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L-Vocalisation in London English

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Abstract Linguists argued that the Cockney dialect, in London, is expected to be replaced by *Multicultural London English* in the years to come. However, this does not imply that Cockney is dead, as recent research revealed that it just moved to Essex. This paper aims at examining whether (I) vocalisation, a common feature of Cockney, is still present in the London district of Bermondsey. Ten working-class English speakers, stratified by age and sex, have been recorded by means of sociolinguistic interviews. The results, discussed both quantitively and qualitatively, show that: (a) (I) vocalisation is present in all age cohorts, with young speakers favouring the non-standard feature; (b) preceding long vowels trigger (I) vocalisation.

Keywords (I) vocalisation. Sociolinguistics. Phonology. Language variation. London English.

Summary 1 Introduction. – 2 Description of (I) Vocalisation. – 3 Diachronic Development of (I) Vocalisation and Previous Studies. – 4 The Present Study. – 5 Results and Discussion. – 6 Conclusions.



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1 Introduction

London, besides being the political capital of England, is also an important linguistic centre of gravity (Wells 1982). Even though the upper-class speech of this city laid the basis for Standard English (SE), the working-class accent of London is deemed the "most influential source of phonological innovation in England and perhaps in the whole English-speaking world" (Wells 1982, 301). The most famous working-class dialect of London used to be Cockney.

Traditionally, the term Cockney was associated to the dialect spoken by the working-class Londoners of the suburbs of East London, known as the East End (Fox 2015). In the late 20th century, however, linguists noted the emergence of a new, mixed, multicultural dialect - a sociolect which is mainly spoken by young, working-class speakers in multicultural areas (Cheshire et al. 2011). While the media and the press refer to this phenomenon as Jafaican, linguists have labelled it 'Multicultural London English' (MLE), suggesting it is an emerging multiethnolect (Kerswill, Torgersen 2017) which is expected to replace the Cockney accent in London in the years to come. This multiethnolect, as well as those present in a number of north-western European cities, stem from the intense immigration in the past 30 years (Kerswill et al. 2013). Today, the East End of London has become a multi-ethnic and socio-economic area of diversity, which appears to have contributed to the Cockney diaspora (Cole 2021). This paper (a) provides a geographical overview of the traditional East End. (b) briefly reviews the main reasons as to why the Cockneys moved out of the East End, (c) provides a brief diachronic background of (l) vocalisation, (d) examines whether (l) vocalisation - a common phonological feature of Cockney - continues to exist in the speech communities of Bermondsey, where no previous systematic investigation has been carried out.

1.1 The traditional East End and its Geographical Boundaries

The traditional East End used to be delimited by the medieval walled City of London to the west, from the River Thames to the south and from the River Lea to the east (Booth 1889). Over the last years, the East End has extended to a wider geographical area due to historical factors (e.g. the mass exodus of the working-class population). However, Bermondsey, located in the south of Whitechapel, has remained the only Cockney area where the local working-class has not completely extinguished.

¹ Jafaican is used with the meaning of 'fake Jamaican' simply implying that immigrants came from Jamaica and the Caribbean.

1.2 **Decentralisation of Cockneys**

The two World Wars had an impact on the decentralisation of Cockneys: people lost their lives, others were evacuated, others moved out during the wars and chose not to go back to their homeland. The 'slum-clearance' programme, designated for the redevelopment of areas after the First and Second World War represents one of the reasons which brought about the Cockneys diaspora. A significant part of the East End population was moved to the new estates of Dagenham and Harold Hill, and to the New Towns of Harlow and Basildon, in the Essex County. The uncontrolled London's population growth led to inner-urban difficulties such as overcrowding or lack of green spaces. To reduce both social and housing problems, planners attempted to decrease the number of people living in the East End. Between 1921 and 1932, owing to the lack of housing, over 186,000 Cockneys moved out to the easternmost outskirts of London, within Buckinghamshire and Essex, where over 25,000 houses were built (Abercrombie 1944). The 'Greater London Plan 1944' aimed at relocating the population beyond the outer green belt. Abercrombie suggested establishing four rings to structure the plan: the first ring includes the inner central area, the second ring circles London at around 12 miles from Charing Cross, the third was the 'Green Belt Ring', and the fourth the 'Outer Country Ring'. It is estimated that the East End lost approximately half of its population after the Second World War.

