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# The sociolinguistics of /l/ in Manchester

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24/02/2021

**ABSTRACT** This paper presents a study of sociophonetic variation in the lateral approximant /l/ in Manchester, UK. Despite being subject to extensive investigation in the phonetic literature, we know little about how English laterals pattern sociolinguistically. We present acoustic measures taken from interviews with 96 speakers from the city, stratified across five socioeconomic classes, spanning 99 years of birthdates (1907-2006). We demonstrate that word-initial /l/ is becoming darker in apparent time: younger speakers have darker /l/s. There is, however, no evidence that the allophonic status of /l/ is changing, with /l/ in all positions becoming darker. There is a monotonic relationship with social class: the higher the social class, the lighter the /l/, with some middle-class speakers showing potential of an allophonic distribution. We find an effect of ethnicity, with white speakers having darker /l/s in comparison to Black and Pakistani Mancunians. Overall, our findings are a novel contribution to the understanding of the sociophonetics of English laterals and provide new evidence of social patterning and the allophonic status of /l/ in this variety.

**Keywords:** Language variation and change, laterals, English, sociophonetics, sound change.

## 1. Introduction and background

The realisation of English /l/ has been subject to a vast number of phonetic and phonological studies in recent years, due to its articulatory complexity and debates around the allophonic status of light and dark counterparts (Sproat and Fujimura 1993; Boersma 2001; Lee-Kim, Davidson and Hwang 2013; De Decker & Mackenzie 2017; Turton 2017). Syllable-based accounts generally

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3 state that light [l] occurs in onset position, e.g. *love*, and dark [ɫ] in coda position, e.g. *fall*, although  
4 this generalisation does not apply across all varieties of English. Compared to light [l], the dark  
5 variant is reported as having a delayed or reduced tongue tip gesture. In terms of sociolinguistic  
6 studies of non-laboratory speech within a given speech community, very few quantitative  
7 instrumental studies exist. Thus, we know little about the sociolinguistic conditioning of the  
8 darkness of /l/ in varieties of English, and whether this is stable or changing. The present study is  
9 a large-scale investigation into the sociophonetics of /l/ in Manchester, UK. As this is a variety  
10 which is commonly reported to have dark realisations of /l/ in all positions (Kelly & Local 1986;  
11 Carter 2002; Beal 2008; Turton 2014; Turton 2017; Kirkham et al. 2019), our investigation pays  
12 due consideration to both social and linguistic factors affecting pronunciation.  
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21 The common description of English /l/ as described above is typical of accents such as Received  
22 Pronunciation (henceforth RP), where word-initial *love*-type tokens of /l/ achieve full tongue-tip  
23 contact and word-final *fall*-types exhibit the described delayed or reduced tongue-tip gesture. In  
24 addition to the potential presence of two discrete allophones, phonetic studies have shown that  
25 darkness is on a continuum, with darker variants having an earlier or backer tongue dorsum gesture  
26 articulatorily, and a reduction in the F2-F1 difference acoustically (Lehiste 1964; Sproat &  
27 Fujimura 1993; Gick et al. 2006; Yuan & Liberman 2009; Yuan & Liberman 2011; Turton 2014;  
28 De Decker & Mackenzie 2017).  
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36 Although the acoustics and articulation of /l/-darkness has been studied comprehensively in  
37 phonetics, sociolinguists have largely focussed on the categorical vocalisation of /l/ (e.g. Ash  
38 1982; Tollfree 1999; Horvath & Horvath 2002; Johnson & Britain 2007; Hall-Lew & Fix 2012;  
39 Tollfree 1999). Aside from Pratt's (2020) recent study of "tech" students in San Francisco, the  
40 main exception to this trend is a range of studies on ethnic minority groups in North America (Van  
41 Hofwegen 2009; Van Hofwegen 2011; Newman 2010), as well as work on bilinguals in the British  
42 Isles (Khattab [2002, 2011] on Arabic-English bilinguals in Yorkshire, Morris [2013, 2017] on  
43 Welsh-English bilinguals and Nance [2013, 2020] on Scottish Gaelic bilinguals in Glasgow).  
44 However, in terms of factors such as change in progress or the role of socio-economic status, we  
45 know almost nothing about the sociolinguistic conditioning of the gradient darkness of /l/ in  
46 varieties of English.  
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3 The present study seeks to investigate the sociolinguistic conditioning of /l/ in Manchester by  
4 analysing acoustic data from sociolinguistic interviews. By considering the effects of age, social  
5 class and gender, alongside linguistic effects such as phonetic and phonological context, our study  
6 provides new evidence of sound change in progress, and its complex relationship to allophonic  
7 status. As mentioned, Manchester /l/ has been shown to be dark in all positions. This is not only a  
8 phonetic claim, but the claim has also been made in reference to the allophonic status of light  
9 vs. dark /l/ (Turton 2014, 2017) i.e., that Mancunians just have one allophone of /l/, which happens  
10 to be dark phonetically. However, there is some evidence that this distribution may be conditioned  
11 by social class: the lack of positional variation may be characteristic of working class speech  
12 (Turton 2014; Turton and Baranowski 2015).  
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21 That said, there is a possible discrepancy between dialect literature reports and more recent  
22 phonetic studies of northern areas of England today. The Linguistic Atlas of England (Orton,  
23 Sanderson and Widdowson 1978; based on the 1950s data from the Survey of English dialects;  
24 Orton 1962) maps the entirety of the north as having light realisations in word-final position (see  
25 Figure 1), yet more recent observations provide evidence that Lancashire and Yorkshire have dark  
26 realisations in all contexts (Carter 2002). An example of such conflicting accounts comes from  
27 nearby Sheffield: Stoddart, Upton and Widdowson (1999) report Sheffield /l/ impressionistically  
28 as being all-light (based on SED data from the 1950s plus contemporary data), but Kirkham (2016)  
29 reports acoustic data showing it is all-dark.  
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38 There are two potential explanations for these differences: fieldworker coding or change over time.  
39 As Wells (1982) observed, northern varieties lack the sharp light/dark /l/ allophony found in the  
40 south, resulting in northern word-final /l/ sounding potentially lighter than, say, RP. That is, these  
41 varieties could have had one allophone with an intermediate phonetic status, which SED  
42 fieldworkers may have perceived as light. The other possible explanation is that a change has  
43 occurred over the past 70 years. Given the gradient of darkening, it is conceivable that /l/ has  
44 changed very slowly and imperceptibly.<sup>2</sup>  
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53 <sup>2</sup> In early episodes of the world's longest-running TV Soap Opera *Coronation*  
54 *Street*, set in Manchester, older characters e.g., Elsie Tanner have noticeably  
55 lighter /l/s than present-day Mancunians. However, they do not have a  
56 characteristic RP-like light /l/. It is difficult to describe them, but it is  
57 possible that they may have clearer tongue tip contact at the onset whilst  
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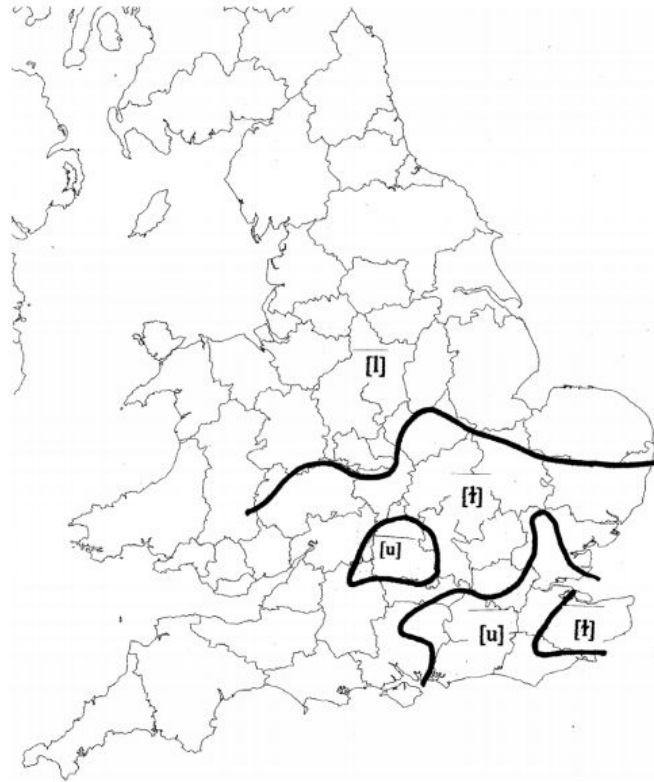


