

The comparison of /l/ and /r/ in Southern British English pronunciation¹

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Abstract: This paper compares the effect of coda /r/ on the previous vowel, the loss of /r/, and its behaviour in a word-final position in the 18th and 19th centuries with the effect of [ɹ] on the previous vowel and L Vocalisation, and its behaviour in a word-final position in the 20th and the 21st centuries. The difference between the liquids lies in their treatment of lax vowels: lax vowels preceding a coda /r/ underwent lowering and compensatory lengthening with R Dropping, whereas Dark L is vocalised, creating a diphthong. The similarity is that both liquids trigger schwa-insertion and are dropped in coda position if they follow a tense vowel. Both processes originated in non-standard speech, and the effect of the liquids on the preceding vowel was accepted first, and their loss only became accepted later. Therefore in a given time period, different registers show different stages of these processes.

Keywords: *historical linguistics, L Vocalisation, rhoticity, Southern British English*

1 Introduction

This paper focuses on the distribution of the liquids /l/ and /r/ in Southern English, and examines their effect on the preceding vowel. The basis of the comparison is that both sounds are unstable in the coda, and can influence the preceding vowel, either by altering its quality or by triggering schwa-insertion. However, the changes happened in different periods: R Influence of the vowels and R Dropping were changes in progress in the late 18th and early 19th centuries, whereas L-Influence of the vowels and L-Vocalisation (and L Dropping) are changes in present-day Southern English. Therefore I examine the behaviour of /r/ in 18th and 19th century sources on standard and non-standard southern pronunciation, and that of /l/ in contemporary linguistic studies on Standard Southern English, non-standard London English, and Cambridge English to look for similarities in the processes through which coda /r/ was lost, and coda (and nucleus) /l/ is being lost.

I aim to prove that the main differences lie in the influence of the liquids on the preceding vowels. Firstly, /r/ influenced tense vowels even in the onset, whereas /l/ influences the preceding vowels only if it is in the rhyme. Secondly, R Influence distinguishes between tense and lax vowels: an /r/ following a tense vowel triggers Breaking (schwa-insertion), but an /r/ following a lax vowel causes Broadening (change in the vowel quality and lengthening). Dark L also treats tense and lax vowels differently: it triggers schwa-insertion if it follows a tense vowel, but there is no evidence of schwa-insertion after lax vowels or the appearance of long monophthongs. However, [ɹ] is vocalised after lax vowels, resulting in the diphthongisation of the short lax vowel,

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therefore [ɹ] can alter the quality of both tense and lax vowels. Consequently, in the case of lax vowels, coda /r/ caused a change in their quality, was dropped and triggered compensatory lengthening, whereas coda [ɹ] is vocalised. In the case of tense vowels, both coda and onset /r/ triggered schwa-insertion and thus caused diphthongisation, but only coda /r/ was dropped, whereas only coda [ɹ] triggers schwa-insertion and diphthongisation and is dropped.

The similarity lies in the distribution of the liquids. As coda /r/ was being dropped in the 18th and 19th centuries, it gave rise to an intervocalic sandhi /r/, but there was a stage when both preconsonantal /r/, pre-vocal R Dropping, and Linking- and Intrusive R were present. Today the same can be said about the distribution of /l/: as the loss of coda /l/ increases, so does the loss of onset /l/ but to a much lesser extent (Kerswill 1990 and 1995), therefore Linking L arises, but Intrusive L is blocked by Intrusive R. Also, today the presence of vocalised /l/ is controlled by stylistic factors, just as R Dropping was in the 18th and 19th centuries.

Therefore section 2 compares the process of R Dropping and L Vocalisation, starting with their prerequisites in section 2.1, followed by an analysis whether they are cases of consonant dropping and compensatory lengthening or consonant vocalisation in section 2.3. Thirdly, their effect on the vowel inventory is presented, and lastly the difference between word-internal and word-final coda is examined in section 2.4 and 2.5. Section 3 presents the sociolinguistic perspective of the phenomena. Lastly, section 4 presents my conclusion.