1.3 The London's Docklands

The second reason which brought about the Cockney diaspora is the failure of the Dock industry.

The beginning of the Docklands' decline started in 1889 after a strike, which extended to the whole Port of London. The Docklands suffered serious consequences with the advent of the First World War in 1914, after losing 430 employees and another indefinite number of people. In 1970s the high-level of unemployment brought about by the failure of the Dock industry, in the Tower Hamlets, and most of the population moved to the only enduring dock industry, situated in Tilbury. After 1981, the long-term decline was followed by a steady rising of the population, marked by a remarkable social change.

1.4 The Arrival of Immigrants

This social change was due to the innumerable immigrants who settled in the old-world area, which was once associated with the working-class Londoners (Bermant 1975). This has marked the 'point of arrival' of the East End (Bermant 1975). The immigrants started to settle in the East End of London since the 17th century, such as the

Huguenots, the Irish, the Jews and the Bangladeshi, creating a multi-ethnic city. It is estimated that by mid-18th century around 15,000 Huguenots inhabited the East End (Bermant 1975). The Irish, originally, settled in Central London. Jewish refugees settled in London around the end of the 19th century, when Jews were persecuted in Russia and Poland (Bermant 1975). Many Bangladeshis came to London in 1962, when *The Immigration Act* allowed immigrants to move to Britain on condition that they all have a job to go to. A notable increase in the number of Bangladeshis living in the Tower Hamlets was registered with census 1981.2

So far, this paper has presented the multi-ethnic profile of the East End implying that seeking to examine Cockney in the East End of London raises methodological questions today. As mentioned earlier, the sole purpose of this paper is to examine whether (l) vocalisation is still present in one district of London: Bermondsey. Exploring points of contact between Cockney and the emergent Multicultural London English (MLE) is beyond the purpose of this study.

Description of (l) Vocalisation 2

In British English, and in other English varieties, the alveolar lateral approximant /l/ is realised with two allophones, namely clear [l] and dark [4]. The former is realised by raising the soft palate and placing the blade of the tongue at the alveolar ridge (Cruttenden 2001); whilst the latter involves a retraction in its articulation (Sproat, Fujimura 1993). Clear [l] is commonly found in the following linguistic environments:

- word-initial position: 'leave', 'let', 'look', 'late'; a.
- b. word-initial clusters: 'blow', 'glad';
- word-medially: 'silly', 'yellow', 'foolish', 'allow', 'select'; c.
- d. word-final, before following vowels, and before following [j]: 'feel it', 'all over', 'will you'.

Whereas dark [1] occurs in non-prevocalic position:

- in word-final position, after a vowel: 'feel', 'fill', 'fell', 'oil', a.
- after vowels, before consonants: 'help', 'milk', 'cold', 'film', b. 'self'. 'illness':
- when /l/ occurs in syllabic positions: 'table', 'middle', 'final', c. 'angle'.

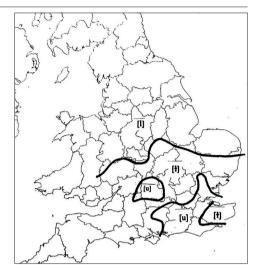
While clear [l] tends not to vocalise, dark [4] can be replaced by a back vocoid [x] or its rounded counterpart [o] or the back rounded [v] (e.g. 'well' [web], 'fill' [fio] or [fix]. However, when /l/ is preceded by the low-mid rounded vowel /2:/, velarized [4] is completely lost, as in 'Paul's' [po:z] (Hughes, Trudgill, Watt 2012). One of the basic premises for (l) vocalisation to occur is that a dialect must have both clear and dark /l/. Consonantal gestures tend to be stronger in onset environments and weaker in syllable final contexts, whereas vocalic gestures are deemed to be antithetical. This would entail that dark /l/ is a more appropriate rhyme segment than its clear counterpart. In terms of phonological necessity, a better rhyme segment must be composed of a vowel, meaning that when /l/ is vocalised it is less marked than dark [4] - as only one gesture of the tongue is employed in the articulation, and it is less marked than clear [1].

