

London's Cockney in the twentieth century Stability or cycles of contact-driven change?

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1 Introduction: migration and linguistic change in London over six centuries

Recent press reports talk about a new, mixed, multicultural dialect in London's traditional East End, apparently displacing traditional Cockney, which ends up being pushed to the edges of the city and beyond (Kerswill 2014). The press have labelled this '*Jafaican*', while academics give it the name *Multicultural London English* (MLE), seeing it as one of a number of North-west European *multiethnolects* currently emerging in cities which have seen intense immigration in the past 30 years (Cheshire et al. 2011; Kerswill et al. 2013). We have argued that this variety, which is characterised by phonetic, morphosyntactic and discourse features, has its origins in the early 1980s, a direct result of the mixing of languages followed by generational shift to English in areas of London which have seen particularly high immigration.

Whether MLE has 'displaced' Cockney is a moot point. First, it is actually hard to talk of it as a 'variety', since it contains a broad range of variation. Second, it forms a continuum with more traditional varieties of working-class speech in London which might come under the 'Cockney' umbrella, as well as with other sociolects in the city, including varieties close to Received Pronunciation. And third, we have argued that it contains characteristics of a Labovian vernacular, habitually spoken by a demographically defined set of speakers, while it is also a youth style containing highly salient slang items which are adopted by a broader range of speakers than its core group (Green 2014). In this chapter we ask two questions: is there any earlier evidence that migrants have influenced London's dialect in the period for which we have recorded evidence? Relatedly, to what extent is it possible to identify any precursors of MLE?

London has long received significant populations from elsewhere in the country as well as overseas. It is well known that the pronominal forms *they*, *them* and *their* arrived in London from Northern England during the Middle English period (Baugh and Cable 1993: 156), to be followed, again from the north, by third person singular present-tense *-s* in the mid-sixteenth century (Nevalainen and Raumolin-Brunberg 2000: 305). Both these changes are thought to be the result of direct migration from the North to London. They were successful not because of force of numbers, but because of the relative wealth and status of the people who migrated. That said, numbers are important: we must assume that these early migrants were able to predominate among the circles of the small but influential merchant class. In this chapter, we will look at another, later, migrant group joining a similarly quite circumscribed network in London, the Yiddish-speaking Jews who settled in a very compact part of the East End in the 1880s. Although there is anecdotal, often only literary, evidence for it, we will consider what *local* linguistic

influence they might have had on the working-class dialect of the East End, even though they were a small minority across the city. We will contrast their situation with today's linguistic conditions in the same part of London, where the proportional number of immigrants is much higher, and where the number of linguistic groups is hugely greater.

2 Population tipping points and the founder principle: the Jews of the East End

Surprisingly, since the 16th century there is little indication that migration has led to changes in London English – at least not to changes which are observable because they have survived later levelling. In any case, in the nineteenth century most migrants were from the southern half of England, with far fewer from other places, including overseas, with the result that the varieties in contact were relatively similar and any changes resulting from the contact therefore difficult to detect. In the Victorian era, of the non-British groups in London, the Irish were by far the largest and 'most conspicuous' (Inwood 1998: 413), there being 109,000 Irish-born residents according to the 1851 census. Despite the relatively large numbers of Irish people, there are no claims in the literature that either Irish English or the Irish language had any influence on London English (cf. Wells 1982: 301–334). Does this apparent lack of influence reflect a general pattern?

However, later migration-induced contact did, it seems likely, affect other dialects in England, and it is instructive to examine a particular case. According to Trudgill (1998), the typologically 'unnatural' 3rd-person singular *-s* agreement was lost in Norwich English following the immigration of large numbers of Dutch and French speakers from the Low Countries in the years after 1567. By 1579, 37 per cent of the city's population was composed of Dutch and French speakers. The resulting contact between a proportionally large number of second-language speakers of English and the native population led to the simplification of the paradigm through the introduction of a zero variant, almost certainly aided (Trudgill argues) by the fact that, at that time, there were actually two endings in competition, *-eth* and the newer (northern) *-s*. Trudgill suggests that, at a critical time, the three variants (zero, *-eth* and *-s*) were numerically balanced, leaving the way open for one to win out – in this case the simplest, zero. The sociolinguistic situation was presumably one of fairly intense contact between the non-native speaking incomers and the existing population, leading to the non-acquisition of the 3rd-person ending by the children of both groups. We will be arguing (following Trudgill 1998, 2004) that the relative frequencies of individual variants and of language varieties, as determined by population sizes, are an important predictor of linguistic outcomes of contact.

Of all British cities, London has probably seen the greatest inflow of people over the longest period – so the apparent lack of linguistic influences despite intense dialect and language contact is surprising. The question therefore arises: could it be the case that, despite the size of the migrant populations there, the proportions of immigrants to 'natives' were never large enough to lead to change? In the nineteenth century, we discover that, according to the 1851 census, 38 per cent of London's population was composed of British and overseas migrants, reducing slightly to 34 per cent by 1891 (Inwood 1998: 412). This, of course, is

practically the same proportion as that which obtained in Norwich 270 years previously; the apparent absence of any effect of this migration could be put down to the fact that the immigrants were heterogeneous and were spread unevenly throughout the city. Later in the century, the proportion of migrants dropped markedly, while the city's population rose from 1 million in 1800 to 4.5 million by 1881 and over 7 million by 1911 (Porter 1994: 249). Migration did contribute to this rise, but improvements in public health in the second half of the century enabled natural increase to account for more than half the population growth (Inwood 1998: 416). Even so, three out of the 30 registration districts in London still had a migrant *majority* in 1881 (Inwood 1998: 416). Doubtless there were many more such areas at a sub-district level. In the light of our focus on relative frequencies, if we want to trace influences on London English, it is in districts such as these that we are likely to find them.

By the time of the late-nineteenth century Jewish immigration, there was already an established, wealthy Jewish population in London, numbering some 46,000 in 1881. The new immigrants were refugees from Tsarist Russia and Poland, and the Jewish population rose to 140,000 by 1905 (Inwood 1998: 413), at which point the Aliens Act of that year would sharply reduce the numbers of new immigrants. Yiddish was their vernacular language (Russell and Lewis 1901: 18). There is little, if any, published research on the maintenance of Yiddish during these years, but the history of Yiddish theatre at the Pavilion in Whitechapel Road is instructive. Yiddish performances had their heyday there in the 1920s, but by 1935 the population of Yiddish speakers was so diminished that they had to cease. Speculative reasons given are the 'Anglicisation' of the younger generations and migration to wealthier parts of London (All About Jewish Theatre, n.d.). Language shift was evidently rapid, encouraged by policies favouring integration – this was true even in the 4,000-pupil Jews' Free School, where 'the emphasis was on integration. Pupils were encouraged to discard the Yiddish language and focus on becoming little English men and women' (Cook 2012). We can conclude, therefore, that the language 'died' with the demise of the first generation.

Yiddish once more became a community language, and remains so in the East End today, when new waves of refugees arrived escaping persecution in Europe in the 1930s. High proportions of Jewish people live in parts of the area today, particularly in Stamford Hill, where there is now a substantial community of Ultra-Orthodox Charedi, whose communities were founded there in the 1920s (<http://www.hackney.gov.uk/hackney-the-place-diversity.htm#.UnjZ7XC-2Cd>). There was, then, a linguistic if not a social discontinuity between the 1880–1905 East European immigrants and the later inter-war refugees. Because the latter did not settle in such a concentrated way, their scope to influence local varieties of English would inevitably have been much more limited. Our focus, therefore, must be firmly on Whitechapel at the turn of the 20th century.

If we are to find any Yiddish influence on London English from this period, we need information about local speech from the time when Yiddish was at its height in terms of having both adult and child speakers. This implies a window which finishes around 1900, when young immigrant, and hence Yiddish-speaking, children would have been reaching adolescence or early adulthood, and the second-generation, English-born children would be in the process of shift or be mainly Anglophone. However, as is clear from our earlier argument, we still need to know

(as far as we are able) the proportions of Yiddish speakers to English speakers. The reason for this is the linguistic ‘advantage’ enjoyed by the founder population of an area: for a number of reasons, including prestige and cultural dominance, the language of the earliest inhabitants of an area stands a better chance of survival than that of later incomers. This ‘founder principle’ has been promoted by Mufwene (2001) as a means of modelling the early development of Atlantic creoles. Importantly for us, the crux of his argument is a focus on the relative proportions of speakers of the European lexifier languages in a given plantation community, emphasising the length of time speakers of one or another language group dominated numerically. The argument can be summarised as follows (cf. Mufwene 2001: 62–64). Where Europeans were in a majority and their language continued to be transmitted for a considerable time, including to members of the slave population living in proximity to them, the language (English or French) would survive among both the European and the slave populations. If Europeans were in a minority and their language was not being transmitted, then creolisation would take place. In the case of the East End just before the beginning of the twentieth century, we need to establish the proportions of Yiddish to English speakers: which group was numerically superior? Yiddish speakers were not a ‘founder’ population, but if their proportions were high enough they had the potential to swamp the local English speakers. If shift to English was rapid, we would expect second-language varieties to have formed a significant input to the resulting variety of English. The shift seems indeed to have been rapid, being well on the way to completion within one generation. What were the social conditions, including demography, contact and ideology, which led to the shift? What kind of social integration was taking place around the turn of the twentieth century? We turn to these questions now.