Figure 1: From the Linguistic Atlas of England (Orton, Sanderson and Widdowson 1978), mapping word-final /l/ as light in the North of England in the 1950s. ([u] represents vocalised /l/)

The primary aim of the present study is to investigate the sociolinguistics of Manchester /l/ over a span of 99 years, considering year of birth, social class, gender and ethnicity as predictors of variation and change, alongside contextual factors. The secondary aim is to contribute to the debate on the allophonic status of light and dark variants. Using naturalistic data from a large sociolinguistic interview corpus offers the benefit of observing change over time and within

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maintaining a backer tongue dorsum retraction throughout. Another interesting observation from 1970s episodes is that characters who are still in the soap today (e.g., Gail Platt) impressionistically may have had lighter /l/s than they do now. Elliott (2000) conducted this kind of study on American English rhoticity in individual actors' lifespans, finding that actors moved with the ongoing change in the country to the reinstatement of post-vocalic /r/, and it could be a subject ripe for study here.

carefully stratified social groupings, providing new insights to this variable, for which most of our knowledge comes from laboratory data.

## 2. Methodology

The paper is based on the speech of 96 Mancunians recorded in sociolinguistic interviews, aiming at eliciting informal spontaneous speech (Labov 1984; Tagliamonte 2006). The current sample of 94 speakers, recorded between 2008 and 2014, is supplemented with two interviews conducted in 1971 in Manchester by William Labov (birth dates 1907 and 1922); as a result, the years of birth of the informants range from 1907 to 2006 (or 1927 to 2006 in the contemporary set). The sample covers the socio-economic range of the city, with five social classes, from lower working to upper middle, operationalised in terms of occupational levels; occupation has recently been shown to be the best single indicator of socio-economic status for a number of other linguistic variables in Manchester (Baranowski and Turton 2018). The sample represents the three main ethnic groups in Manchester with 67 white speakers, 16 Pakistani speakers, and 13 Black Caribbean speakers, all born and raised in Manchester.

The interviews were forced-aligned in FAVE (Rosenfelder et al. 2014) and all tokens of /l/ were measured automatically in terms of F1 and F2 with a Praat script (Boersma and Weenink 2017), resulting in a grand total of 53943 tokens of /l/; we use the midpoint of F2-F1 as an indicator of /l/ darkness. For most of the analysis, we focus on word-initial tokens only ( $n = 15,038$ ) but do combine word-initial and word-final tokens in parts of the analysis ( $n = 28,455$ ). Our purely acoustic methodology cannot account for vocalised /l/s, which require auditory or articulatory confirmation (Hall-Lew and Fix 2012; Strycharczuk et al. 2020). Unlike many British varieties where vocalisation of /l/ is on the rise (Foulkes and Docherty 1999; Britain 2009), this is not a typical feature of Manchester speech, although we do note some gradient vocalisation in a few of our younger middle class speakers.

Linear mixed-effects regression models were run on the difference between F2 and F1 as the acoustic correlate of darkness in word-initial position using the lme4 package in R (Bates et al. (2015); speaker and word were included as random effects).  $t$ -values  $> \pm 2$  are taken as significant. F2-F1 is partially self-normalising and following Turton (2014) and Kirkham et al. (2019) we took no further steps to normalisation. Potential predictors and interactions were tested by comparing

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3 models with and without by likelihood ratio tests. All numeric variables were centred around the  
4 mean and duration was log transformed.  
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### 7 **3. Results and discussion**