The clear-dark /l/ dichotomy also exists in Received Pronunciation (RP) but does not occur in all English varieties. In Welsh English, Irish English, Yorkshire English, and Norfolk English /l/ is mostly clear (Johnson, Britain 2007), whereas, in the south-west, /l/ seems to be universally dark (Wakelin 1986) and variably dark in all linguistic environments in Leeds (Khattab 2022a). In General American English (GenAmE) /l/ appears to be darkish, even in prevocalic position.

Diachronic Development of (l) Vocalisation 3 and Previous Studies

(L) vocalisation has been noted in Southern British English for at least three decades, but the origin of this phenomenon was unclear for many years. Early evidence of (l) vocalisation, when followed by velars and labials or after the low back unrounded [a:] and the lowmid back rounded [5:], dates back to the 16th century (Johnson, Britain 2007). Vocalisation of /l/ was found in Yorkshire between the 17th and 19th century (Ihalainen 1994), in South Durham (Orton 1933), in West Yorkshire especially amongst old speakers (Petyt 1985). Since (l) vocalisation occurs in dialects where there is a marked distinction between clear [1] and dark [4] and in dialects with a darkish /1/ in all environments, it would be unlikely to assume that the origin of vocalisation is rooted in the East of England, as the phoneme /l/, in East Anglia, was reported to be clear in all environments until the 20th century. In the Norfolk dialect, indeed, 'hill' is still articulated as [hil] in rural areas, at least amongst old speakers (Trudgill 1999).

³ Halle, Mohanan (1985) attributed the feature [+back] to dark [4], but this can be questionable since the $[\pm$ back] traits are generally used to describe dorsals rather than coronals.



Articulation of /l/ in nucleus environments during the 20th century.

The Linguistic Atlas of England (Orton 1978)

Before the mid-19th century, the allophonic distinction was briefly mentioned in the *Survey of English Dialects* (Ellis 1889). Clear and dark /l/ split emerged in mid-19th century (Trudgill 2004) due to the dialect contact with New Zealand English (Johnson, Britain 2007). Thus, dark [4] spread across Southern England (see [fig. 1]), yet in West Midland, Norfolk and the North of England, clear [1] has been preserved. This postcolonial contact explains the implausibility of a non-clear /l/ to be exported from Britain, owing to the absence of this allophonic distinction.

(L) vocalisation has been explored in: London English (Cruttenden 1980), Cambridge (Wright 1989), Peterborough (Britain 1997), the West Midlands (Mathisen 1999), Essex and the Fens (Johnson, Britain 2007), Scotland (Scobbie, Pouplier 2010; Stuart-Smith et al. 2013), in Australian English (Borowsky 2001), in Philadelphia English (Purse 2020). It was found to be conditioned by phonological environments (Wells 1982), style (Wright 1988), and social factors (e.g. social practices) (Stuart-Smith et al. 2013). Most of the research conducted on (l) vocalisation deals with the degree of tongue tip weakening. Wright (1987) and Hardcastle, Barry (1989) electropalatography (EPG) studies report partial loss of alveolar contact in coda /l/ where there is a contact between the tip of the tongue and the alveolar ridge. The averaged tongue tracings in /l/ was examined by Turton (2014) in ultrasound data from Essex, in a variety of contexts constrained by prosodic and morphological features. Sproat, Fujimura (1993) carried out an X-ray microbeam finding that both dark and clear /l/ have a dorsal and an apical gesture.