2 Changes in progress

2.1 Prerequisites

Both phenomena have a prerequisite: namely before the time of R Dropping coda /r/ weakened to /ɹ/ (Cruttenden 2001, Lass 1999), and coda /l/ became dark before L Vocalisation. According to Cruttenden (2001) the weakening turned /r/ from an alveolar or post-alveolar trill to a post-alveolar approximant /ɹ/, and the trill was only used before vowels (Cruttenden 2001). Incidentally onset /r/ has also become /ɹ/ and is found as such in present day Standard Southern English, but it has to be noted that it happened in the coda first, and the approximant occurred before a consonant and word-finally. According to Lass (1999) the weakening of /r/ preceded its deletion, however, he questions that its manner of articulation was a trill, (although trilled allophones were present), so he does not describe the exact process of the weakening. Besides that, neither Cruttenden nor Lass mentions whether the rule was post-lexical, that is to say that there is no description of the quality of /r/ in connected speech, in word-final positions such as prevocally in *more apples* and preconsonantly in *more plums*.

If weakening is analysed as decomposition, and the loss of certain articulatory features, these articulatory features have to be dealt with, which is never easy for liquids. The English rhotic was articulated by the tip of the tongue that touched the upper teeth ridge (trill) before its weakening and now the tongue tip either touches the upper teeth ridge (tap) or approximates it (approximant) (Cruttenden 2001). To this primary place of articulation Lass (1999) adds two secondary places of articulation, namely a velar and a pharyngeal one that were present at the time of the weakening of coda /r/. It is interesting to note that if all the articulatory features are lost but the velar one, the

remaining sound is a back vowel, and indeed Lass (1999) does mention that /ɚ/ could be interpreted as an “allophone of /r/”. However, schwa is a central vowel, and 18th century sources such as Search (1773) and Nares (1792) describe that inserted schwa and the /r/ triggering schwa-insertion is present in the same words at the same time. That is to say *beer* was pronounced as /biə̯r/, and schwa and /r/ were not in complementary distribution.²

L Vocalisation is preceded by L Darkening, an allophonic change that affects /l/ preconsonantly and word-finally (Cruttenden 2001). Given the fact that L Darkening is a 20th century process, it is described more precisely and in more details. Therefore it is usually given that the rule is, or at least started as post-lexical. It is also known that /lj/ patterns with the vowels, due to that /lj/ is a well formed onset, and L Darkening happens in the rhyme (Britain & Johnson 2007). Therefore syllabic [l̥] that can be found in the nucleus is always dark in Southern British English. As opposed to word-final coda [l̥], word-final syllabic [l̥] does not seem to show alternation, and it is dark even if the next words begin with a consonant, as in *turtle tank* as well as when it begins with a vowel, as in *turtle aquarium*. Also syllabic [l̥] is more prone to L Vocalisation than non-syllabic Dark L (Wells 1982).

In terms of its articulatory features L Darkening cannot, but L Vocalisation can be analysed as a loss of articulatory features, that is to say it can be analysed as decomposition. Clear L first became more complex, when the alveolar /l/ was velarised, that is to say it gained a secondary place of articulation. During L Vocalisation the primary articulatory gesture is lost, and the velar gesture is retained and inherited by the vowel, thus Vocalised L is realised as a back rounded vowel. It is interesting to note that in this case both liquids have a secondary place of articulation that is velar, and if all the others are lost it is a vowel that remains in both cases.

2.2 Vocalisation of liquids

When the liquids lose their consonantal place of articulation, they are vocalised. However, the extent to which they lose their articulatory features can differ, and the remaining vowel can retain some features of the liquid. The loss of /r/ is analysed as vocalisation by Kijak (2010) in terms of Element Theory and Strict CV phonology. He argues that vocalised /r/ is either realised as /ɚ/ or it was completely lost but triggered compensatory lengthening. He argues that /r/ spread from an Onset position to the preceding Nucleus position, and later lost all of its articulatory features and the preceding vowel could spread to its place, if the preceding vowel was short (or lax). Therefore the loss of /r/ caused compensatory lengthening for short and lax vowels. The qualitative change in the lax vowels, for example the lowering of the R-Influenced long /æ̯/ as in *start*, to /ɚ̯/ is explained by Lass (1999) as the lowering effect of the velar feature of /r/. According to Kijak (2010) when the preceding vowel was already long, (or tense) vocalised /r/ came to be realised as a schwa. The fact that schwa is the reflex of the historical /r/ shows that /r/ lost both of its articulatory features and nothing is retained by the vowel. The primary coronal articulatory feature was lost, and the consonant was vocalised, and the secondary velar articulatory feature was either lost,

² The exact pronunciation of the vowel that I chose to transcribe as /i̯/ can be argued to be long or short and tense or lax. However, what is important for the present purpose and that I aimed to show with the transcription is the presence of schwa and word-final /r/.

therefore the pronunciation of the vowel is the neutral, central schwa, not a back rounded vowel, or /r/ never had a velar place of articulation.