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10 For the main part of our analysis, we focus on word-initial /l/ tokens. This is the context offering  
11 the most potential in terms of new sociolinguistic variation, as this is the context in which  
12 Mancunians (and northerners in areas like Lancashire and Yorkshire) differ most from standard or  
13 southern British English accents. Table 1 shows the best mixed-effects linear regression model of  
14 predictors on the F2-F1 difference, which includes social class, age, gender, ethnicity, the height  
15 of the following vowel (high, mid, low), the preceding context (vowel, consonant, pause), and the  
16 duration of the /l/ (log transformed). Frontness of the following vowel was tested, but it contributed  
17 nothing to the model and we decided to omit it. Recall that lighter /l/s have a higher F2-F1  
18 difference and darker variants have a lower F2-F1 difference. Although the main focus is on initial  
19 /l/, at regular points during the discussion, we note the findings of various analyses which include  
20 both word-initial and word-final /l/s, in order to address the question of allophonic status. Whilst  
21 being aware of the difficulties in ascribing a categorical allophonic distinction from comparing  
22 initial and final contexts as we do here (see Turton 2017), we suggest that such differences could  
23 be indicative of such a presence.  
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35 Note that we avoid including initial and final tokens together in the analysis. This is because of the  
36 difficulty of summarising the preceding and following contextual and phonetic information within  
37 the same model. For example, for word-initial /l/, the main contextual factors are whether the  
38 preceding sound is a vowel, consonant or pause, but for a word-final /l/, it is the quality of the  
39 preceding vowel. Because we know surrounding context has a large influencing effect, it is  
40 important to have the information coded accurately in the model and thus warrants separating out  
41 these word positions.  
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50 Table 1: The best mixed-effects model for initial /l/s. Higher estimates reflect lighter /l/s, t-values  
51  $> \pm 2$  are taken as significant. Class 1 = lower working, 2 = upper working, 3 = lower middle, 4 =  
52 middle middle, 5 = upper middle.  
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level	Estimate	Std. Error	t value	mean F2-F1 (Hz)	n
<b>class</b>					
<i>(baseline 1)</i>				837	2841
class 2	55.04	43.03	1.279	885	3829
class 3	32.87	43.24	0.7603	838	4887
class 4	97.26	46.34	2.099	896	2925
class 5	101.7	62.46	1.629	985	848
<b>birth year</b>	-3.193	0.8083	-3.951		
<b>gender</b>					
<i>(baseline female)</i>				836	8942
gender male	87.82	29.95	2.932	911	6388
<b>ethnicity</b>					
<i>(baseline Black)</i>				1064	1555
ethnicity Pakistani	-43.05	55.05	-0.7819	975	3479
ethnicity white	-259.5	45.02	-5.764	803	10296
<b>following vowel height</b>					
<i>(baseline high)</i>				1028	2790
following mid vowel	-163.8	18.39	-8.907	889	2936
following low vowel	-249.7	18.68	-13.37	816	9604
<b>context</b>					
<i>(baseline post-consonant)</i>				826	7219
utterance initial	160.2	8.424	19.02	981	2813



post-vowel	34.34	7.315	4.695	867	5298
<b>duration (log)</b>	-109.1	6.339	-17.21		
(Intercept)	-51.7	57.07	-0.9059		

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### 3.1 Social factors

The potential for change over time in Northern English /l/ was raised earlier in the paper, where we noted that older dialect reports from 1950s data (Orton, Sanderson and Widdowson 1978) show light /l/s in the north, but more recent phonetic research shows the opposite for some parts of the north i.e. dark variants in all positions (Carter 2002; Kirkham 2016; Turton 2017). We considered whether this discrepancy was due to earlier fieldworker difficulty in transcribing the sound accurately by ear or, alternatively, that the /l/ has changed since the dialect data was collected. Our results provide support for the latter i.e., /l/ has become darker over time in Manchester. Our model indicates that speakers with an earlier birthyear have lighter initial /l/s, with a trend in apparent time towards darker initial /l/s for speakers born more recently (see Figure 2). The picture remains the same when we exclude the two speakers interviewed in the 1970s and use age as a predictor instead of birthyear. The trend in the opposite direction seen for the youngest speakers, that is, those born since the 1990s is likely not an indication of a reversal of the change, but rather a reflection of the conservative behaviour of children, reflecting their parents' generation's speech, resulting in what is often referred to as the adolescent peak (Labov 2001; Tagliamonte and D'Arcy 2009; Bermúdez-Otero 2020); a similar pattern has also been found in the fronting of the GOOSE vowel in Manchester (Baranowski 2017).

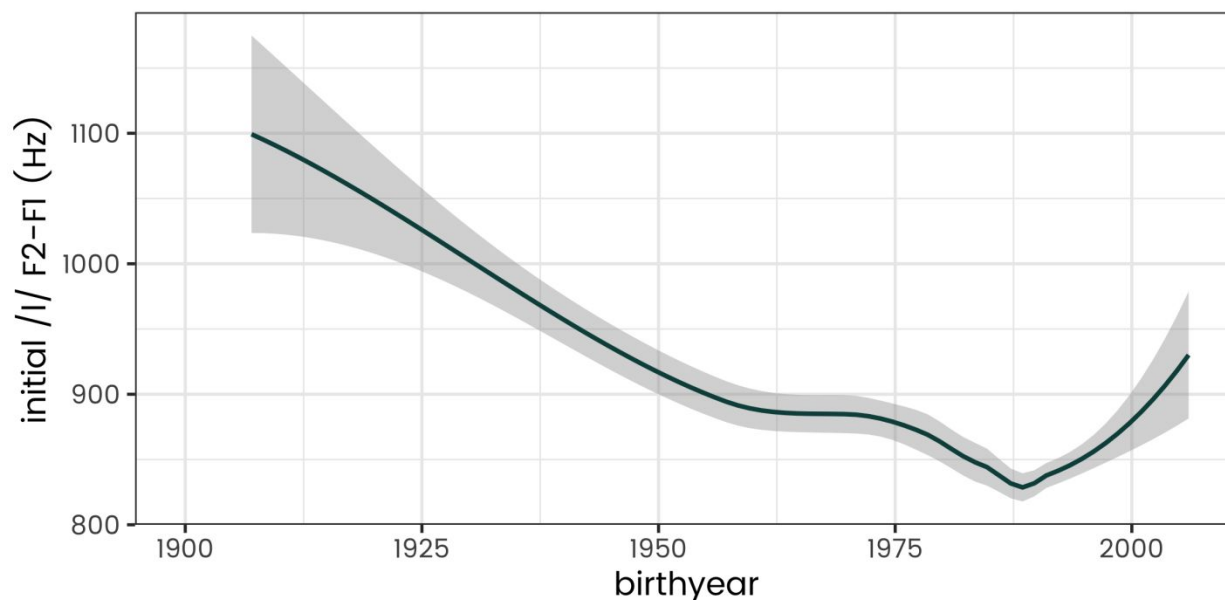


Figure 2: Initial /l/ across year of birth (darker tokens have lower F2-F1 values)

In any case, even the older speakers with lighter initial /l/s do not approach the level of lightness found in Received Pronunciation or speakers from the South East of England. For example, the average F2-F1 difference in initial /l/s for speakers born earlier than 1959 is 949 Hz, but in Kirkham, Turton and Leemann (2020)'s recent study, Londoners average around 1100 Hz for initial /l/ today (data available from Kirkham 2020).

This change towards a darker initial /l/ over time raises an interesting question. Is this darkening of initial /l/ responsible for the claimed lack of allophonic distinction (where, if present, word-initial /l/s are lighter than word-final ones; Turton 2014, 2017) in Manchester i.e., have younger speakers collapsed a previously existing distinction resulting in dark /l/ in all positions? We revisit this question after first considering social class.