Gick (1999) points out that both gestures are likely to be classified as consonantal and vocalic, Recasens (2016) argues that the two gestures are not identifiable in systems where dark /l/ is phonemic. whereas Strycharczuk, Scobbie (2015) found that, in Southern British English, both gestures can be measured, at least in certain vocalic environments. Tollfree (1999) suggests that the tongue tip gesture is audible in word-final pre-pausal /l/. However, Strycharczuk, Scobbie (2015) claim that gestural delay could become phonologised, and that increasing levels of such delay could lead to vocalisation even in pre-pausal position. Gick (1999) proposes a model according to which vocalization of final /r/ and /l/ are inherently due to the weakening of the consonant gesture in coda position - an account in which gestural delay does not seem to push vocalisation. Hudson, Holloway (1997) report that dark /l/ in the C# context is mostly used by middle-class speakers, whilst in the speech of working-class members dark /l/ is more likely to undergo vocalisation, with males leading females. Przedlacka (2002), who analysed (l) vocalisation by participants within a 50-mile radius of Greater London, shows that neither males nor females were leading the change. However, among Inner Londoners, males were found to be leading females (Ashbay, Parry 2007).

4 **The Present Study**

Antilla (2002, 214) noted that "work on phonological variation has continued largely independently of phonological theory, often consciously emphasising its empirical character". It is claimed, indeed, that phonologists rely on sanitised data, whereas sociolinguists collect and work with real data by examining both linguistic and social factors (Johnson, Britain 2007, 294). This paper combines both systematic and theoretical analysis by bridging the gap between Sociolinguistics and Theoretical Phonology. The research questions of the present study are listed as follows:

- Considering the social and economic change that London has faced, and considering that with the Cockney diaspora Cockney speakers took their language forms with them, how much (l) vocalisation is there left in Bermondsey today?
- How does this linguistic variable behave in London English?
- III. How is this phonological feature socially and linguistically distributed in the speech community of Bermondsey?

4.1 Fieldwork and Methods

Fieldwork for this small-scale project was carried out for 4 months in Bermondsey. Ten native English speakers, stratified by age and sex, were recorded with a flash card recorder and a nonintrusive highquality microphone by means of sociolinguistic interviews. To enter the community, I adopted the 'friend-of-a-friend' technique (Milrov 1980) - an approach which should be considered carefully as making contacts only with people who hold an official status could bias the data towards the standard speech style (Tagliamonte 2006). Before each interview was carried out, the ethical protocol was carefully followed. Each participant, prior to the recording session, was given a Consent Form as well as a Participant Information Sheet (PIS) to gain awareness of what is involved in taking part in a research study, also to become aware of their rights (e.g. the participant's rights to anonymity, confidentiality and withdrawal, etc.).

Sampling is a valued step that challenges any sociolinguistic researcher to quarantee representativeness. The latter defines the level of accuracy of a sample enabling researchers to draw conclusions on the larger population under investigation (Milroy, Gordon 2003). The present small-scale study examines (l) vocalisation only in one social class (as the 10 participants are all working class members), across three age cohorts (young, middle-aged, and old), and across sex (males vs. females), as illustrated in [tab. 1].

Table 1 Sample of the present study

10 Working-class Participants					
Age		Sex	Sex		
Young	Middle	Old	Females	Males	
3	3	4	5	5	

Labov (1984) suggests that a typical sociolinguistic interview should last at least one or two hours per speaker. In this study, the length of each one-to-one interview is about 50 minutes, even though, Milroy and Gordon (2003) point out that, sometimes, it can be onerous to be categorical about the interview length, claiming that phonological data can be gathered in 20 or 30 minutes.