The first question that remains unanswered by Kijak's analysis is the well-known discrepancy between tense and lax vowels, namely that lax vowels are not altered by /r/ if it is in the onset, and they were lengthened, not diphthongised. Therefore there seems to be no evidence for such an intermediate stage in which /r/ is in the nucleus and the vowel is not lengthened, therefore there is no such a vowel that can be analysed as a vocalised /r/. Instead, the process can be analysed as a case of R Dropping and compensatory lengthening. The second problem is the source of schwa following a tense vowel in words in which the /r/ is in the onset, or in Kijak's terms the /r/ is not followed by an empty nucleus. For example, *hero* is pronounced as /'hɛrə/ in conservative RP. The fact that Pre-R Breaking exists in a word without R Dropping, and that the schwa-insertion before a pronounced /r/ was the standard, and r-less pronunciation was marked as the non-standard in the 18th century suggests the existence of two phenomena: that of Pre-R Breaking and R Dropping, and not that of one, R Vocalisation. Moreover, if the process is treated as an insertion of a vowel and R Dropping, it is easy to explain that schwa was inserted as a default vowel, and it is not expected to be back or rounded as it would be, if the vowel were a vocalised /r/. Therefore I argue that first a schwa was inserted before an /r/, and later only coda /r/ was lost. Although this analysis maintains a difference between tense and lax vowels, it also explains the different behaviour of these vowels, and it treats /r/ in the same manner in both cases, namely as R Dropping.

As opposed to the well-established pronunciation of R Influenced vowels in RP, the exact pronunciation of vocalised [ɹ] is subject to uncertainties. According to Cruttenden (2001) it can be realised as [o], [ɹ], rarely unrounded [ɹ] or centralised [ö]. These sounds can all be interpreted as a Vocalised L, in which the original [ɹ] sound is decomposed to different extents, and the extent of decomposition seems to distinguish them from each other. In [o] and [ɹ] both the velar and the labial gestures of [ɹ] (Cruttenden 2001) are retained, thus the vowels are back and rounded. If the vowel loses the labial gesture, it becomes [ɹ]. The question of [ö] is interesting, as it does not lose the labial gesture, but it does not retain the velar gesture to such an extent as the rest of the reflexes. However, [ö] is only centralised, but not central, and it is distinct from a schwa, therefore the common feature of these realisations is that they are all back, as it seems that they inherited and retained backness from the velar liquid. These sounds can be analysed as vocalised [ɹ] when they follow a lax vowel, as no schwa-insertion has been reported between a lax vowel and [ɹ], but [ɹ] is often realised as a vowel. Thus the vowel and the liquid do not appear in the same word at the same time, for example *milk* is either pronounced as [mɪlk] or [mɪok] but not as *[mɪoɹk].

Interestingly, just as in the case of a /r/ sequence, as in *hero*, the presence of an inserted vowel or a diphthong and a liquid in the same word at the same time can also be noted, for example in *feel* [fi:l]. Schwa-insertion is found after /i:, e:, a:/ (Cruttenden 2001) and /i:, e:, u:/ (Krämer 2008). These can be generalised as the tense vowels of English. Therefore in this case it is not possible to talk about L Vocalisation, but about Pre-L Breaking, and about L Dropping in the case of non-standard speech. The present state of words such as *feel* with a diphthong and a word-final liquid seems to be parallel to the standard pronunciation of the words ending in /r/ in the 18th and 19th centuries. Schwa-insertion with the preservation of the liquids was

and is accepted in standard speech. 18th and 19th century sources treated Pre-R Breaking as an optional, but accepted process, whereas they treated R Dropping as non-standard. Pre-L Breaking is treated as an optional but standard process, and L Dropping as a sociolinguistic variable by Wells (1982, 1990) and Kerswill (1990, 1995). Therefore it seems that in the case of tense vowels Pre-Liquid Breaking operates in the standard variety and an additional Liquid Dropping operates in the non-standard variety, whereas in the case of lax vowels there is a straightforward case of Liquid Vocalisation as there is no evidence for schwa-insertion.³