The social class results reveal a near-monotonic trend: the higher the social class, the lighter the initial /l/, as seen in the estimates of the F2-F1 difference in Table 1. Although comparisons between individual classes do not reach statistical significance, the inclusion of class overall is significant by likelihood ratio test. Moreover, the estimates indicate that the trend is unlikely to be accidental in that we have a near-monotonic pattern. In terms of initial and final position, additional models reveal that social class 1 (the lower working class) show next to no difference between initial and final /l/ realisations, whereas 5 (the upper middle class) have fairly light initial /l/s. We

suggest that this relative difference could be used as a proxy for an allophonic distinction in the upper middle class. Evidence for this comes from a separate regression looking only at word-final /l/s, where social class is not significant. This means that all social classes have roughly equal word-final /l/ darkness, but a monotonic trend in word-initial /l/ darkness. Thus, the lightness of word-initial /l/ could be taken as a rough proxy for the allophonic status of /l/; Figure 3 visualises this trend. Previous articulatory results from ultrasound tongue imaging suggesting that middle class Mancunians may hold a distinction gives us added confidence in this argument (Turton 2014; Turton and Baranowski 2015). The similarity of upper middle-class speech in Manchester to that found in the south of England has also been reported for GOAT-fronting (Baranowski 2017) and for the FOOT-STRUT distinction (Turton and Baranowski 2020).

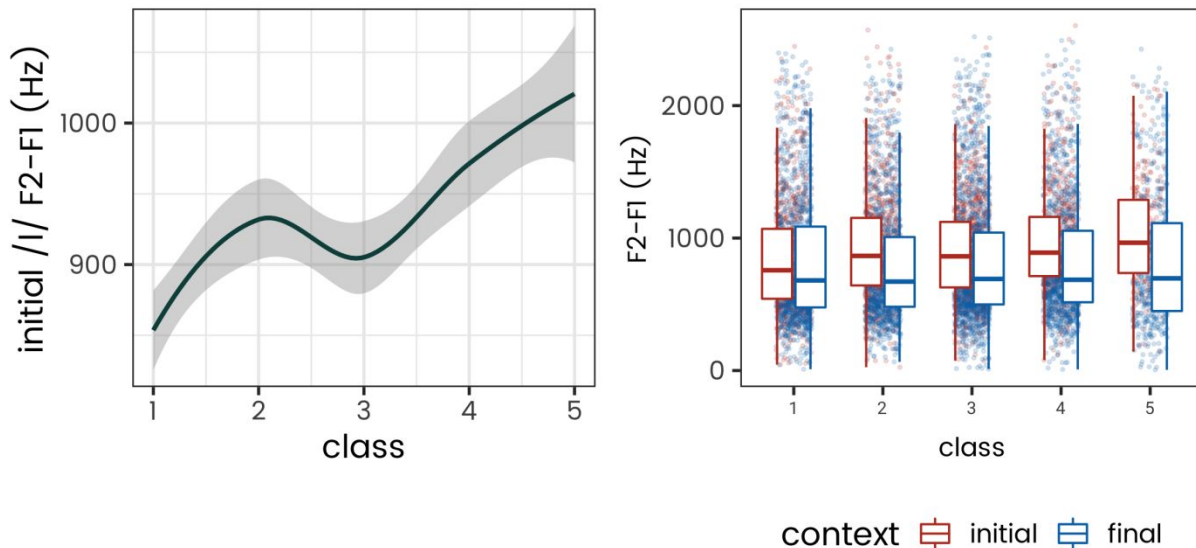


Figure 3: /l/ in different social classes (darker tokens have lower F2-F1 values). The left panel shows initial *leap*-type tokens only and the right panel shows initial *leap*-type and final *peel*-type contexts. (1 = lower working, 2 = upper working, 3 = lower middle, 4 = middle middle, 5 = upper middle).

In the left-hand panel of Figure 3, social class is plotted as a continuous predictor of the lightness of initial /l/ (lighter tokens have a larger F2-F1 difference). This visualises the monotonic relationship between social class and lightness of initial /l/. The right hand panel of Figure 3 shows initial vs. final /l/s for each social class presented as factors. The figure demonstrates that the upper middle class speakers have a greater difference between initial and final contexts. Still, these initial

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3 /l/s of the upper middle class do not reach the averages of initial /l/s in young Londoners, for  
4 example, mentioned above (mean F2-F1 initial /l/ for our upper middle class Mancunians = 985Hz,  
5 London = 1100Hz) . The lower working class show complete overlap, while the in-between classes  
6 show a small difference in the expected direction: initial tokens are lighter than final. There is a  
7 large amount of overlap between contexts, which is expected given the nature of measuring  
8 segments such as /l/ from spontaneous speech data. We tested various interactions between all  
9 pairs of social factors – birthyear, class, ethnicity and gender – but none constituted a significant  
10 addition to the model. As can be seen in Table 1, females have darker /l/s than males, leading the  
11 change toward darkening. Although an interaction with class is not a significant addition, separate  
12 models on each social class find that the gender effect is much stronger in the lower working class,  
13 who have the most stark gender difference in /l/ realisation. This may be the effect reported by  
14 Labov (2001:308); that “males in the lower social classes show a consistent pattern of retreating  
15 from or resisting a female-dominated change”.

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26 The effects of word position across different social class categories raise questions about  
27 potential change over time in the allophonic status of light and dark /l/. Recall that we posed this  
28 question earlier: is the darkening of initial /l/ over time responsible for the collapse of a  
29 previously held allophonic distinction? The results show that the data is not consistent with such  
30 an argument. There is no evidence for older speakers being more likely to have an allophonic  
31 distinction, as ascertained by comparing word-initial and word-final /l/s in models and data  
32 visualisation. An additional model of word-final /l/s only shows an almost identical estimate for  
33 birthyear as the model for word-initial /l/ presented above: /l/ is 3-4Hz darker with every  
34 additional birthyear for both initial and final position. The overall picture is then that there is no  
35 change in the allophonic status over time, but that younger speakers are darkening all of their /l/s  
36 across the board, that is, in all positions. Further evidence of this comes from visualising this  
37 pattern through the prism of social class (Figure 4). We pick out the two extreme classes which  
38 show this effect most clearly (the other three classes have no discernible pattern). Figure 4  
39 demonstrates there is no change in the difference in the relationship between word-initial and  
40 word-final /l/ over time, or in other words, no change in the lack or presence of allophony over  
41 time in Manchester: both sets of lines move in parallel.