I would usually meet with my participants a couple of hours before the actual interview started, as it seems that "even when interviewed by a stranger, speakers will settle down to a pattern approximating to their everyday interactional style after about the first hour" (Douglas-Cowie 1978, cited in Milroy, Gordon 2003, 58). The main goal of sociolinguists is to find out how people talk when they are not being observed to capture the 'vernacular' - "the style in which the minimum attention is paid to speech" (Labov 1972, 208). However, recording activities might be subject to the 'observer's paradox'. Trudgill (1986) claims that the informants are now familiar with technology, and they tend not to be tense or anxious when being recorded, therefore, it is easy to have a high-quality of recordings and attain linguistic goals. To minimise the observer's paradox, I adopted a semi-structured sociolinguistic interview (Labov 1984). The topics which Labov (1984) describes as 'conversational networks' are selected based on (a) previous successful subjects which engaged the participants in the conversation, and (b) topics which may yield information on neighbourhood norms and on more general ones. Each module, in my interviews, began with general questions, such as "Did you go to one of the schools in the neighbourhood?" (Tagliamonte 2006, 38) to measure a participant's level of interest in that topic. Less controlled speech used to be typically elicited through the 'Danger of Death' question, 5 yet this is quite controversial nowadays as many linguists dispute the morality of forcing someone to recollect and describe this kind of trauma.

The interviews were then transcribed in ELAN, and the data was coded auditorily in an Excel Spreadsheet. The total number of tokens analysed is 743 (about 74 tokens per speaker). The script was also run in PRAAT and mixed-effects regression analysis was carried out to assess the influence of multiple predictors on the target linguistic variable. Mixed-effects models are useful to model both speaker and word as random intercepts, so that while the variance attributed to different levels is estimated, each level of the randomeffects predictor is mapped onto this normal distribution (Gorman. Johnson 2013). The mixed-effects regression analysis was carried out in Rbrul (Johnson 2009) - a program which runs in R, and uses the *lme4* package as well as the *glmer* function. The type of analysis is binary: /l/ vs. vocalisation, with vocalisation as application value. The procedure employed in the logistic regression analysis follows Gorman, Johnson (2013, 222):

- predictors which turned out not to be statistically significant, but the factor weights went in the expected direction, were kept in the model:
- (ii) non-statistically significant predictors whose estimate did not go in the expected direction, were removed from the model;
- (iii) statistically significant predictors whose estimate went in the right direction, were kept in the model.

⁴ This study is rooted in the Labovian framework and focuses on style-shifting in terms of attention paid to speech. However, it is worth mentioning that Bell (1994) proposed the sociolinguistic theory of audience design, which holds that linguistic styleshifting mostly happens in response to a speaker's audience.

⁵ Cf. Labov 1984.

The comparison of different nested models was carried out with the log-likelihood ratio test, which performs significant tests with mixed models by comparing the likelihood of one model to the likelihood of another model (Winter 2020).

The independent variables included in the model are listed as follows:

- Preceding phonological environment (long vowels, short vowels, syllabic /l/).
- Following phonological environment (consonants, vowels, pause).
- Social class (working-class).
- Age (young, middle-aged, old).
- · Sex (females vs. males).

411 Sociolinguistic Theory

This section provides a brief overview of micro-sociolinguistics, which investigates how the social structure affects the way people talk and how patterns of use are influenced by social factors (e.g. social class, age, and sex). The importance of social class lies in the fact that internal differences of societies are reflected in speakers' language use (Trudgill 1995). In English-speaking countries social class has, in fact, been proven to be a prominent variable according to which language varies; indeed, most linguistic features have a 'social' origin (Patrick 1999). The treatment of this independent variable in sociolinguistics has followed a set of empirical approaches from sociology to determine the individual's class by employing indexes across scales which typically take into account: income, education and occupation.

Age stratification of linguistic variables mirrors change in the community throughout time and change in the speech of individuals in a critical period of their lives. The present study adopted an apparent time methodology according to which the notion of time is measured by comparing the speech of older informants with that of young speakers. The different linguistic behaviour between young and old informants is interpreted as a change which has taken place within the community, with younger speakers tending to favour innovative forms and older speakers tending to favour more conservative ones (Trudgill 1974).