2.3 Effect on the Preceding Vowel

The behaviour of the vocalised liquids does not only interact with the preceding vowel when they show different patterns based on the tenseness or laxness of the preceding vowels, but the liquids also modify the preceding vowels. In the case of the lax vowels only /r/ had an effect on the quality of the vowels, as the lax vowels became lower due to its presence and long, due to the loss of /r/ that triggered compensatory lengthening. In contrast, L Vocalisation leads to diphthongisation of formerly short vowels, as in *kill* /kɪo/, therefore the result is also a long vowel, but a diphthong, not a monophthong, and it seems that at present some features of Dark L, namely its backness is retained, as opposed to R Dropping, where nothing was retained.

Tense vowels, however, underwent laxing in both cases. The laxing effect of Pre-R Breaking can be exemplified by the fact that the pronunciation of *fear* is /fɛr/ and not */fɛr/ or */fɛ/. The same holds for Pre-L Breaking, as *feel* is reported to be pronounced in non-standard speech as [fiɔ] or [fi] and not as *[fiɔ] and *[fi] or *[fi] and *[fi] (Data comes from Wells 1982, Kerswill 1990 and 1995). This is better analysed as a laxing process, and not as lowering, because lax vowels are not lowered when they become the first vowel of the diphthong, but are left unaffected by L Vocalisation.

The fact that lax vowels are not affected by L Vocalisation but were affected by R Dropping leads to an important difference between R Influence and L Influence on the vowel-inventory: whereas R Influence has led to splits, L Influence leads to splits and mergers. In the case of R Influence, both lax and tense vowels were split, resulting in an R Influenced and a plain variant, and as the motivating environment was lost, and the allophonic difference became phonemic, the original two phonemes became four, as it can be seen in Table 1, exemplified by lax /ɪ/ and tense /i/.

³ Gick (2002) analyses both the case of /r/ and /l/ in American English as a straightforward case of Vocalisation instead of a series of two changes, namely Pre-Liquid Breaking and Liquid Dropping. However, I maintain that a different analysis of tense and lax vowels might be argued for on the basis of my current material. However, more research is needed, especially in the case of Pre-L Breaking where it is possible to carry out acoustic and articulatory experiments.

Before R Influence	/ɪ̃/		/ĩ/	
	<i>stick, stir</i>		<i>steam, steer</i>	
After R Influence	/ɪ̃/	/ɪ̃ɪ̃/	/ĩ/	/ɪ̃ɪ̃/
	<i>stick</i>	<i>stir</i>	<i>steam</i>	<i>steer</i>

Table 1: R Influence

In case of L Influence, tense and lax vowels were split into L Influenced and plain vowels in the non-standard variety, however, the realisations of the L Influenced lax vowels and tense vowels are the same, because lax vowels are not affected by L Vocalisation, but tense vowels become lax due to L Influence. The result is a three way opposition between *fit*, *feel/fill* and *feet* in non-standard London English, created by a split and a merger, as it can be seen in Table 2, exemplified by lax /ɪ̃/ and tense /ĩ/. (The data comes from Wells 1982.)

Before L Influence	/ɪ̃/		/ĩ/	
	<i>fit, fill</i>		<i>feel, feet</i>	
After L influence	/ɪ̃/	/ɪ̃o/	/ĩ/	
	<i>fit</i>	<i>fill, feel</i>	<i>feet</i>	

Table 2: L Influence

Yet another important difference between the forms shown in Table 1 and Table 2 is that R Influence and R Dropping happened in the 19th century, and its results are phonemes of Standard British English, and the plain vowels are not recoverable.⁴ Therefore *start* is always pronounced as /stɪ̃ɪ̃t/, and there is no variation between /stɪ̃ɪ̃t/ and */stæɪ̃t/ or */stɪ̃ɪ̃t/ in Southern British English, be it standard or non-standard. Although word-final /r/ appears as a linking phenomenon, as in *starry* /'stɪ̃ɪ̃rɪ̃/, the vowel still remains long and low. Therefore R Influence is a historical process whose effect is always seen in the words that historically contained an /r/ in the relevant position, however, it is not active in today's Southern British English. Although loanwords are influenced by Breaking or Broadening and R-Dropping, these rules do not lead to positional variations in the vowel quality, and the first two operates at a lexical level only. This cannot be said of L Influence, as it is a change in progress in contemporary Southern British English. The resulting vowels appear to be allophonic as they tend to show variation and complementary distribution, as the vowels of *feel* [fĩo] and *feeling* [fĩɪ̃ɪ̃] differ due to the fact that only Dark L can be vocalised, and Dark L is an allophone of Clear L. Although vocalisation in a prevocalic environment has been reported (Kerswill 1990, 1995), for the time being L Influence can be called post-lexical in the non-standard accents of English covered here.