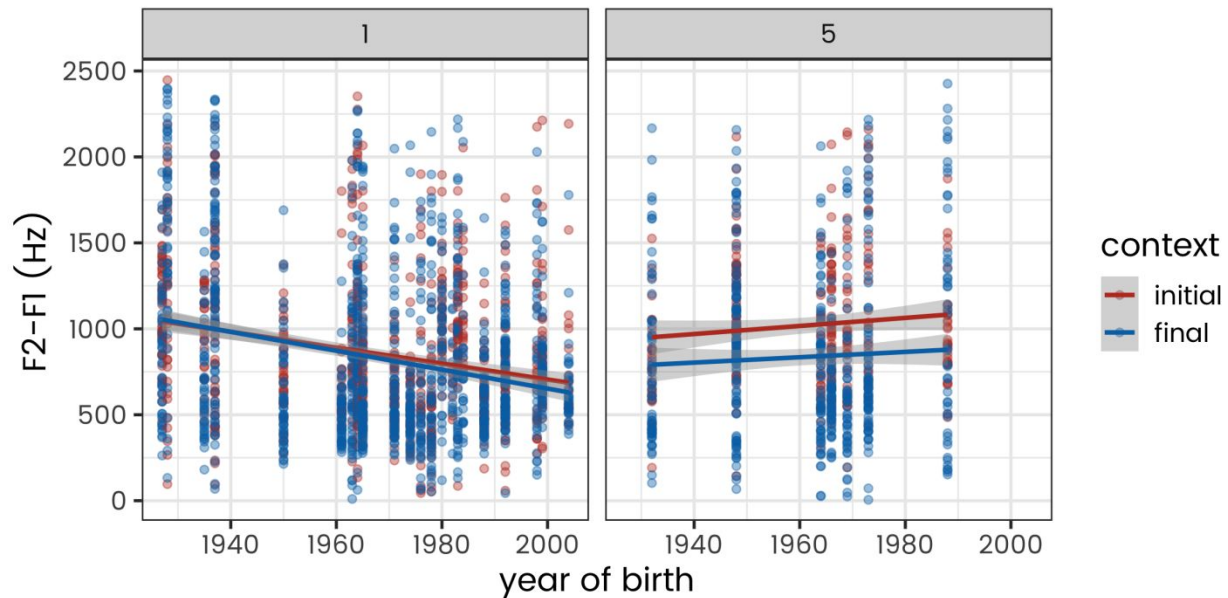


Figure 4: F2-F1 differences across age in the extreme social classes (1 = lower working class, 5 = upper middle class).

We report new results on variation in the ethnic background of our speakers in Manchester. In comparison to white speakers, Black Caribbean and Pakistani Mancunians have much lighter /l/s. In terms of Pakistani speakers, similar findings have been reported elsewhere in the UK: lighter /l/s in British South Asian speakers are reported in Bradford (Heselwood and McChrystal 2000; Kirkham and Wormald 2015), Glasgow (Stuart-Smith, Timmins and Alam 2011), and Sheffield (Kirkham 2015). These clearer variants are also found in Indian English more generally (Wells 1982; Sharma 2012). Commenting on the light realisation of /l/ in Glaswegian Asian speakers (in contrast to dark /l/s in Glaswegian in general), Stuart-Smith, Timmins and Alam (2011) suggest that “[c]learer realisations of /l/ could ultimately go back to Punjabi/Urdu /l/ which is typically very clear”. In reference to this, Kirkham (2016) notes that often speakers do not need to be proficient in a second language to acquire their multi-ethnic variety (see also Cheshire et al. 2011).

Interestingly, in Manchester, we note Black Caribbean Mancunians have the lightest /l/s of all. This could also be a heritage effect, as lighter /l/s are reported for Caribbean Englishes (Wells 1982: 570). Van Hofwegen (2011) finds that lighter /l/s are a traditional, though receding, feature

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3 of African American English.<sup>3</sup> Almost all of our Black speakers have either parents or relatives  
4 from Jamaica and report close links with their Caribbean heritage, including being in touch with  
5 family members from Jamaica and visiting there for holidays. At the same time, these lighter  
6 variants could also occur as a feature of Multicultural Manchester English and be available to  
7 speakers without this same heritage (Cheshire et al. 2011; Drummond 2017, 2018). The authors  
8 have noticed impressionistically that some young white working-class Mancunians in  
9 multicultural areas of the city may now have adopted this light /l/ into their own speech, although  
10 it remains to be seen if this feature is part of their vernacular or whether it is adopted in certain  
11 styles only.  
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19 A closer inspection of the data shows that younger ethnic minority speakers, both Caribbean and  
20 Pakistani, have darker /l/s than older speakers from the same ethnic background, demonstrating  
21 that all ethnic groups participate in this change (recall there is no significant interaction between  
22 age and ethnicity). Thus, even though Black youngsters have lighter laterals than their white  
23 counterparts, their /l/s are still darker in comparison to older Black speakers. The same age pattern  
24 is true of Pakistani speakers in general, although there are some speakers who do not follow this  
25 trend. Izna L., 21 years old, upper working class, is one example of this. She has much darker /l/s  
26 than Pakistani speakers her age, more typical of white speakers. Although Izna identifies as British  
27 Pakistani and lives and attended school in a multi-ethnic area of Manchester, her mother is a white  
28 Mancunian and her friendship network is white. Izna's pattern demonstrates that further work is  
29 needed to understand this kind of variation on a micro level, and that closer attention to biracial  
30 speakers experiences (which are relatively overlooked in the existing literature; cf. Holliday 2016)  
31 is needed to understand identity patterns and parental or peer-group influence.  
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54 <sup>3</sup> Interestingly, lighter variants are also found in Latino dialects in Texas  
55 (Van Hofwegen 2009) and New York City Newman (2010).  
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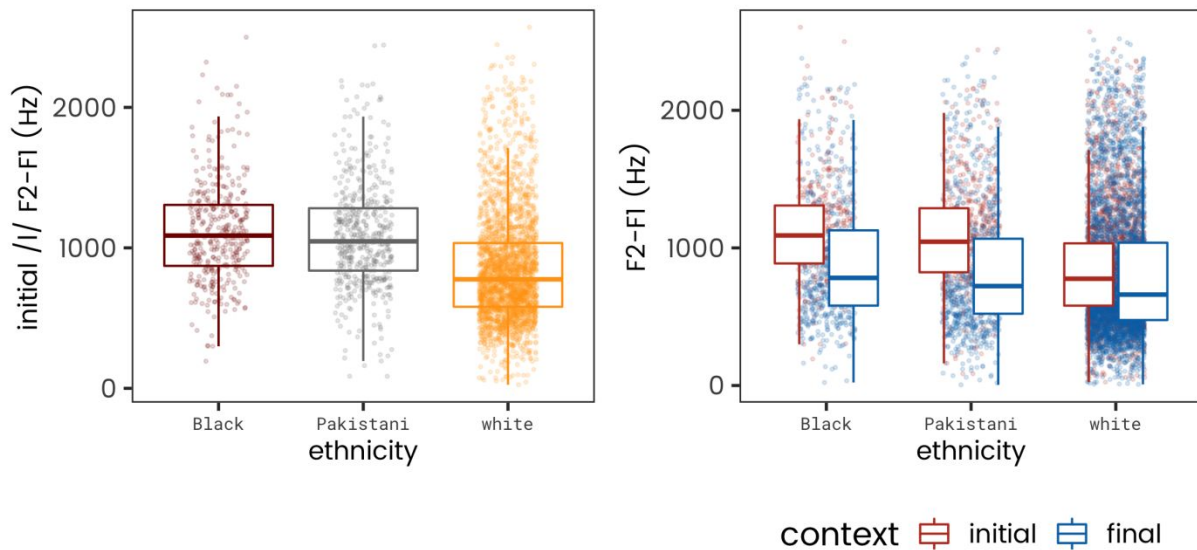