We are fortunate in having relatively detailed information about the distribution of the Jewish and non-Jewish population in the East End at the critical period. In 1899, George Arkell published his *Jewish East London* (Arkell 1899 [2012]), a street map based on a survey of dwellings across the boroughs of the East End. Figure 1 reproduces this map. The darkest shading (dark blue in the original) is in the south-west quadrant and shows streets which are at least 95 per cent Jewish. These are surrounded by streets which are at least 50 per cent Jewish. The remainder of the map is largely shaded a deep red, signifying a population which is less than 5 per cent Jewish. What is striking is the extreme concentration of the then-recent Jewish immigration within a fairly compact area. The area became relatively self-contained, with 70 per cent of the population being employed locally in tailoring (Cook 2012). Despite this, there were cross-community contacts, with many gentile children being employed as a *Shabbos goy* (‘Sabbath non-Jew’) to light fires in Jewish households on the Sabbath. Schools, however, reflected the ethnic composition of the area, with many being close to 100 per cent Jewish (this was true not only of the Jewish Free School). A high proportion of children additionally attended small *chederim*, or traditional elementary schools teaching religion and Hebrew, where the medium of instruction was almost always Yiddish (Lewis 1901: 217).

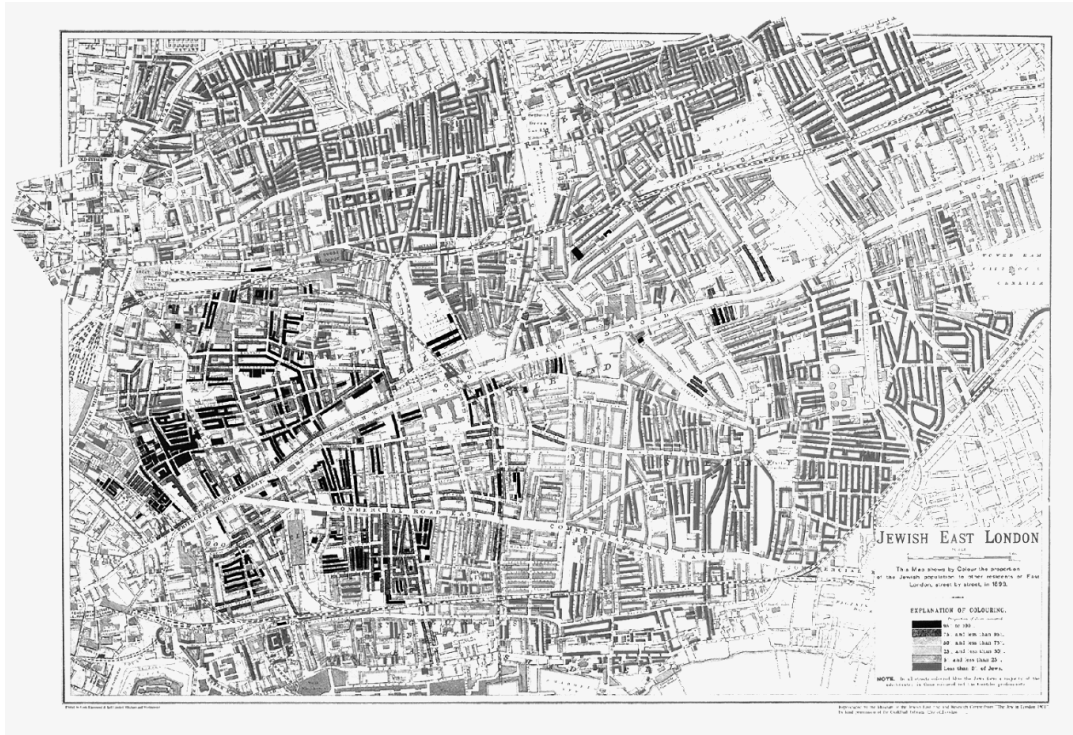


Figure 1. Jewish East London (south-western portion) (Arkell 1899 [2012]). The strongly Jewish areas are indicated by darker shading in the bottom left-hand portion of the map¹

Despite this concentration and despite pride in religious and community-based institutions and traditions, Yiddish was quickly abandoned in favour of English, a process which was apparently complete within one or two generations, as we have seen. Ideological factors of two sorts might be underlying causes. At the time, there was a prevailing European negative attitude to Yiddish (Schmid 2002: 343). As Russell (1901: 31) comments: ‘Yiddish [is] a ‘jargon’, which mainly consists of bad German’. Little is known about contemporary Jewish and non-Jewish attitudes to Yiddish in London, but this negative ideology could well have lessened the potential for the language to act as an identity marker, thus hastening language shift. Secondly, there was clearly a collective desire to make social and economic progress in the adopted society, and this is reflected in many of Russell and Lewis’s (1901) comments about the near-complete ‘Anglicisation’ of the second generation; these are important for our argument, and we return to them below.

3 A Jewish Cockney in the early twentieth century? Testimony and circumstantial evidence

¹ The original map is viewable in colour at the following internet address: <http://webarchive.nationalarchives.gov.uk/+http://www.movinghere.org.uk/search/catalogue.asp?sequence=5&resourcetypeID=2&recordID=56004>).

In the initial stage, perhaps up to 1900, children's acquisition of English would have been through formal primary and secondary schooling. There would also have been English-language input from adult learners – the parents and their generation. Contact with local English speakers would have ranged from extensive to very little, depending on occupation, neighbourhood and cultural norms. Such a situation favours the growth of *ethnolects* (Wölck 2002), where a single ethnolinguistic group has migrated and maintains a measure of internal cohesion, allowing a distinguishable, group-based variety of the host language to emerge. In Britain today, there are British Asian ethnolects in cities such as Bradford and Sheffield, where these conditions apply (Heselwood and McChrystal 2000; Kirkham 2011; for Glasgow and London, see Stuart-Smith, Timmins and Alam 2011, Fox 2007 and Sharma 2011).

We turn next to the evidence for a specifically Jewish ethnolect in East London in the early years of the last century. To our knowledge, there are no relevant contemporary recordings. There are, however, a small number of recordings of elderly speakers from this part of London who were children at the critical time. But first we will look for contemporary testimony.

Russell and Lewis's (1901) descriptions of the still-young Jewish community of the East End contains much social commentary, including reflections on religious practice, work, leisure, education, the 'Jewish character' and relations with non-Jews. Each author (the second a Jew) paints a largely positive picture of a successful community, aided by the much wealthier existing Jewish population. They are at pains to show that Yiddish is only really spoken by the immigrants themselves, while their children speak English. The ideology of the book is both pro-Jewish and pro-integrationist (though Lewis is at odds with Russell, who he accuses of overestimating the Jews' degree of integration and secularisation). The authors do not make any comments about the way English is spoken, but, even allowing for their ideological stance, we can deduce from their account that they believed there was not a distinctive 'Jewish' way of speaking, or at least that the community's way of speaking English was not salient to either outsiders or insiders. Four quotations support this:

The 'Anglicising' process, however, cannot be said to be very widely or thoroughly effective, except in the case of the rising generation. Here the transformation effected by an English training is astonishing in its completeness. All the children who pass through an elementary school may be said to grow up into 'English Jews'. (Russell 1901: 23-24)

It has been seen that the social isolation which preserves the Yiddish-speaking community from all the contaminating influences of intercourse with Gentiles is no longer maintained in the case of the English-born generation. The English training, and the inculcation of English habits and ideas, goes far towards robbing them of their Jewishness. They consider themselves Englishmen, and do not apparently attach any very great sanctity or importance to the racial and religious ties which bind them to their fellow-Jews who have immigrated from foreign lands. And the reality of this change is at once attested and emphasised by the cordial feelings with which English Jews are commonly regarded even by the most bitterly anti-foreign among the East End Gentiles. The barrier of social prejudice, in fact, may be said to have broken down. (Russell 1901: 140-141)

The typical Jew, of the class we mention, has certainly been thoroughly Anglicised, though he may bear a Dutch name which indicates the country from which his family came originally. (Lewis 1901: 163)

... the child brought up in England regards Yiddish with contempt. I have myself met boys who had been taught to translate Hebrew which they did not understand into Yiddish, which was equally unintelligible to them. (Lewis 1901: 219)

In sum, the Jewish immigrants are said to remain socially isolated, while their children have moved a long way to integration socially and linguistically, decisively turning their back on the old language.

Schools followed the policy of Anglicisation, and as pointed out by the project *Moving Here* (n.d.), 'The schools seem to have succeeded in this aim: an 1894 Board of Trade report describes how the children 'enter the school Russians and Poles and emerge from it almost indistinguishable from English children'. In relation to speech, one wonders what lies behind the author's choice of 'almost' here. A century on, the Manchester-born author Howard Jacobson denies that a British Jewish accent ever existed. In a film review, he writes:

If you're going to be funny about being Jewish, know to the bone what you are being funny about. It is not funny simply to name Jewish food. It is not funny to employ yiddishisms like *bubbeleh* and *lobbes* unless you can find the poetry in them. Least of all in a Jewish accent that hasn't been heard since my father's family arrived from Kamenetz Podolski in 1893, and probably not then. (*Evening Standard*, 12 February 2004)

Jacobson is criticising the use, in the film, of a stereotyped British Jewish accent, albeit not necessarily a London one. Such stereotypes can occasionally be encountered in films and sitcoms, such as Peter Cook's 1960s portrayal of an East End tailor in *Never Mind the Quality, Feel the Width*. Although it is difficult to establish the source of the stereotyped Jewish accent Jacobson mentions, it is highly likely to have a basis in an earlier reality. However, Jacobson's comments about the non-existence of an early British Jewish accent are not directly applicable to London, since his grandparents had settled in Manchester. So far, our evidence for the presence or absence of a London Jewish accent at the turn of the twentieth century is circumstantial and inconclusive, and favours absence. But given what we know from contemporary situations in different parts of the world, including Britain, ethnically distinct varieties of host languages are far from rare. Can the turn-of-the-century East End have been so different?