The effect of speaker sex (Labov 1990) has long been accounted for in sociolinguistics starting from the early 1970s. Labov (1990) noted that, in stable sociolinguistic stratification, when examining sex at the intersection with social class, men tend to adopt a higher frequency of non-standard variants than women. In cases of linguistic change from above the level of awareness women are more likely to favour prestigious linguistic forms, whereas in cases of linguistic

change from below the level of awareness⁶ women are more likely to use a higher frequency of the less-prestigious variant than men. 7 Numerous studies have demonstrated that within a community, males and females use phonological features in different ways. Given that gender roles differ more widely than socioeconomic classes in many communities, it has been argued that gender should be considered as having a higher influence on linguistic variety than class (Milroy, Milroy, Hartley 1994).

4.1.2 The Theoretical Approach

This section briefly describes the theoretical approach which has been employed. The phonological model selected is Optimality Theory (OT) which allows modelling for language variation and change. OT, proposed by Prince, Smolensky (1993; 2004) and discussed by Prince, McCarthy (1995) in the Correspondence Theory, is an outputbased model of language where the input is retrieved in the output. The basic assumption of this theory is that language is governed by a set of violable constraints which can have more than one form. A violation is serious if the constraint is highly ranked, and the optimal candidate is the one which incurs a small number of serious violations. For any input there is a number of potential outputs, yet only the more logical ones are taken into account (e.g. [dpg] as an input of /kæt/ would be illogical). By contrast, for any output, there could be an infinite set of possible inputs, potentially. A generator (GEN) produces a set of candidates (CAND) which are evaluated against parallel constraints by an evaluator (EVAL).

/input/	CON1	CON2	CON3	
CAND1	*		*	
CAND2		*		
r CAND3			**	

The above table illustrates that both candidate 1 and candidate 2 incur two constraints violations, yet candidate 1 incurs the highest ranked and more serious constraint, thus it is excluded as a possible option. Candidate 2 only incurs one violation, but it is higher ranked

⁶ The raised onset for SQUARE class words in Auckland is an example of change in progress below the level of social consciousness. Cf. Batterham (2000) for additional information.

⁷ For details related to linguistic variation and the social construct of gender which goes beyond than the binary category of biological sex, cf. Eckert (1989, 2000).

compared to constraint 3, so this candidate loses, leaving candidate 3 as the optimal candidate. The optimal candidate is the represented by the symbol .

Constraints, within the OT framework, can be classified in two broad categories: 'Faithfulness' (phonemic contrast) constraints and 'Markedness' (structural) constraints (Prince, Smolensky 2004). Faithfulness prohibits any distinction between the input and the output, and the input is not altered in the surface form. McCarthy (2008) proposed two principal faithfulness restrictions, namely MAXIMAL-ITY8 (MAX) and DEPENDENCY (DEP). MAX strictly entails any item in the input to have an equivalent in the output. DEP guards that an item present in the output must have a correspondent in the input. The notion of markedness was explored by Trubetzkoy (1939) and later reviewed by Jakobson (1941). The scholar argued that a less marked sound appears earlier in language acquisition by children, and its frequency is likely to unfold in the world's languages. This notion has also been considered by Stampe (1972) in the theory of 'Natural Phonology', where he suggested that the natural process, also known as 'unmarked', is due to an ease of articulation. Markedness requires that segments in the input must be maximally expressed in the output, aiming at promoting the most 'natural' form in language, promoting surface forms which are the least marked. Even when obfuscated by faithfulness, the 'markedness' restrictions always tend to emerge in diachronic changes in the so-called emergence of the unmarked (McCarthy, Prince 1994).

5 **Results and Discussion**

This section presents results from the mixed-effects Rbrul regression analysis - which predicts the probability of (l) vocalisation based on the presence of predictors included in the model - and discusses the findings in relation to Optimality Theory.