⁴ Some of them are already being lost due to the smoothing of diphthongs and triphthongs to monophthongs (Upton 2008).

2.4 Recoverable and Non-recoverable Loss of the Liquids

Liquids have a tendency to be dropped in a coda position, however, they seem to show a difference in a word-internal coda and a word-final coda position. The case of the word-internal coda is the more straightforward of the two. In this position at first social variation is shown, as a vocalised liquid is treated as a marker of non-standard speech, and later it becomes accepted.

As opposed to word-internal codas, word-final coda [ɹ] does not only show a stylistic variation but also positional variation. That is to say that /l/ tends to be vocalised in the utterance *call Susan* but not in the utterance *call Andy*. Although the number of Clear L exceeds the number of Dark or Vocalised L in the prevocalic position, the fact that Dark and Vocalised L appears in a position where Clear L is expected should not be overlooked. It shows that these words end in an underlying /l/ for some speakers, but end in an underlying vowel for others. On the one hand this can be analysed by giving a different domain for L Darkening. In this case, the domain for L Darkening has become the word instead of the utterance for those who use word-final Dark L prevocalically. This might be the result of analogy during which preconsonantal and prepausal word-final Dark L has influenced the prevocalic sound. It has to be added that this can not only hold for word-final Dark L, but also for word-final Vocalised L too. This shows that L Darkening and Vocalisation are not post-lexical rules, and Dark or Vocalised L may have been phonemicised for some speakers.

On the other hand, Vocalised L with or without Linking L, may be interpreted as the reanalysis of the liquid as a vowel. Example for such pronunciation are *bull in* with a [w] and *peel it* as [pʰɪlɪt] (Kerswill 1995). This might be taken as a counter-argument for the analysis provided by Gick (2002). Gick (2002) argues that a merger of the vocalised liquid with another vowel of the vowel inventory (usually a merger with schwa for /r/ and a merger with /ɪ/ for Vocalised L) is a necessary prerequisite for the reanalysis of the liquid as a vowel. As Gick (2002:171) put it, reanalysis is when “either both the liquid and the vowel is reinterpreted [...] as vowel-final or both can be reinterpreted as /r/- or /l/-final.” Thus reanalysis is necessary for the complete loss of prevocalic liquids. However, vocalised /l/ has not been merged with any vowel, but the liquid has been reinterpreted as a vowel for certain speakers. Prevocalic L Vocalisation might be interpreted as a sign of inter- and intraspeaker variation that is typical for a change in progress and it can be paralleled to the development of non-rhoticity in New Zealand English. Word-final prevocalic R Dropping was observed in this variety by Hay and Sudbury (2005) together with word-final preconsonantal R Dropping, however, the rate of R Dropping was smaller in the prevocalic position than in the preconsonantal position and thus New Zealand English emerged as non-rhotic variety with Linking R and Intrusive R. This seems to be true for L Vocalisation as well: word-final L Vocalisation increases both before consonants and vowels, however, the rate of vocalisation is higher preconsonantly than prevocalically (Kerswill 1990, and 1995). Therefore a variety with a Linking L might develop.

2.5 Linking and Intrusion

Linking- and Intrusive Liquids appear word-finally if the given word ends in a non-high vowel, and the next word begins with a vowel. They occur only in such dialects in which preconsonantal liquids are dropped, as Liquid Dropping and Vocalisation are necessary

prerequisites for Linking and Intrusion. The two phenomena are treated differently from a diachronic viewpoint, as two consecutive steps of a diachronic process. The first step is Linking, when a word that used to end in a liquid in every position loses the liquid before a pause or a consonant, and only retains it prevocalically. The second step is Intrusion, when other words that end in the same vowel as the words that historically ended in a liquid are reanalysed as words ending in a vowel and a linking liquid sequence.