Wells (1982) suggests that there is, indeed, a London Jewish accent. He writes:

Another subvariety is Jewish, characterized (at least in its stereotype) by laminal rather than apical pronunciation of /t, d/ and by the use of a velarized labio-dental approximant, a dark [v], for /r/; also, often, but the use of [-ŋg-] in *singer*, etc. (Wells 1982: 303)

Following on from Wells's comments, Foulkes and Docherty (2000: 37–38) mention the absence of orthographic <r> in Dickens's portrayal of Jewish characters, as in *tyfling* for *trifling*, where the omission of /r/ could correspond to a

labiodental [v] when spoken in a labial environment (a following /f/), and they go so far as to suggest that London Jewish speech might be the origin of labiodental /r/ in British English (however, see remarks in Fabricius, this volume).

But there is an important caveat: note Wells's hedge 'at least in its stereotype'. This suggests that he himself has not heard these variants – and he has since confirmed this to be the case (Wells, p.c. 2013). This stereotype presumably has the same source as the comedian Peter Cook's 1970s representation of Jewish speech, but we cannot easily tell whether the source is the early or the mid-twentieth century. Our argument suggests that the conditions were right for a Jewish ethnolect to arise shortly after 1900, and that the more diffuse immigration from the 1930s probably did not meet these conditions. Since there are no other (published) observations about a London Jewish accent, existing in the present or in the past, we need to look elsewhere for evidence.

In order to judge whether there have been contact-based influences on London English, we need an indication of the degree of stability and change during the period with which we are concerned, the twentieth century up to 1980. To do so, we turn to audio recordings of individuals who were born and raised in the East End before 1900, as well as archive recordings of people born between 1931 and the mid-1950s. Together, these will give us a picture of the stability, or otherwise, of East London vernacular vowel systems before the rapid vowel changes that set in with the appearance of MLE in the last two decades of the century.

4 Sivertsen's *Cockney Phonology*: Mid-century recordings as a window early twentieth-century East End speech

Eva Sivertsen's *Cockney Phonology* (1960) provides us with some of the earliest speakers for whom we have extensive recordings. This was one of the first investigations of an urban dialect in Britain, but can really be regarded as traditional dialectology in an urban environment because of the small number of informants, the lack of any quantification of results and an unsystematic treatment of variation. Sivertsen carried out her fieldwork in 1949 and 1956–7 and it constituted the data for both her MA and PhD theses, the latter being later published as *Cockney Phonology*. We were able to acquire Sivertsen's original tapes from her family in 2009. She had four named informants, all women born in 1874–1892, though she also based her study on other speakers she met in and around the social club where she carried out the fieldwork. However, only two of the four women's data were subjected to extensive analysis. Sivertsen's informants came from Bethnal Green, and grew up in areas which the map, shown in Figure 1, and Baker (1998) tell us had a high proportion of Jews. The informants' formative years would have been around 1900, exactly the time of the map. Of the two women, one talks extensively about the Jewish neighbourhoods and her own close relations with the people. Before we consider these women's vowel systems, we summarise Sivertsen's broader conclusions about Cockney pronunciation.

Sivertsen's analysis is mainly auditory, and was based on tape recordings of interviews, reading lists of words and phrases, and note taking – though she also carried out a small-scale acoustic study of some vowels. The emphasis is on Cockney phonological structure, including a comparison with RP vowels, though

all consonants are also discussed, in particular with reference to glottalisation and the realisation of the liquids /r/ and /l/. Neither language contact nor the multi- (or perhaps bi-) cultural nature of Bethnal Green is specifically discussed in *Cockney Phonology*. She does note changes in speech due to the influence of education and more standard ways of speaking. In addition, she observes the effect of the speaking situation, i.e. the interlocutor, on the use of particular phonological and morpho-syntactic forms. She is aware of up-to-date structuralist contact linguistics, however:

Some people have a better ear for dialect differences than others. Some consider it more important to approach a standard speech form than others do. The result is a conflict not only between two, but between a great number of different speech forms, such as we find it in many large urban areas today. There is interference on a large scale, but of a type which is not easily subjected to the kind of analysis proposed by Uriel Weinreich. There are erratic pronunciations, vacillations, uncertainty, lack of consistency. (Sivertsen 1960: 3)

Weinreich (1953) deals with contact, but Sivertsen does not pursue this line of enquiry further. Sivertsen was interested in speech forms ‘when the speakers are most off their guard, when they are less conscious of how they speak, in so far it is possible to make such an abstraction’ (Sivertsen 1960: 4), and in this regard she not only anticipates Labov’s later formulation of the ‘vernacular’, but also his belief in the centrality of this speech style (Labov 1966). However, in her account Sivertsen does not ascribe features to particular informants, so that what she presents is an impressionistic distillation of the data, generalised to the community as a whole.

Sivertsen’s description of Cockney is, however, very detailed. For vowels, Sivertsen found shifted diphthongs in FACE (see Wells 1982), transcribing them as [ɛ̃ɪ] or [æ̃ɪ] (symbols are as in the original; the superscript ̃ indicates a ‘non-syllabic’ element). She notes considerable variation: the higher variant is found in more formal styles and with speakers who are considered less ‘rough’ (Sivertsen 1960: 57). GOAT has [œ̃ʊ] or [œ̃ʊ̃] with no indication of stylistic or social variation (1960: 88). This transcription represents a front onset, but a high-back offset, and this suggests that the fronting of the offset of this vowel had not started (Kerswill, Torgersen and Fox 2008). PRICE has [ɑ̃ɪ], which can be more or less monophthongal, with a typically unrounded onset (Sivertsen 1960: 64). MOUTH has a front, fairly open onset which may be monophthongal [ã] or slightly raised diphthong [ɛ̃ɔ̃] (Sivertsen 1960: 88–89). GOOSE is ‘strongly diphthongized and considerably more fronted [than RP]’ with a quality in the area of [ə̃ũ] (Sivertsen 1960: 81). FOOT is generally [ʊ]. TRAP is fairly front and slightly raised, [ɛ̃] or [æ̃] (Sivertsen 1960: 59–60). There is also variation in STRUT which may be a front or central vowel, which she transcribes [ʌ], or a more retracted vowel in some contexts, in particular before /r/ and /l/ and before vowels (Sivertsen 1960: 83–84). DRESS is [e], between half-close and half-open (Sivertsen 1960: 53).

Sivertsen states that her two main informants are EE and MM (she does not give their names), with the former as the more important source. EE was born around 1890 and lived in or near Brick Lane all her life (the street runs north–south,

and is located in the upper half of Figure 1), having worked as a feather-curler and housewife. Looking at F1–F2 plots of the informants' vowels will enable us to establish a base line for what Sivertsen considered representative of, or at least canonical for, the accent. The plot shown in Figure 2 presents average formant values, with Lobanov normalisation (Lobanov 1971). For the diphthongs (excluding GOOSE), only the vowel onset is represented. The plot is based on an automated analysis of over 7,500 vowel tokens. For this speaker, the sound files were subjected to forced alignment of segments using the procedure developed at the University of Pennsylvania. A visual inspection of the completed alignment was carried out, and obvious alignment errors were manually corrected. Automatic formant extraction was done using the online tool FAVE Extract (Rosenfelder et al. 2011). EE has a typical London English vowel system: a fairly back FOOT and diphthong-shifted FACE and GOAT (i.e. with open onsets; Wells 1982: 308; Kerswill et al. 2008: 4) and PRICE (with a back onset in the same position or slightly above START). STRUT is the lowest short vowel – a conservative feature (see Trudgill 2004: 44–45; 133). Comparing these plots with Sivertsen's transcriptions, we see that there is generally a good match. DRESS is higher than expected from Sivertsen's description, and GOOSE is more front than she indicates. TRAP is a front vowel. For STRUT, Sivertsen allows for considerable variation on the front/back dimension; the plot suggests that EE's vowel is towards the back of the range.

Impressionistically, EE uses a somewhat careful style. There is no TH-fronting (it did not become a majority form until the latter part of the twentieth century), but there is some glottalling intervocalically in words like *getting* with a syllabic /n/. Glottal stops are also found word-finally before a vowel, such as *right in* and *got into*. Wells (1982: 324) states that this feature can be found in 'educated' London speech, but not in Received Pronunciation. However, glottal replacement of /d/ is also common in EE's interview in *couldn't*, *didn't* and *wouldn't*, a well-established Cockney feature. Surprisingly, EE is a frequent user of alveolar approximants intervocalically across a word boundary ('t-to-r'; see Clark and Watson 2011) in phrases like *got it*, *what I* and *a lot of*, a feature not usually described for London, but widespread in Northern England and in vernacular Dublin English (Hickey 2005: 41). She has an alveolar or labiodental /r/, but no taps.