Figure 5: /l/ across ethnic groups

Both Black and Pakistani speakers, on closer inspection, do seem to have lighter word-initial /l/s than word-final tokens. This means it is possible, in contrast to white Mancunians, that these speakers do have an allophonic distinction. The complexities of using non-controlled data to reach such conclusions are described in Turton (2014) and are best verified by further laboratory study. Nevertheless, this result provides a compelling basis for future research in multi-ethnic variation in Mancunian /l/s.

### 3.2 Non-social factors

In terms of linguistic and other non-social effects, the results are precisely what we would predict given what we know about coarticulation and contextual circumstances. Figure 6 shows preceding context and following vowel height side by side. The role of preceding context is clear: utterance initial /l/ is the lightest (e.g. *leap over*), following a vowel comes next (e.g. *a leap*) and following a consonant is the darkest (e.g. *big leap*). The right-hand panel of Figure 6 shows that initial /l/ is affected by following vowel height in the expected direction: following high vowels predict lightest /l/s (e.g. *leap*), followed by mid vowels (e.g. *leg*), with the darkest found after low vowels (e.g. *last*). A preceding front vowel (e.g. *pill*) shows lighter /l/s than a preceding back vowel (e.g. *pull*), but this effect is weak and not significant in the model when everything else is taken into

consideration. Duration is a significant predictor of darkness in the expected direction: darker /l/s are longer (Sproat and Fujimura 1993; Lee-Kim, Davidson and Hwang 2013).

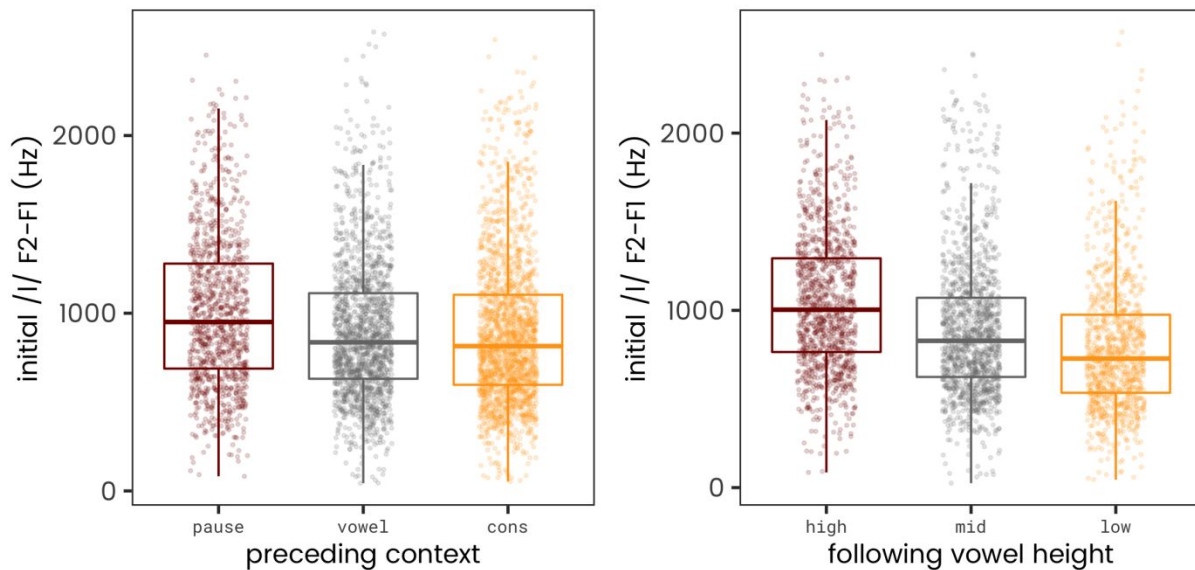


Figure 6: /l/ in different phonetic contexts

#### 4. Conclusion

The aim of this paper was to investigate the sociolinguistic patterning of /l/ in Manchester, a variety of English which is reported to have very dark laterals in all positions. We find that variation in word-initial /l/ is subject to social and linguistic conditioning. The darkening of /l/ is a change in progress, with younger speakers having darker /l/s. We demonstrate that this change in progress is not responsible for the lack of allophonic distinction reported for Mancunians in phonetic studies. This gradual shift in pronunciation also explains the discrepancy between old dialect reports, such as the Linguistic Atlas of England (Orton, Sanderson and Widdowson 1978) and more recent phonetic reports (Carter 2002; Kirkham 2016). /l/-darkness is conditioned by social class: the higher the social class, the lighter the initial /l/. We show that this finding could be responsible for an allophonic distinction in the highest social class, who have a much larger F2-F1 difference between initial and final contexts. At the same time, this contextual difference is acoustically much smaller when compared to accents like those in the south of England. Articulatory data from previous studies (Turton 2014; Turton and Baranowski 2015) gives us added confidence in asserting this argument despite the lack of controlled laboratory data. Finally, we find that ethnic