Results from the multivariate analysis suggest that (l) vocalisation, in Bermondsey, seems to be conditioned by the preceding phonological environment and by the age of participants. The following phonological environment as well as sex did not reach statistical significance. The statistical information reported in the table below include: R² - a measure of the 'goodness of fit' (Winter 2020); log-odds, which reflect the strength of the relationship between a

⁸ The MAX constraint is the analogous to the PARSE restriction of the 'Containment Theory'.

⁹ This study only examines language production and thus, does not provide an account on perception; cf. Ohala (1993) for related details.

predictor and the response; 10 and factor weights - relative probabilities within the range of 0 - 1.00 which are related to log-odds.

 Table 2
 Mixed-effects regression analysis reporting statistically significant
 predictors. Note: *p<0.5; **p<0.01; ***p<0.001.

Application value = vocalisation; Overall proportion = 0.673; R ² = 0.161;					
Log-likelihood = -431.169; N = 743					
Contraints	Logodds	FW	%	N	<i>p</i> -value
Preceding phonological environment					***
Long vowels	0.711	0.67	80	289	
Short vowels	-0.225	0.44	59	360	
-C Syllabic /l/	-0.487	0.381	58	94	
Age					***
Young	0.952	0.72	87	173	
middle-aged	-0.467	0.38	61	232	
Old	-0.485	0.38	62	338	

In the preceding phonological context, only preceding long vowels (e.g. 'girl')¹¹ are marked as favouring predictors. Short vowels (e.g. 'well') as well as the effect of preceding consonants on syllabic /l/ (e.g. 'little') disfavour vocalisation. This result is in line with findings from Colchester and Southend (Spero 1996), the Fens (Johnson, Britain 2007), and Australia (Horvath, Horvath 1996). In the London area, long vowels preceded by vocalisation were also found to be frequently shortened (Bowver 1973).

In terms of social significance, [tab. 2] suggests that (l) vocalisation is only conditioned by the age of speakers, with young participants favouring vocalisation at 0.72, whilst middle-aged and old participants disfavour it. In sociolinguistic theory, age stratification of linguistic variables is of prominent importance as it mirrors (a) change in the community throughout time, (b) change in the speech of individuals in a critical period of their lives. In line with previous sociolinguistic studies, the different linguistic behaviour between young and old informants, in Bermondsey, might be interpreted as a change which has taken place within the community, with younger speakers tending to favour the non-standard feature, whereas middle-aged and older speakers tend to favour the more conservative variant. (L) vocalisation has a history of being stigmatised, but it seems to be spreading to more formal styles (Johnson 2001). Crosstabulations between individuals' age and

¹⁰ If log-odds are positive, there is a positive correlation between the variables, whereas if they are negative there is a negative correlation between them.

¹¹ Tokens like 'girl' were coded on the phonetic surface. In this case, the token is non-rhotic.

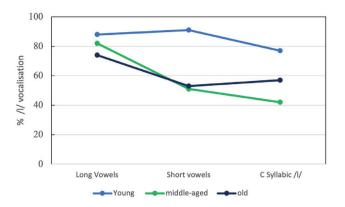


Figure 2 Interaction between preceding vowel length and speaker's age, p < 0.05

preceding vowel length suggest that young speakers lead in the use of vocalisation when /l/ is preceded by long vowels, short vowels, and when syllabic /l/ is preceded by consonants. All age groups indicate high levels of vocalisation after long vowels, with middle-aged speakers being slightly behind the young generation, and slightly ahead of old speakers. Both middle-aged and old speakers vocalise nearly at the same levels after short vowels, whereas when /l/ occurs in syllabic position preceded by consonants, old informants were found to vocalise a little bit more than middle-aged speakers.