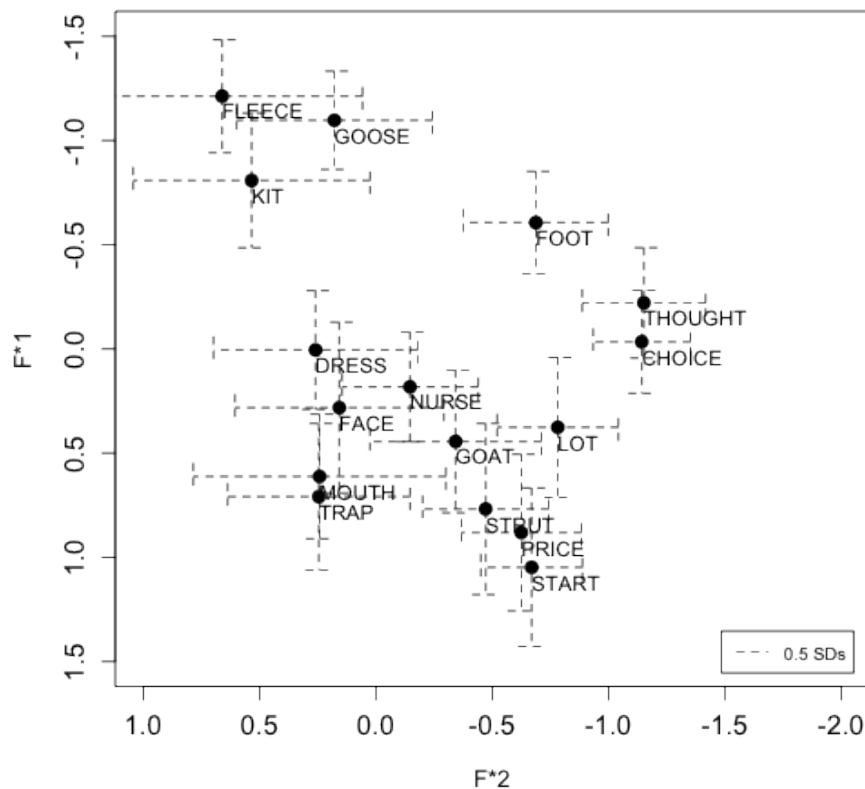


Figure 2 Vowel system of EE, female born c. 1890 and recorded in 1956, showing mean vowel onsets and 0.5 standard deviations (Lobanov normalisation).

As a comparison, we analysed the vowels of H. J. Kent, a man born in 1888 in the borough of Hackney, which borders onto Bethnal Green. Data for him comes from the *Survey of English Dialects* (SED) recordings held by the British Library and accessible online. Forced alignment was not used; 128 tokens were analysed by hand, representing all the stressed vowels found in the SED interview on the British Library website. 18 tokens were measured for the most frequent vowel (FACE), with three being measured for the least frequent (NURSE). Figure 3 shows that Mr Kent has a similar vowel system to EE's, but has a more shifted FACE, a more back FOOT and a less back/more open STRUT, which is clearly the lowest vowel in the system. The two speakers share fairly high qualities for KIT, DRESS and TRAP.

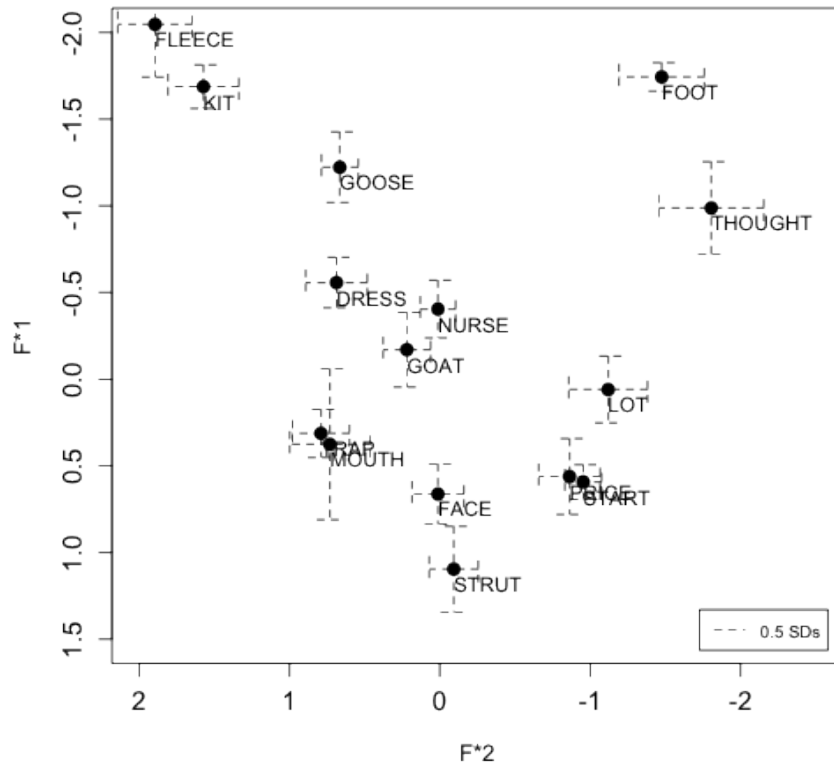


Figure 3 Mr H. J. Kent, mean vowel onsets (Lobanov normalisation), showing 0.5 standard deviations.

A somewhat different picture emerges with Sivertsen's other main informant, MM. She was born in 1892 and had lived at the corner of Bethnal Green Road and Brick Lane all her life. We are told that she had an Irish family background, though no further details are provided. She worked as an upholsterer and in a tea factory. Sivertsen states that her neighbours considered her to be 'a 'real, rough Cockney girl', in speech and manners' (Sivertsen 1960: 7).

Figure 4 shows MM's vowel system. Because the sound quality on her recordings was relatively poor, automatic formant tracking was not possible, so a smaller subset of her tokens were analysed by hand using PRAAT. A total of 194 tokens were analysed, ranging from 30 for the most frequent vowel (FACE) down to two for the least frequent (CHOICE). Monophthongs were measured at the midpoint, while diphthongs were measured at the steady state portion of the spectrogram immediately after the onset but away from influence of preceding segments. This was about one quarter of the way into the vowel.

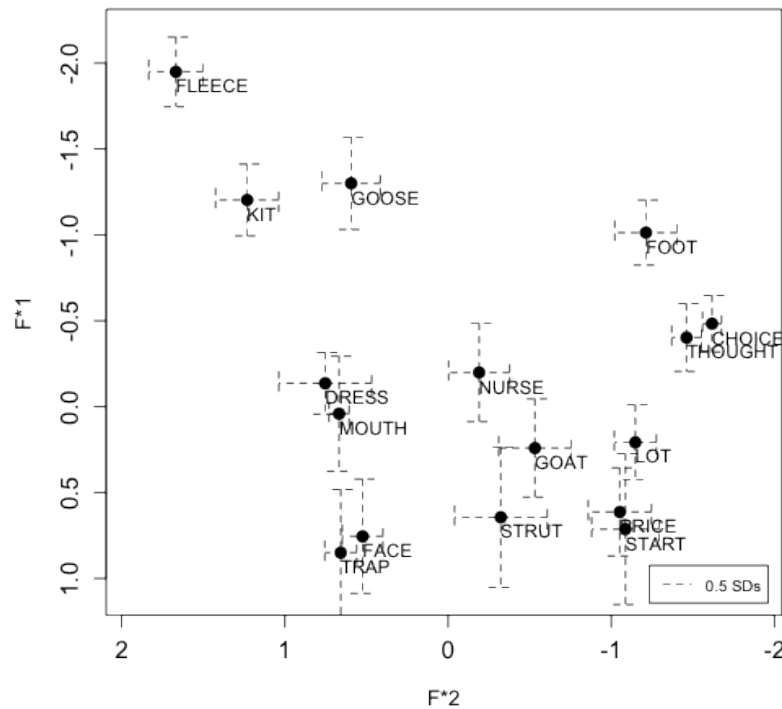


Figure 4 Vowel system of MM, female born in 1892 and recorded in 1956 (based on a manual analysis of vowels; Lobanov normalisation), showing 0.5 standard deviations.

Her short front vowels, KIT, DRESS and TRAP, are lower than those of EE and Mr Kent, and her STRUT is not the lowest short vowel in her system. These differences are consistent with the early stages of a mid-to-late twentieth century short-vowel shift in the London region (Torgersen and Kerswill 2004) which is not present in the latter's systems. Compared with EE, MM has a raised MOUTH and lowered FACE, suggesting more advanced diphthong shifting than her coeval. This is true at least for FACE, for which a shifted vowel is probably a twentieth-century innovation (see Trudgill 2004: 55–57 for evidence of this). Shifted diphthongs in MOUTH were well established in the mid-nineteenth century (Trudgill 2004: 52, citing Ellis 1889), and may in fact be a conservative feature and, therefore, 'shifting' a misnomer (Britain 2009). There is evidence that diphthong shifting in FACE was an ongoing process in the Southeast of England from the late nineteenth century at least until the 1950s, spreading out from London. Trudgill (2004: 51–59) summarises evidence from Ellis (1889) and the *Survey of English Dialects* (Orton and Tilling 1970), as well as other publications, to show that there was a gradual diffusion of this feature throughout this period. Diphthong shifting of FACE was most likely still a live process in London around the turn of the twentieth century and later when MM and EE were growing up. (In London's inner city, diphthong shifting of all the relevant vowels is currently being reversed, as a result, we argue, of post-World War II language contact – see Kerswill et al. 2008 and Cheshire, Kerswill, Fox and Torgersen 2011.) It is possible to argue, then, that MM's vowel system is more 'advanced' in two respects: it shows participation in the short-vowel

shift as well as the results of continued diphthong shifting of FACE. The caveat here is that the height of the onset of this diphthong was socially sensitive and possibly subject to style shifting: some, but probably not all, of the differences between MM's and EE's FACE might be due to the latter's somewhat careful speech style.