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3 minority speakers from Black Caribbean and Pakistani backgrounds have much lighter /l/s than  
4 white speakers. We suggest that a light /l/, relative to that of white Mancunians, may be a feature  
5 of Multicultural Manchester English. We hold back from making comments on the allophonic  
6 status of /l/ in these speakers for the time-being. Overall, we have shown that /l/ is a fruitful variable  
7 for sociolinguistic study and our findings pave the way for studies of other all-dark varieties to  
8 uncover similar patterns of variation and change.  
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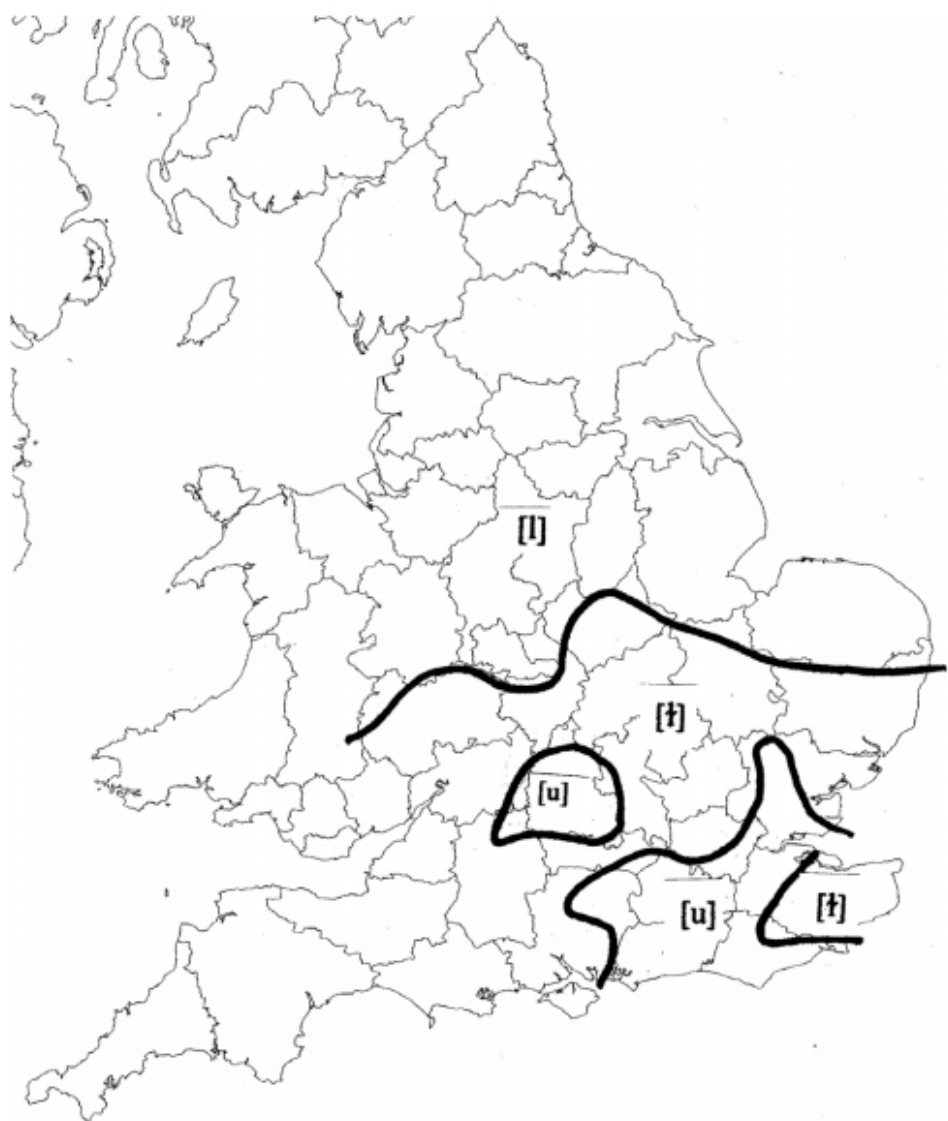
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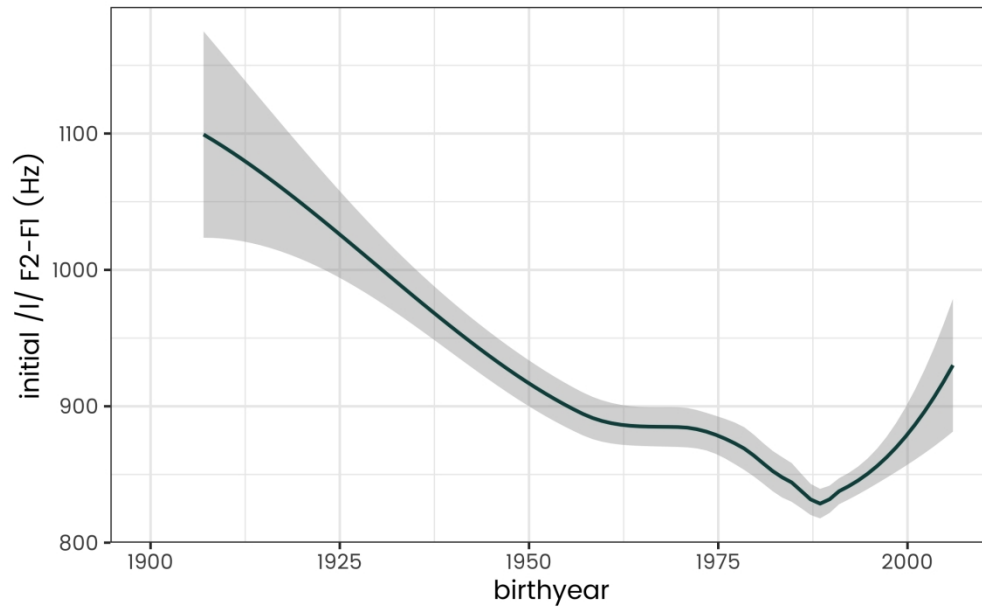
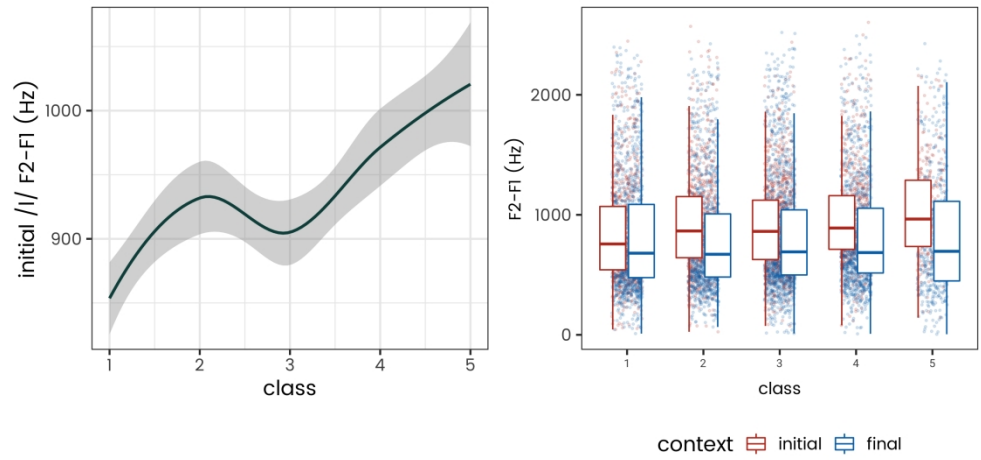