From a theoretical viewpoint, the above mixed-effects regression analysis revealed that (l) vocalisation, in Bermondsey, appears to be conditioned by preceding vowel length, with preceding long vowels favouring the vocalisation of /l/. In line with phonological theory, long vowels foster the early and longer dorsal gesture, whereas a short vowel blocks it. But why do long vowels trigger (l) vocalisation? The vocalic dorsal gesture maximisation tends to minimise the coronal gesture, and vocalisation is more likely to occur when /l/ is preceded by long vowels (Sproat, Fujimura 1993). [Fig. 3] shows that vocalisation is inhibited when /l/ is preceded by short vowels owing to the very short timings between the two gestures. Thus, vocalisation is a result of the coronal gesture failure (Sproat, Fujimura 1993).

To account for the influence of preceding consonants on syllabic /l/, this paper follows Johnson, Britain (2007) in employing the *coronal[LAT]/rhyme constraint. The use of the FAITH $_{\rm [COR]}$ (*GLOTTAL-l/*LABIAL-l >> *DORSAL-l >> *CORONAL-l) constraint, implies that FAITH $_{\rm [COR]}$ prohibits vocalisation Thus, if vocalisation is inhibited in the environment of following glottals or labials, it will be also blocked in the environments following dorsals and coronals. [Tab. 3] and [tab. 4] show that the ranking for *CORONAL-l and FAITH $_{\rm [COR]}$

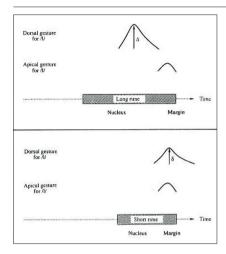


Figure 3 Representation of /l/ vocalisation gestures, Sproat, Fujimura (1993)

yields two potential outputs. [Tab. 3] for instance, should be interpreted as follows: if vocalisation is possible after coronals, it is likely that it will occur after dorsals, glottals/labials. This outcome is also illustrated in [tab. 5], where the glottal stop is the preceding phonetic segment.

Table 3 OT representation for /mʌdl/ (adapted from Johnson, Britain 2007)

/mʌdl/	*GLOTTAL-l/	*DORSAL-l	*CORONAL-l	FAITH[COR]
	*LABIAL-l			
⊯m∧du				*
mʌdl		*		

Table 4 OT representation for /mʌdl (adapted from Johnson, Britain 2007)

/mʌdl/	*GLOTTAL-l/	*DORSAL-I	FAITH[COR]	*CORONAL-l
	*LABIAL-l			
mлdu			*	
⊯m∧dl				*

Table 5 OT representation for /l1?l/ (adapted from Johnson & Britain 2007)

/lr?l/	*GLOTTAL-I/	*DORSAL-l	*CORONAL-l	FAITH[COR]
	*LABIAL-l			
ادًا	*!			
ı lı?u				*

Even though it is possible to provide an OT explanation for the effect of preceding consonants on syllabic /l/, statistically, at least in Bermondsey, this constraint does not appear to influence vocalisation. Cross-linguistic studies show evidence (l) vocalisation in Old French, Catalan, Modern Provencal, Serbo-Crotian, suggesting that this phonological feature is a natural phenomenon. 12 Whereas, studies carried out on child language acquisition show that the dichotomy cleardark /l/ does not occur in children's speech. In language acquisition. children tend to downgrade markedness restrictions to obtain faithfulness to the acquiring system.

6 Conclusions

This small-scale study has examined (l) vocalisation in the underdocumented speech community of Bermondsey to find out whether, despite the Cockney diaspora and despite the emergence of Multicultural London English, this phonological feature is still present in this London district. Results from the mixed-effects regression analysis suggest that (l) vocalisation continues to exist in Bermondsey as a change in progress led by young speakers. Preceding long vowels were marked as the most favouring environment for vocalisation to occur due to phonological necessity, and OT was employed to provide a theoretical explanation of the predictors which condition (l) vocalisation. Even though the findings seem to match previous research, the limitation of this study consists in the small number of participants.

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¹² For an in-depth discussion on the naturalness of (l) vocalisation, cf. Johnson, Britain 2007.

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