5 Cockney vowels 1930–1970

We turn now to recordings of Londoners born one or two generations after Sivertsen's informants. The project *Linguistic Innovators: The English of Adolescents in London* (Economic and Social Research Council, 2004–7; see Kerswill et al. 2008) included recordings of eight elderly East Enders born in 1918–35. Figure 5 shows the vowel system of Mr MG, born in 1931.

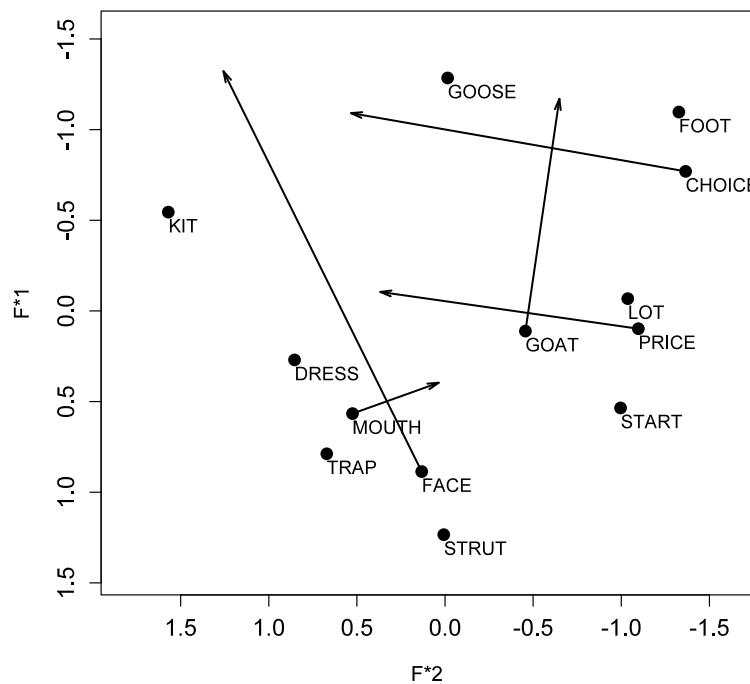


Figure 5 Mr MG, elderly male speaker from Hackney (b. 1931, recorded 2005).

It shows a system similar to EE, MM and Mr Kent, with the low-central STRUT vowel of EE and Mr Kent and the relatively extreme diphthong shifting of MM and Mr Kent. This suggests a certain stability over a 50-year period between the birth of the former three and Mr MG.

The speech of two individuals born around 1944 and 1955, respectively, recorded in their adolescent years, brings the comparison to the middle of the century. One of these is PF, a girl aged around 12, who was recorded having a lively conversation with Sivertsen. Figure 6 shows her vowel system.

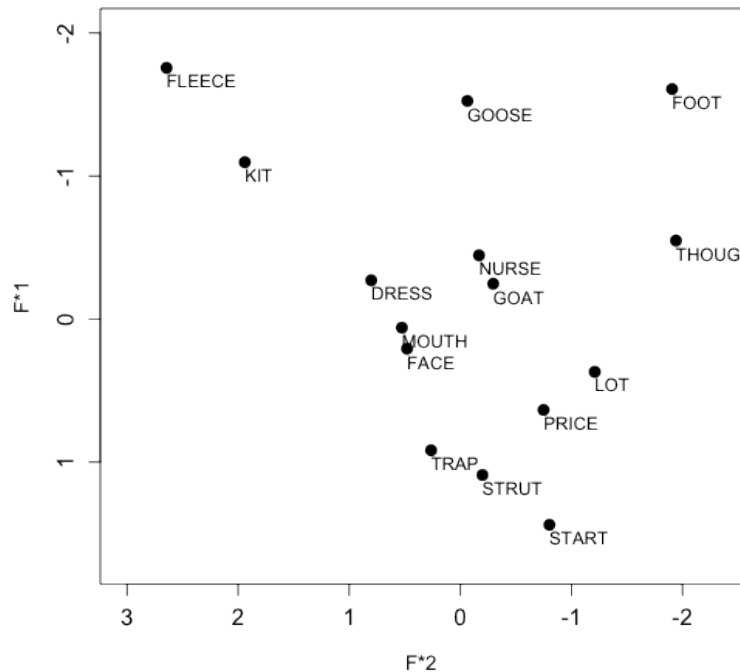


Figure 6 PF, female aged 12 (recorded in 1956 by Eva Sivertsen).

PF shows many of the same characteristics: central GOOSE, back FOOT and strongly shifted MOUTH and PRICE. STRUT is still the lowest short vowel, and in this respect she is conservative in relation to MM, though TRAP has moved down to occupy almost the same space. DRESS and KIT are lower than those of EE and Mr MG, but are similar in relative height to those of MM. PF's short vowels, then, share with MM the beginnings of participation in the Southeastern short-vowel shift noted earlier. Unlike the older speakers, FACE does not show diphthong shift.

Finally, we will look at the speech of a boy aged about 13, recorded by William Labov in Southall (West London) in 1968.

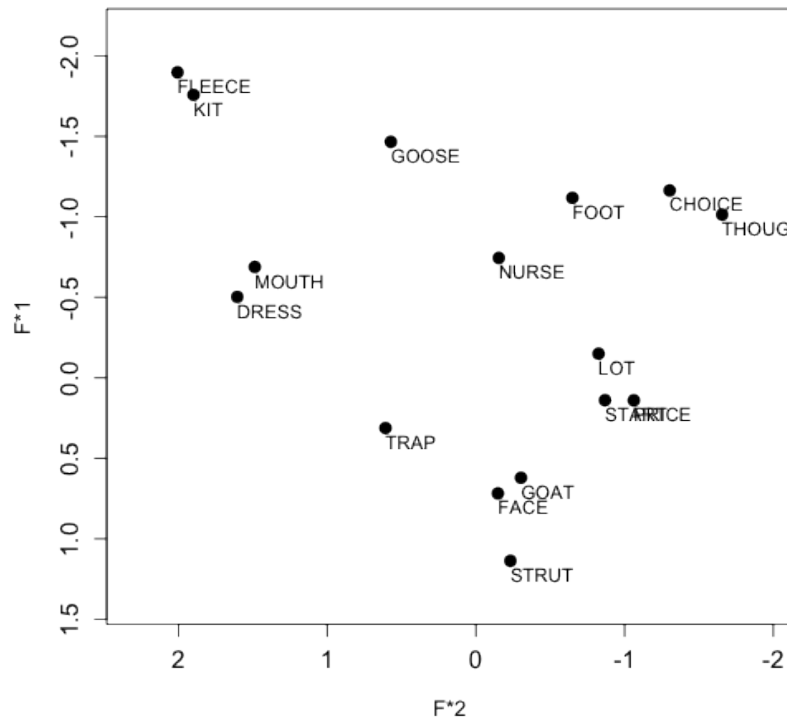


Figure 7 Boy aged 14-15 (1968). Recorded in Southall by William Labov. Manual analysis.

In almost all respects, this boy's system, shown in Figure 7, is very conservative, with a front, raised TRAP and a front-central STRUT which is the lowest of all vowels by some distance. He shows, therefore, no sign of the Southeastern short-vowel shift which we detect in MM (who was eighty years his senior) or PF. MOUTH, FACE and GOAT are very strongly diphthong-shifted. For FACE and GOAT, this is probably best interpreted as a continuation of an ongoing process. For MOUTH the position is not clear, for reasons we have just given; however, the onset of MOUTH is higher than for any of the older informants discussed here, and this suggests a (new but time-limited?) raising process.

Despite a number of uncertainties about the movement, or indeed stasis, of some of the vowels, the overall picture is one of considerable stability across nearly eighty years, with speakers born in the 1880s quite closely matching those of at least some people born in the mid 1950s. This is in spite of great economic and social change, a locally high level of immigration at the beginning of the period and the start of mass immigration at the end of it. Falling within this period were the two World Wars, with their dramatic disruption of families and neighbourhoods. None of these factors, however, seems to have had any impact on the vowel systems of the working-class population of the capital. Instead, change amounted to a slow, small, Neogrammarian chain shift in the short vowels.

6 Language contact and linguistic change in the turn-of-the-century East End?

The deliberately descriptive approach we have taken so far has excluded considerations of contact and social factors. Earlier we argued that the best place to look for contact-induced change in London is in highly circumscribed, local communities in specific time periods. We therefore return to the Jewish parts of Bethnal Green of 120 years ago.

In the previous section, we saw how MM seems to have a markedly ‘modern’ vowel system by comparison with her contemporaries EE and Mr Kent and, indeed, the young speaker born three generations later. MM’s vowels still fall within the envelope of a working-class London accent. However, some listeners today report that they hear something ‘foreign’ about her accent: members of audiences at academic presentations involving the Sivertsen data have commented that her pronunciation suggests either an Italian or an East European influence. Regardless of whether these observations are reliable, it is worth carrying out a closer phonetic analysis. We do this in two phonetic areas where varieties of English which have experienced substantial and prolonged language contact appear to differ from ‘inner-circle’ varieties, such as those spoken in southern England or by North American, New Zealand or Australian descendants of European settlers.

