however this is not always a case, as for example /ʌ/ becomes [ɒ] if it is followed by a Vocalised L. For example *bulb* becomes [bɒʊb] from [bʌɫb](Wells 1982: 315).

Table 1: Effect of L-Vocalisation on the Preceding Vowel

Word-final vocalised L is absorbed in the preceding [oː], although the vowel quality shows the presence of an underlying consonant. As the THOUGHT vowel in London is pronounced as [oʊ] or [oː] if it is followed by a consonant in the same morpheme, and it is pronounced as [ɔə] elsewhere. Therefore *pause* and *paused* are pronounced as [poːz] and [poːzd], and *pour* and *pour#ed* as [pɔə] and [pɔəd](Wells 1982: 311). The name *Paul* and its genitive, *Paul's* is also pronounced as [poː] and [poːz]. Although the /l/ is vocalised, it has to be present underlyingly, because the vowel is realised as [oː], and therefore it patterns with the words ending in consonants. Therefore, the name *Paul* has to end in a consonant. This can be summarised in the following table, although it has to be kept in mind that the L-Vocalisation rule usually results in a [ɤ], and /l / is only absorbed when the preceding vowel is [oː].

	Environment		
	pause	*bore*	*Paul*
GOAT Split	poːz	bɔə	poːl
L-Darkening	−	−	poːɫ
L-Vocalisation	−	−	poː
Result	[poːz]	[bɔə]	[poː]

Table 2: THOUGHT Split and L-Vocalisation

The only case when the L-influence is phonemicised is in the lexical set of GOAT. In London the GOAT vowel is pronounced as [ɒʊ] before a Dark L, and as [ʌʊ] everywhere else. However, verbs ending in a Dark L or a Vocalised L, and therefore pronounced with the [ɒʊ] sound in three out of their four inflectional forms in their paradigm (as for example *roll* [rɒʊɫ, rolls* [rɒʊɫz]*, rolled* [rɒʊɫd]) have been regularised, and now [ɒʊ] can be found before a Clear L, for example in *rolling* [rɒʊlɪŋ]. (Wells 1982: 312) In this case Clear L in *rolling* can be the result of an L-Clearing rule, if the Dark L is present in *roll* [rɒʊɫ] and *rolled* [rɒʊɫd]*, or of an L-Insertion rule, if the L is vocalised in *roll* [rɒʊɤ] and *rolled* [rɒʊɤd].

However, these verbs seem to be the exception, not the rule, and the result of L-Vocalisation in a word-final environment in the London dialect is allophonic variation, and not the appearance of new phonemes due to splits. As opposed to word-final vocalised /l / the diphthongs in the pre-consonantal positions can be treated as phonemes, and the distribution of /l / has changed.

3. Cambridge English

Cambridge is located in the southern part of Cambridgeshire, therefore it belongs neither to the Home Counties, nor, strictly speaking, to East Anglia, but it can be called the South Midlands dialect area (Trudgill 1997:65) or as not a core area of East Anglia, but as a "Transition Zone" (Trudgill 2008: 179), although according to Wells, parts of Cambridgeshire belong to the East Anglia dialect area. (Wells 1982: 335). This area in general, and local Cambridge speech in particular distinguishes between Clear L and Dark L; however L-Vocalisation seems to be a recent phenomenon. Wells in 1982 wrote that both Clear L and Dark L are realised as lateral consonants, (Wells 1982: 341), however, most recent sources report that L-Vocalisation is more and more common in the southern parts of East Anglia. (Trudgill 2008: 191). L-Vocalisation in Cambridge was described as a feature of connected speech by Susan Wright as early as 1988, and by Kerswill in the 1990'.