In the case of Southern English Linking- and Intrusive R, the distinction is only valid from the viewpoint of a diachronic description, because from a synchronic viewpoint the environments for Linking and Intrusive R are the same. They both appear at the end of morphemes ending in a non-high vowel if the next morpheme begins in a vowel. The explanations given for the two phenomena sometimes treat them differently, for example McCarthy (1991) maintains that R Deletion that historically preceded R Insertion is responsible for the R-less pronunciation of *tuner was* and R Insertion is responsible for the pronunciation of *tuna is* with an /r/. Other analyses, such as Harris (1994) give a uniform explanation for *tuna* and *tuner*, arguing that the /r/ is the result of a floating element, and Kijak (2010) in his Strict CV account explains both as spreading, and Balogné Bérce (2009) as hiatus filling. A uniform analysis is preferred from a synchronic viewpoint because the two phenomena occur in the same environment, and two different rules are preferred from a diachronic viewpoint, because the two processes followed each other in a linear manner.

The phenomenon that is absent from the development of /l/ but present in the development of /r/ is the intrusive liquid. According to Gick (2002), both the reanalysis of word-final vowels as liquids and the generalisation of this rule are necessary for an intrusive consonant to develop, and /r/ has undergone this process, whereas /l/ has not. Moreover, according to Gick (2002), the merger of the vocalised liquid with another vowel is also necessary for the reanalysis of word-final vowels as liquids, and as I have pointed out, L Vocalisation and L Dropping seems to have stopped before this point in the process. Furthermore it has not only failed to fulfil the prerequisites, but also there are no such word-final vowels to which a hypothetical Intrusive L could be generalised. The result of L Vocalisation and also that of Pre-L Breaking and L Dropping is a non-high back vowel, therefore Intrusive L could be generalised to other such vowels. However, the words ending in non-high vowels already show Intrusive R in Southern English. It also has to be noted that the fact that words ending in Vocalised L in most of the cases end in a Linking L or in a vowel, however sporadic Intrusive R was also reported by Uffmann (2008). This shows that Vocalised L can be reanalysed as a vowel, without merging it with other vowels.

3 Standard and Non-Standard Pronunciation

Analysis of the data and consideration of sociolinguistic and stylistic variation show that, as with every change in progress, there were and there are variations existing side by side, as the changes originated from non-standard varieties and gradually became part of standard speech. The influence of the liquids on the preceding vowels was accepted quickly as part of Standard Southern British English both in the 17th and 18th centuries, and in the present-day too. Thus Pre-R Breaking was described and accepted by 18th century orthoepist such as Walker (1791) and Nares (1792), and Pre-L Breaking is marked as an optional process by the Longman Pronouncing Dictionary (Wells 1990).

However, the loss of /r/ was accepted more slowly, just like the loss of /l/ both due to L Vocalisation and L Dropping. As Walker (1791) complained that “the r is entirely sunk” in London and Westley (1829) condemned R-less pronunciation as vulgar. Despite their opinion, R-Dropping spread from London, and Standard Southern British English, as well as the majority of dialects of Southern English became non-rhotic as well (Altendorf, Watt 2008). The same is true for the loss of /l/ at present, as vocalisation of /l/ is reported from the non-standard speech of the London area (Wells 1982), and of the East Anglian region (Kerswill 1990, 1995). However, today it seems to appear in standard speech, for example Wells (1982) first classified it as “non-RP,” but he revised this statement in 1984, and in 2000 he advised teachers of English as a foreign language to accept vocalised L for Dark L. Although it gains acceptance, there is still considerable sociolectal variation, as word-internal coda /l/ can be clear in hypercorrect speech, dark in standard speech and vocalised.

Word finally, both Linking and Intrusive Liquids depend on the loss of the coda liquids. However, this does not prevent sociolectal variation, and it seems that Intrusive R was already present as an optional rule for certain speakers in the late 18th and early 19th centuries, whereas other speakers did not even have exceptionless R Dropping at that time. It also seems that non-prevocalic /r/, word-final R Dropping before a consonant and before a vowel, Linking R, and Intrusive R were present at the same time in different registers. Therefore there were speakers who did not distinguish *bear Andy* and *bear Susan* either due to the R-ful or to the R-less pronunciation of both phrases and there were speakers for whom the first phrase contained an /r/ but the second did not. Also, there were speakers who did not distinguish between *letter is* and *coma is* either because both were R-less or R-ful, and there were speakers for whom only the phrase *letter is* contained an /r/.