The first of these areas concerns speech rhythm, as captured by the Pairwise Variability Index, or PVI, which measures the degree of stress timing in a language – in other words, whether stressed syllables in discourse tend to occur at equal intervals (Torgersen and Szakay 2012). PVI is calculated as the proportional difference between the durations of adjacent syllables in a sample of speech. The more unequal the syllables are, the higher the PVI will be, and the closer to an idealised *stress timing* the sample is. If syllables are more nearly equal, the PVI will be lower, and the sample is closer to being *syllable timed*. (See Torgersen and Szakay 2012: 824–825 for a more detailed account of the PVI measure.) As is usual practice, the PVI we use here is normalised for speech rate, and is known as nPVI (Grabe and Low 2002; Torgersen and Szakay 2012). As an example of a putatively syllable-timed language, French has a low nPVI of 43.5, while ‘British English’ (more specifically, Southern Standard British English or RP) has a score of 57.2, making it relatively stressed timed (Grabe and Low 2002: 544).

In what follows, we present the nPVI for a number of varieties of English, three of which are clearly contact varieties (Māori English [Szakay 2006, 2008], Singapore English [Grabe and Low 2002] and MLE as spoken by teenagers in the multilingual London borough of Hackney). Contact varieties tend to have a greater tendency towards syllable timing than other varieties (Grabe and Low 2002), and it is this fact that will interest us. Figure 5 shows nPVI values for these speaker groups and for Southern Standard British English. For London’s East End, the figure shows data for four groups of speakers from the *Linguistic Innovators* project: from Hackney, there are elderly Anglos (people of white British background), young Anglos and young non-Anglos (the children of immigrants, almost all from developing countries). The latter groups were 17–19 years of age. By way of comparison with matched speakers from a London borough with low language contact, we include data from older and younger Anglo speakers from Havering. Finally, we include nPVI scores for EE, MM and the remaining two elderly informants recorded by Sivertsen, Mrs C and Mrs P.

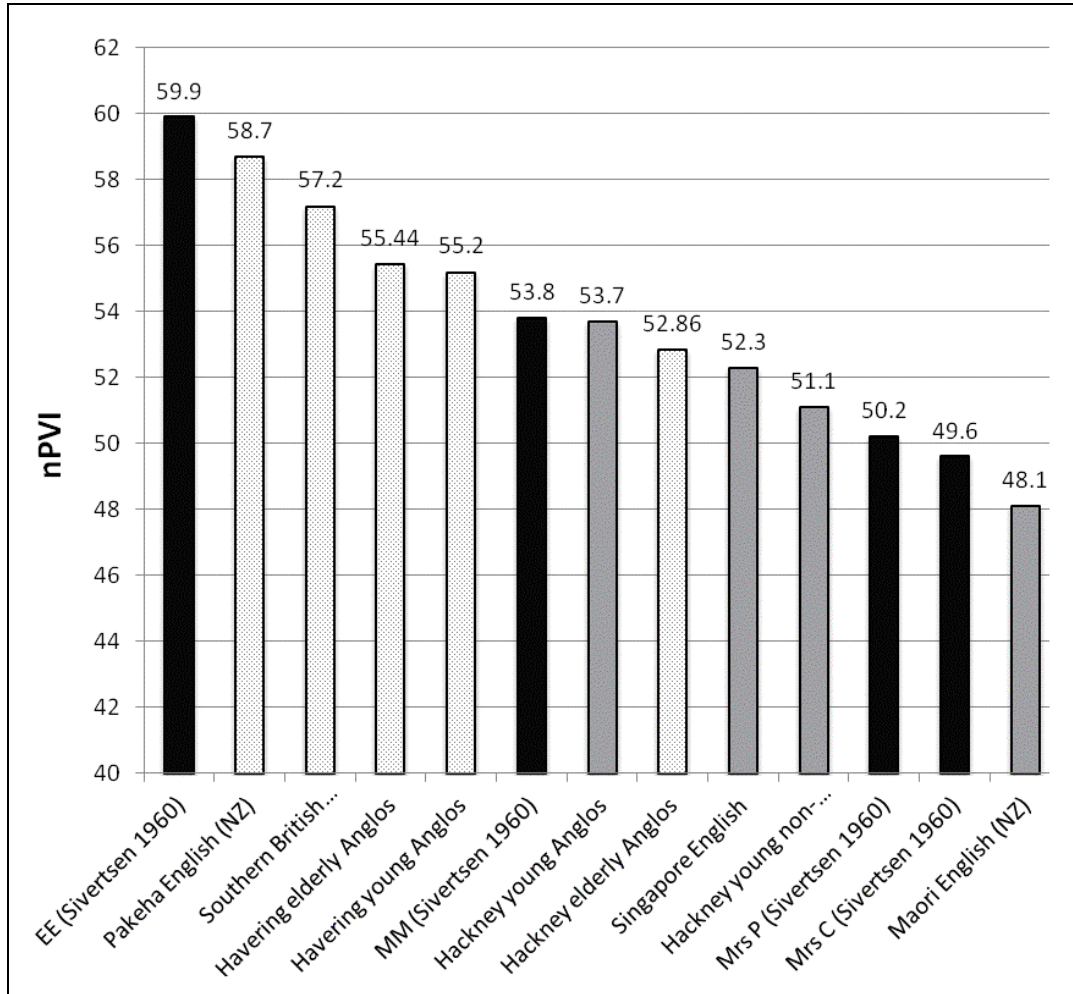


Figure 5 Normalised Vocalic Pairwise Variability Index (nPVI) for thirteen speakers/speaker groups (see text for explanations and sources).

The speakers/groups in Figure 5 have been ranked by descending nPVI, with the more stress-timed voices towards the left of the figure. Contact varieties have been highlighted in grey; we provisionally take younger Hackney speakers of any ethnic background to represent MLE, and hence a contact variety, because of the multi-ethnic and multilingual nature of the communities here. The four Sivertsen informants' bars are coloured black.

Overall, we note that all but one of the non-contact varieties cluster in the left-hand half of the figure, and that all contact varieties are located on the right. Unexpectedly given their apparently homogeneous social backgrounds, Sivertsen's informants are spread right across the spectrum, with EE's score exceeding that of any other speakers/groups and Mrs P and Mrs C being placed well towards the syllable-timed end of the spectrum, clustering with the contact varieties. MM, however, is near the centre of the spectrum. We therefore need to square this result with our notion that MM's spoken English might have a 'foreign' element to it, and that part of that impression is syllable timing. Despite their greater syllable timing, Mrs P and Mrs C do not sound 'foreign' in the way that MM does to some listeners.

One way of approaching this is to look at the East End as a locale which has seen waves of immigration over centuries, with the result that there has been virtually no period without a substantial number of non-Anglophone incomers in the communities. The nPVI for the elderly Hackney Anglos we interviewed in 2005 matches that of the young Anglos, whose language socialisation very clearly involves high degrees of contact with non-native English. Neither the elderly nor the young people in Havering have similar nPVI values, instead grouping with the prototypical non-contact varieties. The implication of this is as follows. The elderly Anglos from Hackney, born in the 1920s and 30s, were raised in communities which were bi- or multilingual or which had been so in the period immediately before their linguistic socialisation. For parts of the East End, especially Bethnal Green, this was the case. The language variety spoken by MM may therefore not have been atypical; low nPVI values could have been part of the local accent in Hackney, and this is reflected in the scores of all but one of the East End speakers whose nPVIs we have measured. The odd person out is EE, and perhaps it is she who is the exception, not MM. None of this is true of Havering, which was and remains relatively monolingual, and whose population continues to have high nPVI values.

The difference between MM's and EE's nPVIs suggests the presence of intervening social factors. Before we examine these, we will pursue the phonetic differences between the two of them a little further. This time, we hypothesise an influence from Yiddish itself, specifically voice onset time (VOT). This is the duration of the audible burst in stop consonants, such as /t/, before voicing begins. In some languages, including English, initial voiceless consonants are said to be *aspirated*, with a relatively long duration compared to, say, Greek or Spanish, which have short VOTs for /t/. Yiddish, along with Dutch and a number of south German varieties, also has a notably short VOT (Iverson and Salmons 1995; Jewish Language Research Website n.d.), and this feature is a strong candidate for adoption in cases of language shift. It is also a variable characteristic of English as spoken in some British Asian communities, where transfer of this feature from Panjabi, Bengali or Sylheti appears to have taken place (Kirkham 2011, McCarthy et al. 2013). With this in mind, we analysed the VOT in an oral history interview with a Jewish East Ender, Philip Bernstein, who was born in Hackney in 1910 of Lithuanian/Russian parentage (National Archives n.d., recorded 1992).

Figure 6 shows the VOT values of two reference varieties, Southern British English as spoken by university students (Docherty 1992) and standard varieties of American English (Lisker and Abramson 1964), as well as EE, MM and Philip Bernstein.