3.1 L-Vocalisation in Cambridge

In Cambridge speech Kerswill (1995: 3) analysed L-Vocalisation in the following four environments:

> A. V_C as in *called*
>
> B. V_#C as in *call Susan*
>
> C. V_V as in *calling*
>
> D. V_#V as in *call Andy*

All the examples for the environments come from Kerswill, and it has to be noted that Kerswill marks word boundaries, but does not mark word-inernal strong morpheme boundary in *called* and *calling,* which would be treated as having a morpheme boundary (*call#ing, call#*ed) by Wells. This, and the difference between the dates of publication, can complicate the comparison of the data. However, these complications aside, Kerswill found that approximately 75% percent of the participants used a Vocalised L in a pre-consonantal environment, regardless of the presence or the absence of a word-boundary (Kerswill 1990:6, 1995:4). This Vocalised L is transcribed as [o], but its effect on the vowel system, and whether it always forms a diphthong with the preceding vowel, or it can be entirely lost, are not described.

What is described is that especially young speakers do vocalise word-finally, even if the following word begins with a vowel, but do not vocalise word-medially before a vowel.

This can be taken as a sign that the rule is not post-lexical any more, therefore words such as *bell* and *call* do not show variation, and end in an underlying vowel. However, in the V_V environment, such as in *believe* variation is impossible, and therefore the number of Vocalised L's is low. To give more examples, morpheme-final /l/, as in *pile,* where alternation between Clear L (*pile of*), Dark, or Vocalised L (*pile driver*) is possible, is increasingly pronounced with a Dark or a Vocalised L regardless of what follows it. However, morpheme-medial /l/ in the _V environment, as in *pillow* and in *believe* can never show alternation, as there is no environment in which the /l/ could become dark. Therefore, these examples show that morpheme-final /l,/ which traditionally shows alternation now seems to be a Vocalised or Dark L even if the next word begins with a vowel. However, word-medial pre-vocalic /l/, which never shows alternation, is not vocalised.

The fact that in Kerswill's study *call#ing* and *call#ed* are treated as words consisting of one morpheme complicates this analysis, because if a Vocalised L is typical in *called,* and a Clear L is typical in *calling,* then there is variation, which suggests that it is still an allophonic rule, and verbs such as *call* and *kill* end in an underlying /l /. Although Kerswill reports vocalisation in the V_V environment (approximately 1%) (Kerswill 1995: 4, Kerswill 1990:5), it is not said whether it appeared in verbs ending in /l /or somewhere else, for example in *pillow.*

This complication aside, the relatively high percentage (24% (Kerswill 1990: 5) of vocalisation in the V_#V environment, the appearance of the Dark L in this environment (7%) suggests the phonemicisation of Vocalised L. Also the fact that this is done by young speakers more often than old, seems to suggest that the process is coming to completion, and Vocalised L is about to become a phoneme. (Kerswill 1990: 7)

3.2 L-Clearing or Linking L?

If once the assumption is made that words such as *bell* end in an underlying vowel, the question arises how the Clear L that appears in 67% is to be treated. The Clear L can either be explained by an L-Clearing rule, as in (4), or as a Linking L rule, as in (5):

(4)   o → l /_#V

	bell	*bell is*	*kill*	*kill it*
Underlying Representation	/bɛo/	/bɛo ɪz/	/kɪo/	/kɪo ɪt/

L-Clearing	-	[bɛlɪz]	-	[kɪlɪt]
Surface Representation	[bɛo]	[bɛl ɪz]	[kɪo]	[kɪlɪt]

Table 3: L-Clearing rule

(5)   ø → l / _#V

	bell	*bell is*	*kill*	*kill it*
Underlying Representation	/bɛo/	/bɛo ɪz/	/kɪo/	/kɪo ɪt/
Linking L	-	[bɛolɪz]	-	[kɪolɪt]
Surface Representation		[bɛolɪz]	[kɪo]	[kɪolɪt]

Table 4: Linking L rule

Rule (4) proposes an alternation between the vowel and a Clear L, and it does nothing more than reverse the original rule of L-Vocalisation, the difference being that while formerly the underlying sound was the consonant /l/, now it is the vowel /o/. The result of rule (4) is that while formerly vocalisation before a consonant was optional (*kill Susan* could be pronounced as ['kɪl 'suːzn] and ['kɪo 'suːzn] as well), now it is the liquid that is optional, and a vowel can appear before another vowel. For example *kill Andy* can be pronounced both as ['kɪo 'ændi] and as ['kɪl 'ændi]. But with this rule, the fact remains that a Vocalised L plus a Clear L cannot be present in the same word adjacently. This might seem like a contradiction to the analysis of the vocalised L as a phoneme, because it assumes that the change is recoverable. However, this rule is optional in Cambridge, and therefore it leads to free variation between [kɪo ɪt] and [kɪl ɪt], not to complementary distribution.