The current development of /l/ again runs parallel to the historical process of R Dropping and Linking R. At present, L Darkening is an exceptionless process for most speakers, whereas L Vocalisation and L Dropping are not. Therefore the same phenomena, namely preconsonantal [ɫ], Vocalised L before a consonant in the same morpheme, word-final Vocalised L before a consonant or a vowel, and Linking L exist at the same time. The exact pronunciation of /l/ varies both within speakers and in the speech of one speaker based on stylistic and sociolinguistic factors. That is to say that there are speakers for whom there is no Linking L, as word-final /l/ is not vocalised or dropped, and therefore there is no difference between *kill Susan* and *kill Andy* with respect to the presence of the liquid. There are speakers who may vocalise preconsonantly, and for whom there is a difference between *kill Susan* and *kill Andy*. Lastly, there are speakers for whom there may not be a difference between these two phrases due to prevocalic L Vocalisation.

4 Conclusion

I conclude that the steps in the loss of the coda liquids serve as a prerequisite for the next one, and thus they follow each other, but the steps happen at the same time in different varieties of the language and there is a considerable inter- and intra-speaker variation. In terms of the chronological ordering, vowels were altered first, however, lax vowels were only lowered by coda /r/, but not by [ɹ]. Secondly, the liquids were lost in the coda position, and a linking liquid developed word-finally which was only generalised

to an intrusive liquid in the case of /r/. The steps are summarised in Table 3.

	/r/	[ɹ]
Lax vowels	Lowering R Dropping Lengthening	L Vocalisation resulting in diphthongisation
Tense vowels	Schwa-insertion Liquid Dropping	
Liquids	Linking Intrusion	Linking

Table 3: Order of the steps

As the table shows one of the differences lies in the behaviour of liquids when they follow a lax vowel: in this position coda /r/ was dropped, and there the vowel underwent compensatory lengthening, whereas coda [ɹ] is vocalised and realised as a vowel. Therefore the main difference is that coda /r/ is always dropped, whereas coda [ɹ] is either vocalised (if it follows a lax vowel) or it is dropped (if it follows a tense vowel). The sequence of a tense vowel and a liquid behaves in the same manner regardless whether that the liquid is an /r/ or an [ɹ]. In terms of the distribution of the liquids the difference lies in that there is a non-historical Intrusive R in phrases such as *draw a picture* and words such as *drawing*, but there is no Intrusive L in Southern British English.

In terms of social variation, the change in the pronunciation of lax vowels before a coda /r/ and schwa-insertion after tense vowels became part of the standard speech first. The changes concerning the distribution of the liquids was accepted more slowly. Thus the loss of coda /r/ and /l/ were accepted later than their effect on the preceding vowel, and Intrusive R was accepted last. The discrepancies between standard and non-standard pronunciation of /r/ and R-Influenced Vowels in the 18th and 19th centuries are summarised in Table 4a. The discrepancies between standard and non-standard pronunciation with respect to Pre-L Breaking and L Vocalisation in the 20th century are summarised in Table 4b.

	Standard	Non-standard
	/r/	/r/
Lax vowels	Lowering Lengthening	Lowering Lengthening R Dropping
Tense vowels	Schwa-insertion	Schwa-insertion R Dropping
/r/	–	Dropping Linking Intrusion

Table 4a: Sociolectal variation of /r/, 17th and 18th century

	Standard	Non-standard
Lax vowels	–	L Vocalisation resulting in diphthongisation
Tense vowels	Schwa-insertion	Schwa-insertion L Dropping
/l/	–	Vocalisation or Dropping; Linking

Table 4b: Sociolectal variation of /l/, present-day

As Table 4a and 4b show one of the differences between /r/ and [ɹ] can be found when they follow a lax vowel. The change in the quality and quantity of a lax vowel if it is followed by a coda /r/ was accepted early on in the 18th and 19th centuries, but as lax vowels are not affected by a coda [ɹ], but followed by a vocalised coda [ɹ], they become part of the standard speech more slowly. This is due to the fact that the main difference between standard and non-standard speech lies in the distribution of liquids, and the only difference between the liquids is that coda /r/ is always dropped, whereas coda /l/ can be vocalised or dropped. This difference aside, the steps of the loss of /r/ run parallel to the loss of /l/.

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