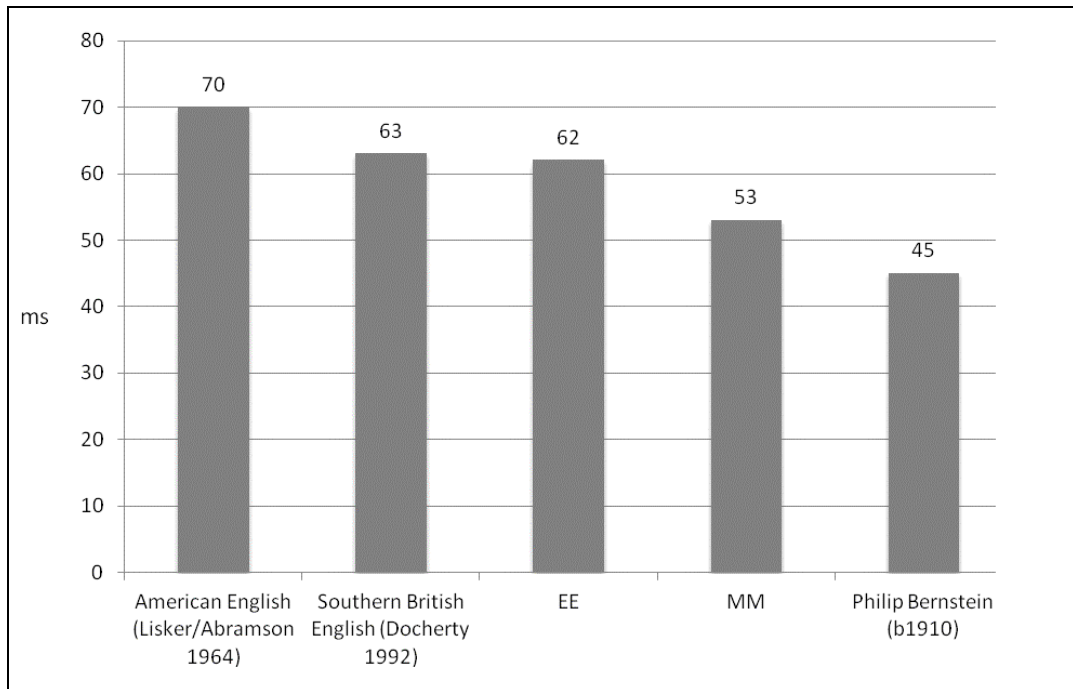


Figure 6 Voice onset time (VOT) measurements for American English, Southern British English and three East Londoners born 1890–1910.

We can see that EE groups with Southern British English, while MM lies halfway between EE and the (presumably Yiddish influenced) Mr Bernstein. This may well indicate a similar Yiddish-derived feature in her speech. MM is not, however, Jewish, but one lesson of recent studies of multiethnolects is that linguistic features can be used by speakers whose home language and heritage are not the origin of those features (Svendsen and Røyneland 2008, Cheshire et al. 2011). Our argument is, then, that East End Cockney around the turn of the last century and beyond contained at least some phonetic features which may have come about initially through transfer following language shift, subsequently becoming a permanent feature of the local variety of English, through a process of at least embryonic focussing (RH). The data is consistent with this interpretation, though in the absence of recordings taken from a representative sample of the city's population in the relevant period it is not possible to tell if the argument matches the reality of the time.

We have not yet addressed the reasons for the differences between EE and MM in both of these features (speech rhythm and VOT). As we have already noted, these two people grew up in very similar neighbourhoods and have, so far as we can tell, very similar social histories. Could there be a difference in their social networks at a critical time in their earlier lives? Very strikingly, MM discusses at considerable length her contacts with, and attitudes to, the local Jewish population, in a way that none of the other three of Sivertsen's informants do. MM was heavily involved with the Bethnal Green Jewish community when growing up, and still was at the time of the interview. She knows about their religion and their cooking, and comes up with a number of Yiddish words:

now we can do horseradish (.) have you ever heard of horseradish? (.) and beetroot? [Eva: yes horser er horseradish] chrein [kʃɛɪn] we call it ... mixed together [Eva: horseradish and what mixed together?] beetroot [Eva: mm oh I haven't tried that] I'll show you a jar of it [Eva: mm] (.) no I suppose you haven't seen it? [Eva: no I don't think so] you can eat it with cheese meat lamb whatever you like [Eva: oh mhm] (.) open it] go on [Eva: horseradish and beetroot] that's it and it's hot (.) so smell it [Eva: yes] it's very hot [Eva: oh yes it is you take with er?] (.) you eat that with cheese [Eva: aha] or meat [Eva: mhm] (.) or anythink you like [Eva: yes] hm (.) that's what it's made of [Eva: mhm] (.) they call it (.) chrein [kʃɛɪn] (.) Jews call this chrein [kʃɛɪn]

She describes her job as a *Shabbos goy* (though she doesn't use the term):

I like Jews Jewesses rather but I get along with them all right all me life I suppose it's living down here in Brick Lane when I was a little about ten (.) not cos we wanted it but we used to go there like five (.) to light their fire on a Saturday (.) we light their fire (.) they call them frum [frʊm] a good Yiddisher person is frum [frʊm] you see

MM gives *chrein* a mainstream English pronunciation with initial [kʃ], rather than Yiddish [xʀ]. *Frum* receives the Yiddish [ʊ], which suggests first-hand knowledge of the word, if not the language. She uses a tap [ɾ] in this word, though this is characteristic of her speech more generally: /r/ in /fr/ and /θr/ clusters is usually a tap, as it is intervocalically, including linking /r/, as in *after all*. It is not certain the extent to which [ɾ] was a normal pronunciation in London at this time, but it is likely that the retroflex [ɻ] or alveolar [ɺ] approximant was widespread in southern England in the nineteenth century, alongside weakly tapped variants: referring to Southern dialects, Ellis (1889: 23) writes 'The one ancient character which runs more or less persistently through the modern S. div. [Southern Division] is the reverted (R) or retracted (r.), the parent of the point-rise or untrilled (r_o) or vocal (ϑ), which still permeates received speech'. The symbol (r_o) refers to a 'buzzed' sound 'not touching the palate' (Ellis 1889: Preliminary Matter p. 85), while (R) may have a 'flap [which is] indistinct and less sharp than for (r)' (Ellis 1889: Preliminary Matter p. 85), while it is often a retroflex sound that characteristically 'seems to blend with the preceding vowel' (Ellis 1889: 23). Taps may well be a conservative feature (as pointed out by Trudgill 2004: 71–72), but the vigorously articulated taps produced by MM do not sit well with what is otherwise a rather modern vowel system and marked syllable timing compared to Sivertsen's other informants. We would speculate that this, too, is a transfer feature from Yiddish (but see Chapter X for a discussion of a tap in Received Pronunciation without any reference to contact).

7 Discussion

Cockney in the twentieth century displays considerable continuity and slow change, suggesting that its transmission has been through an unbroken chain of intergenerational transfer (Thomason and Kaufman 1988: 9–10). Labov makes the strong claim that such transmission precludes language and dialect contact, and that cases of contact must be treated separately (Labov 2007). It is clear that the social conditions in the East End around the turn of the last century would have been propitious for transfer through language shift, and the greater than usual degree (for English in southern England) of syllable timing and a short VOT might well be transfer features of this kind. The use of tapped /r/ could fall into the same category. These features could have been transmitted to non-speakers of Yiddish or Jewish, Anglo and other backgrounds. The first two features (at least the tendency towards syllable timing) may well be restricted to the East End (we lack data to state this with any certainty); if that is true, then we are probably dealing with a long-term, stable contact phenomenon, which is reinforced by successive waves of immigration and which is likely to be swamped if the migration were to cease. Vowel qualities, however, appear to be unaffected by this process, though it is highly likely that the move to greater syllable timing is partly reflected in durational changes in the vowels and the loss of some reduced forms (see Torgersen and Szakay 2012 for discussion).

As we have argued elsewhere (Cheshire et al. 2011), the situation in the late twentieth century is altogether different, in two respects. First, there are now upwards of 200 languages in the mix, compared to a handful a century ago, and just two (English and Yiddish) in Bethnal Green. Secondly, immigrant populations of 30 per cent and higher are now pervasive throughout London, and not restricted to just a few wards in some boroughs as was the case 120 years ago. We argue that language acquisition is now characterised by *group second-language learning* (Winford 2003) in the context of a *feature pool* (Mufwene 2001: 4–6): children and adolescents are acquiring their linguistic and sociolinguistic competence in a context where often a majority of other people are not first-language speakers of English. This applies also to those whose home language is English and are exposed to traditional varieties of London English. What the present has in common with the past is that intensive language contact leads to (potentially) long-term changes. In MM's voice, we may just be catching a glimpse of a long-extinct, Yiddish-influenced way of speaking.

References

- All About Jewish Theatre n.d. London: the end of Yiddish theatre. http://www.jewish-theatre.com/visitor/article_display.aspx?articleID=3504. Accessed 8/4/14.
- Arkell, George. 1899 [2012]. Jewish East London. Map reproduced by the Museum of London, 2012. Oxford: Old House. Viewable at <http://webarchive.nationalarchives.gov.uk/+http://www.movinghere.org.uk/search/catalogue.asp?sequence=5&resourcetypeID=2&recordID=56004>.
- Baker, T. F. T. 1998. Bethnal Green: Economic History, A History of the County of Middlesex, Vol. 11: Stepney, Bethnal Green (1998), 168–190.