Rule (5), however, proposes a Linking L rule that describes an alternation between Clear L and nothing, therefore, it predicts that both a Vocalised L, and a Clear L are present in the same word, at the same time. In this case the phrase *Kill it!* would be pronounced as ['kɪol ɪt]. However, as long as there is no evidence for this pronunciation, it would be an unnecessary complication to assume that [kɪl ɪt] is underlyingly /kɪo ɪt/.

The decisive evidence for choosing between Rule (4) and Rule (5) would be the description of the vowel in in the _l#V environment. Rule (4) operates if the word *feel* in the phrase *feel uncomfortable* is pronounced as [fiːl] with only a Clear L present, and the vowel not affected by L-Vocalisation. Rule (5) on the other hand would be supported by a diphthong, and the pronunciation of *feel uncomfortable* as ['fɪol ʌn'kʌmftəbl]. In this case the

Vocalised L is present as a [o] and it is the result of the L-Vocalisation rule. The Clear L is also present and it is the result of the Linking L rule.

Unfortunately, Kerswill does not provide information on the nature of the vowel in Cambridge in these papers.[7] Regardless of the status of this Clear L, it can be observed in Cambridge speech that Vocalised L can occupy a position in which only Clear L could be found formerly. Therefore, Vocalised L is not in complementary distribution with Clear L any longer, and the choice between the two depends on the speaker, and not on the phonetic environment. Therefore, Vocalised L has to be treated as a phoneme.

4. Philadelphia and Pennsylvania

Pennsylvania is divided into two dialect areas (Wells 1982: 472, Labov 2006: 148), the western part called West Pennsylvania, and the eastern Middle Atlantic, where Philadelphia is located. According to Wells, General American is derived from Pennsylvanian speech, among others (Wells 1982: 470). In General American /l / is usually, dark, although there is a distinction between /l / before a stressed vowel, which is clearer, and /l/ before an unstressed vowel or a consonant or a word-final /l /, which is dark (Wells 1982: 490). The difference between the phonetic quality of /l / in General American and in the English dialects may cause a difference in vocalisation in these dialects. Also, the different distribution of Clear L and Dark L (or Dark L and Darker L) can cause a different distribution of Vocalised L.

4.1 L-Vocalisation and Linking L

As expected, the environment for L-Vocalisation is different from the environment for L-Vocalisation in London and Cambridge, because in Philadelphia, /l / is not only vocalised when it is word-final and post-vocalic (that is, in the coda, and not in the nucleus), but also when it is pre-vocalic (Ash 1982). This suggests that if a word-final /l / is vocalised, the L sound will be unrecoverable (because /l / is vocalised both before a vowel and before a consonant). That is, Linking L is not expected to appear, and words such as *feel* and *kill* end in an underlying vowel.

What complicates this analysis is the effect of /l / on the preceding vowel, because in Pittsburgh, and in Pennsylvania, mergers have been found before a coda L. These mergers include that of /uː/ /ʊ/ and /əʊ/ as in *pull, pool*, and *cold.* The merging of /iː/ with /ɪ / as in

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[7]Although alternation between *peel* [piːə] *peel it* [piːəl ɪt] has been reported from Reading (Kerswill 1995: 4)

steel and *still*, and of /uː / with /ʊ/ , as in *fool* and *full* are also reported from Pittsburgh (Labov 2006: 69). Unfortunately, it is unknown how this presumably allophonic variation interferes with L-Vocalisation, and whether neutralisation of these vowels can be found before a Vocalised L, or before an [l] or an [ɫ] only. [8] Therefore, it cannot be said whether pairs like *fee* and *feel* are homophones or not.