Figure 2: Initial /l/ across year of birth (darker tokens have lower F2-F1 values)

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/l/ in different social classes. The left panel shows initial leap-type tokens only (as in the model) and the right panel shows initial leap-type and final peel-type contexts. (1 = lower working, 2 = upper working, 3 = lower middle, 4 = middle middle, 5 = upper middle).

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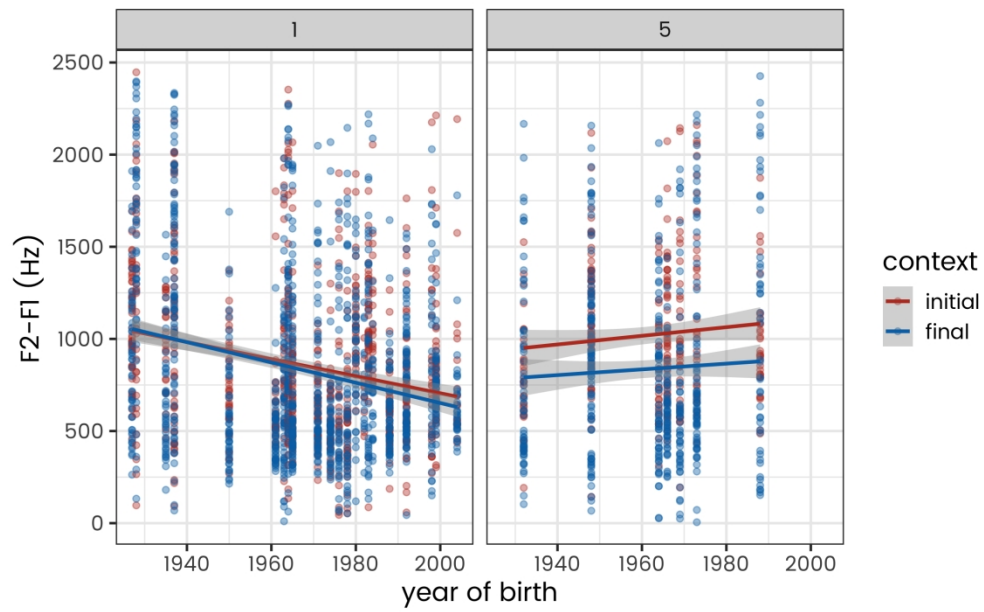


Figure 4: F2-F1 differences across age in the extreme social classes (1 = lower working class, 5 = upper middle class).

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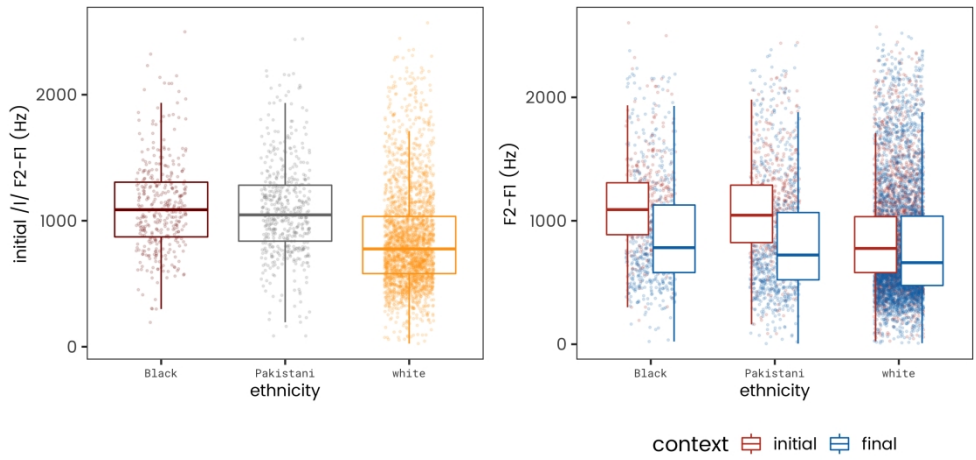


Figure 5: /l/ across ethnic categories. Both Black and Pakistani speakers, on closer inspection, do seem to have lighter word-initial /l/s than word-final tokens. This means it is possible, in contrast to white Mancunians, that these speakers do have an allophonic distinction. This would need to be verified by further phonetic study.

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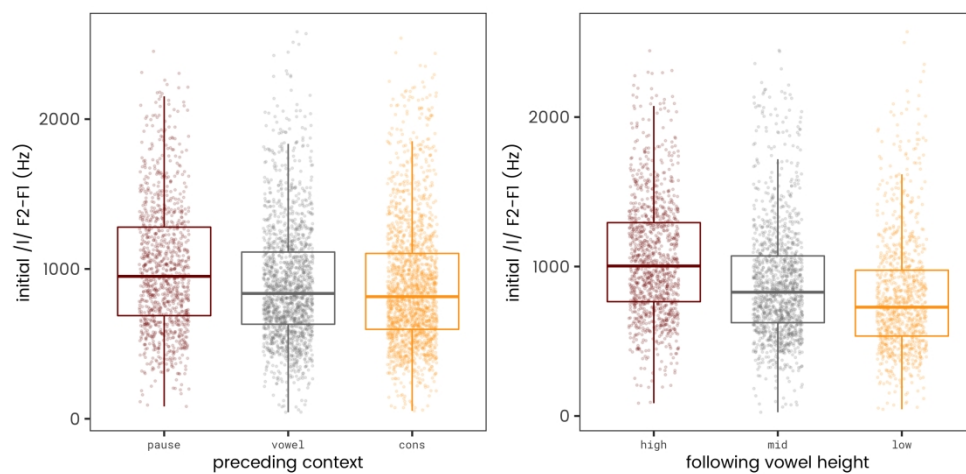


Figure 6: /l/ in different phonetic contexts

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