- <http://www.british-history.ac.uk/report.aspx?compid=22757>. Date accessed 27 May 2014.
- Baugh, Albert C. and Thomas Cable. 1993. *A History of the English Language* (4th edn.). London: Routledge.
- Britain, David. 2009. One foot in the grave?: Dialect death, dialect contact and dialect birth in England. *International Journal of the Sociology of Language* 196/197: 121-155.
- Cheshire, Jenny, Paul Kerswill, Susan Fox and Eivind Torgersen. 2011. Contact, the feature pool and the speech community: The emergence of Multicultural London English. *Journal of Sociolinguistics* 15: 151–196.
- Clark, Lynn and Kevin Watson. 2011. Testing claims of a usage-based phonology with Liverpool English t-to-r. *English Language and Linguistics* 15: 523–547.
- Cook, Beverley. 2012. The Jewish East End, 1899. Notes accompanying a facsimile edition of George Arkell's map 'Jewish East London'. Oxford: Old House.
- Docherty, Gerard. 1992. *The Timing of Voicing in British English Obstruents*. Berlin: Foris.
- Ellis, Alexander. 1889. *The Existing Phonology of English Dialects, Compared with that of West Saxon Speech*. New York: Greenwood Press.
- Foulkes, Paul and Gerard Docherty. 2000. Another chapter in the story of /r/: 'Labiodental' variants in British English. *Journal of Sociolinguistics* 4: 30–59.
- Fox, Susan. 2007. *The demise of Cockneys? Language change among adolescents in the 'traditional' East End of London*. Unpublished PhD dissertation. Colchester: University of Essex.
- Grabe, Esther and Ee Ling Low. 2002. Durational variability in speech and the rhythm class hypothesis. In Carlos Gussenhoven and Natasha Warner. (Eds.), *Papers in Laboratory Phonology, Vol. 7*. Mouton: Berlin, pp. 515–546.
- Green, Jonathon. 2014. Multicultural London English: the new 'youthspeak'. In Julie Coleman (ed.). *Global English Slang: Methodologies and Perspectives*. London: Routledge, pp. 49–61.
- Hansen, Gert Foget and Nicolai Pharao. 2010. Prosody in the Copenhagen multiethnolect. In Pia Quist and Bente Ailin Svendsen (eds.) *Multilingual Urban Scandinavia*. Bristol: Multilingual Matters, pp. 79–95.
- Heselwood, Barry and Louise McChrystal. 2000. Gender, accent features and voicing. *Leeds Working Papers in Linguistics and Phonetics* 8: 45–69.
- Hickey, Raymond 2005. *Dublin English. Evolution and Change*. Amsterdam: John Benjamins.
- Inwood, Stephen. 1998. *A History of London*. London: Macmillan.
- Iverson, Gregory K. and Joseph C. Salmons. 1995. Aspiration and laryngeal representation in Germanic. *Phonology* 12: 369–396.
- Jewish Language Research Website. n.d. <http://www.jewish-languages.org/yiddish.html>. Accessed 7/9/14.
- Kerswill, Paul. 2014. The objectification of 'Jafaican': The discursual embedding of Multicultural London English in the British media. In Jannis Androutsopoulos (ed.) *The Media and Sociolinguistic Change*. Berlin: De Gruyter, pp. 428–455.

- Kerswill, Paul, Jenny Cheshire, Susan Fox and Eivind Torgersen. 2013. English as a contact language: The role of children and adolescents. In Marianne Hundt and Daniel Schreier (eds.) *English as a Contact Language*. Cambridge: Cambridge University Press, pp. 258–282.
- Kerswill, Paul, Eivind Torgersen and Susan Fox. 2008. Reversing ‘drift’: Innovation and diffusion in the London diphthong system. *Language Variation and Change* 20: 451–491.
- Kirkham, Sam. 2011. The acoustics of coronal stops in British Asian English. *Proceedings of the XVII International Congress of Phonetic Sciences*, pp. 1102–1105.
- Labov, William. 1966. *The Social Stratification of English in New York City*. Washington: Center for Applied Linguistics.
- Labov, William. 1994. *Principles of Linguistic Change Vol 1: Internal Factors*. Oxford: Blackwell.
- Labov, William. 2007. Transmission and diffusion. *Language* 83: 344–387.
- Lewis, H. S. 1901. Another view of the question. In Russell, C. and H.S. Lewis *The Jew in London*. New York: Thomas Y. Crowell, pp. 155–236.
- Lisker, Leigh and Arthur S. Abramson. 1964. A cross-language study of voicing in initial stop: Acoustical measurements. *Word* 20: 384–422.
- Lobanov, B. M. 1971. Classification of Russian vowels spoken by different speakers. *Journal of the Acoustical Society of America* 49: 606–608.
- McCarthy Kathleen M., Bronwen G. Evans and Merle H. Mahon. 2013. Acquiring a second language in an immigrant community: The production of Sylheti and English stops and vowels by London-Bengali speakers. *Journal of Phonetics* 41: 344–358.
- Moving Here n.d.
http://www.movinghere.org.uk/galleries/histories/jewish/growing_up/growing_up.htm. Accessed 27th April 2014.
- Mufwene, Salikoko. 2001. *The Ecology of Language Evolution*. Cambridge: Cambridge University Press.
- National Archives. n.d. Interview with Anna Tzelniker and Philip Bernstein. http://webarchive.nationalarchives.gov.uk/+/http://www.movinghere.org.uk/search/catalogue.asp?catphase=FullDetails&phase=&RecordID=56660&ResourceTypeID=2&Sequence=1&keywords=&fuzzy=&format=&community=&theme=&date_from=&date_to=&source=§ion=&person=&PageMove=Go&PageNo= . Accessed 26/4/14.
- Nevalainen, Terttu and Helena Raumolin-Brunberg. 2003. *Historical Sociolinguistics*. Harlow: Longman.
- Nevalainen, Terttu and Helena Raumolin-Brunberg. 2000. The changing role of London on the linguistic map of Tudor and Stuart England. In Dieter Kastovsky and Arthur Mettinger (eds.) *The History of English in a Social Context*. Berlin/New York: Mouton de Gruyter, pp. 279–337.
- Orton, Harold, and Philip M. Tilling. 1970. *The Survey of English Dialects, Volume 3: The East Midland Counties and East Anglia*. Leeds: Arnold.
- Porter, Roy. 1994. *London: A Social History*. London: Penguin.
- Rosenfelder, Ingrid, Joe Fruehwald, Keelan Evanini and Jiahong Yuan. 2011. FAVE (Forced Alignment and Vowel Extraction) Program Suite. <http://fave.ling.upenn.edu>.

- Russell, C. 1901. The Jewish question in the East End. In Russell, C. and H.S. Lewis *The Jew in London*. New York: Thomas Y. Crowell, pp. 1–148.
- Russell, C. and H.S. Lewis. 1901. *The Jew in London*. New York: Thomas Y. Crowell.
- Sharma, Devyani. 2011. Style repertoire and social change in British Asian English. *Journal of Sociolinguistics* 15: 464–492.
- Schmid, Monica S. 2002. Persecution and identity conflicts: the case of the German Jews. In Anna Duzsak (ed.) *Us and Others*. Amsterdam: Benjamins, pp. 341–356.
- Sivertsen, Eva. 1960. *Cockney Phonology*. Oslo: Oslo University Press.
- Stuart-Smith, Jane, Claire Timmins and Farhana Alam. 2011. Hybridity and ethnic accents: A sociophonetic analysis of ‘Glaswasian’. In Frans Gregersen, Jeffrey K. Parrott and Pia Quist (eds.) *Language Variation - European Perspectives III: Selected Papers from the 5th International Conference on Language Variation in Europe (ICLaVE 5), Copenhagen, June 2009*. Amsterdam: Benjamins, pp. 43–57.
- Svendsen, Bente Ailin and Unn Røyneland. 2008. Multiethnolectal facts and functions in Oslo, Norway. *International Journal of Bilingualism* 12: 63–83.
- Szakay, Anita. 2006. Rhythm and pitch as markers of ethnicity in New Zealand English. In Paul Warren and Catherine I. Watson (eds.) *Proceedings of the 11th Australian International Conference on Speech Science & Technology*, pp. 421–426. University of Auckland, New Zealand, December 6–8, 2006.
- Szakay, Anita. 2008. *Ethnic Dialect Identification in New Zealand: The Role of Prosodic Cues*. VDM: Saarbrücken.
- Thomason, Sarah Grey and Kaufman, Terrence. 1988. *Language Contact, Creolization and Genetic Linguistics*. Berkeley: University of California Press.
- Torgersen, Eivind and Paul Kerswill 2004. Internal and external motivation in phonetic change: Dialect levelling outcomes for an English vowel shift. *Journal of Sociolinguistics* 8: 23–53.
- Torgersen, Eivind and Anita Szakay 2012. An investigation of speech rhythm in London English. *Lingua* 122: 822–840.
- Trudgill, Peter. 1998. African American vernacular English, East Anglian dialects and Spanish persecution in the Low Countries. *Folia Linguistica Historica* 8: 139–148.
- Trudgill, Peter. 2004. *Dialect Contact and New-Dialect Formation: The Inevitability of Colonial Englishes*. Edinburgh: Edinburgh University Press.
- Weinreich, Uriel. 1953. *Languages in Contact: Findings and Problems*. New York: Linguistic Circle of New York.
- Wells, John C. 1982. *Accents of English*. Cambridge: Cambridge University Press.
- Winford, Donald. 2003. *An Introduction to Contact Linguistics*. Oxford: Blackwell.
- Wölck, Wolfgang. 2002. Ethnolects—Between bilingualism and urban dialect. In Li Wei, Jean-Marc Dewaele and Alex Housen (eds.) *Opportunities and Challenges of Bilingualism*. Berlin: Mouton de Gruyter. pp. 157–170.