However, even if they are kept apart, the /l / is probably unrecoverable because L-Vocalisation is possible before a vowel. If it is assumed that Linking L is a necessary prerequisite for Intrusive L (see 1.3), and if in fact, there is no Linking L in the Philadelphia accent, then Intrusive L should not be found either (Gick 2002: 17).

4.2 Intrusive L

Intrusive L is reported from Pennsylvania, and described by Gick as the non-historical sandhi /l / that appears after /ɔ /, and sometimes after /a /[9] and /ə / (Gick 1999: 36).This /l / in the Mid-Atlantic dialect only appears in connected speech, when followed by a vowel, that is to say, it is a sandhi phenomenon. [Gick 2002: 178]. This sandhi L can appear word-finally, such as in *bra is,* or word-medially, such as in *drawing.* This suggests that words like *ball* and *draw* pattern together, and they both end in a vowel, when followed by a consonant or a pause, and end in /l /, when followed by a vowel. For example *call* and *draw* are pronounced as [kɔ]and [drɔ] in isolation, but *calling* and *drawing* are both pronounced with an [l] as ['kɔlɪŋ] and ['drɔlɪŋ]. Thus, for some speakers in the Mid-Atlantic dialect area, L-Vocalisation is completed, and the result has to be treated as a phoneme.

5. Conclusion

I conclude that London English, Cambridge English, and Mid-Atlantic English do reflect three different stages in the process of L-Vocalisation. In London English, it is an allophonic process, and the result of L-Vocalisation is always recoverable. In Cambridge English, /l/ is not always recoverable, and the possibility of a Linking L is present. In the Mid-Atlantic dialect the process is completed, and there is no /l / in the relevant words for some speakers. The results of the comparison of these dialects, and the set of feeding rules that lead to the differences between them are summarised in *Table 3*.

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[8] Because if neutralisations happen, even when there is L-Vocalisation, this might suggest that there is an underlying L.

[9]This is the symbol used by Gick, and the example he gives for this sound is *bra.*

	London	Cambridge	Pennsylvania
1. L-Darkening	present	present	present
2. L-Vocalisation	present	present	present
3. /l / is unrecoverable in the _# environment	rarely	often	often
4. Linking L	absent	probably present	present
5. Intrusive L	absent	absent	present

Table 5: Results

As it can be seen from *Table 3*, each step in the process is a prerequisite for the next one, and the output of each rule provides an input for the next one. The main difference between these accents lies at the third step, namely in the recoverability of morpheme-final /l/. Of course, morpheme-internal Vocalised L can never show alternation, therefore it is always unrecoverable. However, when morpheme-final /l / does not show alternation any longer, but it is vocalised, even when it is followed by a vowel in the next morpheme, it is phonemicised. London English is the only accent in which Vocalised L is recoverable in this environment, therefore it is the only accent in which it has to be treated as allophonic alternation.

Cambridge English and Pennsylvanian English differ in terms of the presence of Intrusive L. However, this is probably not the result of the difference in the phonemic status of the Vocalised L, but of the different distribution of the /r / phoneme. Although Vocalised L is phonemicised in Cambridge English, Intrusive L will probably not appear, because Vocalised L is usually realised as [ɤ] or [o]. Thus, even if Linking L follows these vowels, it will not be generalised to other words, because in these dialects there are no other words ending in [ɤ] or [o]. Moreover, the vowels similar to these, namely /ə / and /ɔ:/, trigger an Intrusive R when word-final.

The important difference between the English and the American dialects is that in England L-Vocalisation is spreading, whereas in Pennsylvania it is probably receding. This is shown by the fact that L-Vocalisation in a pre-consonantal position is becoming part of Received Pronunciation, and by that in Cambridge, young speakers vocalise more often than old speakers (Kerswill 1990: 5). Contrary to the English dialects, although in the Mid Atlantic dialect the process is completed, in Philadelphia, L-Vocalisation is receding (Ash 1982), and Intrusive L in Pennsylvania is overtly stigmatised, so much so that it is difficult to elicit data (Gick 2002:175), thus it is probably also receding.

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