

**If A changes to B, make sure A exists:  
a case study on the dialect origins of New Zealand English<sup>1</sup>**

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**Introduction:**

One of the principal advances sociolinguistics has brought to the study of language change has been in trying to answer what Uriel Weinreich, William Labov and Marvin Herzog in their groundbreaking paper *Empirical foundations for a theory of language change* (1968) termed the *embedding problem*, namely the route linguistic changes take both through the language as well as through the speech community that uses that language. They convincingly argued that ‘the problem of providing sound empirical foundations for the theory of change revolves about...this embedding’ (1968:185). Once changes are underway, some of the most

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sophisticated analyses have come from sociolinguistic undertakings, shedding light on changes so complex that traditional asocial models of change fail to account for them. One notable example is Labov's (1989, 1994) analysis of the structure of variation and change in short (a) in Philadelphia.

Less successful, however, has been our ability to socially and linguistically locate and investigate language changes that are in their infancy. Here the embedding problem overlaps with the *actuation* problem – why a particular change (and not some other change) takes place at a particular time (and not at some other time) in a particular place (and not in some other place) in a particular variety (and not some other variety). A good example is Trudgill's (1988) finding that labiodental [ʋ] as a variant of prevocalic (r), a vigorous change in contemporary Norwich English, and used by a considerable minority of young speakers in the 1980s, had been present in recordings made in the 1960s (Trudgill 1974), but had not been considered then as a change that would affect the linguistic system of the speech community as a whole. As Milroy (1992: Section 6.2) points out in quite some detail, part of the problem lies in the distinction between *speaker-innovations* – the 'pool' of new linguistic forms in the speech community each of which may or may not spread - and *linguistic change* – an alteration in the linguistic system which results from a speaker-innovation successfully spreading through the language and the speech community. Labiodental /r/, then, had been treated as a speaker-innovation, rather than a linguistic change.

Weinreich, Labov and Herzog (1968: 176) also argue for 'social realism' in the resolution of the embedding problem, a strong claim for a detailed and meticulous search for the social factors that are undoubtedly intertwined with linguistic variation and change. Sociolinguistics has made great advances in this direction too: consider the progress made, for example, in the deconstruction of gender (Eckert and McConnell-Ginet 1992), style (Bell 1984), age (Eckert 1997) and space (Britain 2002) as social variables.

In the study of post-colonial varieties of English, such as those spoken in New Zealand and Australia, the need for social realism in dialectological analysis also applies to the very origins of those dialects. As I show both here and in Britain (2001), differences between present-day New Zealand English (NZE) and British English have, in the past, frequently been analysed

as if the New Zealand forms necessarily must be innovations, and often appear to take RP as their baseline for analysis. In Britain (2001), for example, I show how present-day NZE <-own> past participles, such as *grown*, *blown*, and *flown*, originating from Middle English **ou**, and realised today mostly as disyllabic forms, e.g. [grʌʊən], have often been analysed as being the result of a *split* of a formerly monosyllabic /ou/. Yet there is evidence that such disyllabic forms have been present in New Zealand English from its early days (Gordon and Trudgill 1999), and would have been an (admittedly minority) immigrant settler variant (see Britain 2001). What has often been analysed as a split and an innovation away from an original RP-like variant, is, in fact, more probably the expansion of an *imported* disyllabic form.

Both here and in Britain (2001), I therefore argue that we must pay much more attention to the social makeup of the settler speech community – as heterogeneous, with diverse geographical, social and linguistic origins (Mufwene 1996; Trudgill 1986; Montgomery 1989; Siegel 1993 etc.) – in order to fully understand the nature and course of linguistic change.

As the example of disyllabic <-own> in NZE makes clear, an important factor in the embedding/actuation interface revolves around establishing *where the innovation came from* and *what the original pre-change form was*. This appears to be so obvious that it doesn't deserve mention. This article, however, highlights a case where, I believe, too little attention has been given to where a particular change 'came from'. I therefore propose a rather simple and obvious methodological principle which addresses the embedding problem: the '*If there is a change from A to B, make sure A exists*' principle. I think it is particularly relevant to the study of post-colonial varieties of English.

### **(au) in New Zealand English:**

The case to be investigated here is the NZE diphthong (au)<sup>2</sup>. It has received quite considerable discussion in the literature on variation and change in New Zealand English, especially, in fact, early New Zealand English (see for example, Woods 1997, 1999, 2000,

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<sup>2</sup> In order to distinguish between (au) as a variable and [au] as a variant of that variable, I shall label (au) as the MOUTH variable, following Wells (1982).

Trudgill et al 2000, Gordon 1983, 1994, 1998, Gordon and Trudgill 1999). The variation involved - the position of the onset of the diphthong between [a] and [ɛ] – has often been noted as highly salient, and the ‘non-standard’ variants almost always labelled as ‘strongly stigmatised’ (see, for example, Gordon 1983, 1994, Maclagan and Gordon 1996: 7). It is somewhat surprising then, given this apparent saliency, that there exists to date no quantitative investigation of MOUTH based on *conversational data*. The analyses thus far (Bayard 1987 and Maclagan and Gordon 1996, Maclagan et al 1999) have all looked solely at word list/reading passage data for MOUTH, with all the usual consequences for access to vernacular forms of the dialect. Below, in Figure 1, is a scatterplot of an analysis I conducted of MOUTH based on the 75 recordings of young and old, Maori and Pakeha, working and middle class, men and women of the Wellington Social Dialect Project, directed by Janet Holmes, Allan Bell and Mary Boyce (1991) in the early 1990s. Each small circle on the graph represents each speaker’s average onset and offglide realisations based on 3666 tokens of conversational data, and compared with their reading of a passage (1290 tokens) (small diamond) and a word list (295 tokens) (small triangle). Average realisations for each style are represented by the larger symbols. The X axis shows the offglide and the Y axis the onset, and the variable indices for both are presented in Table 1 below. A more detailed analysis of the social and linguistic constraints on MOUTH in NZE will be presented in a later paper (Britain, *fc*). For now we can note a few important points.

**Table 1: The index scores for onsets and offglides of (au) used in Britain (fc)’s analysis of variation and change in contemporary vernacular NZE.**

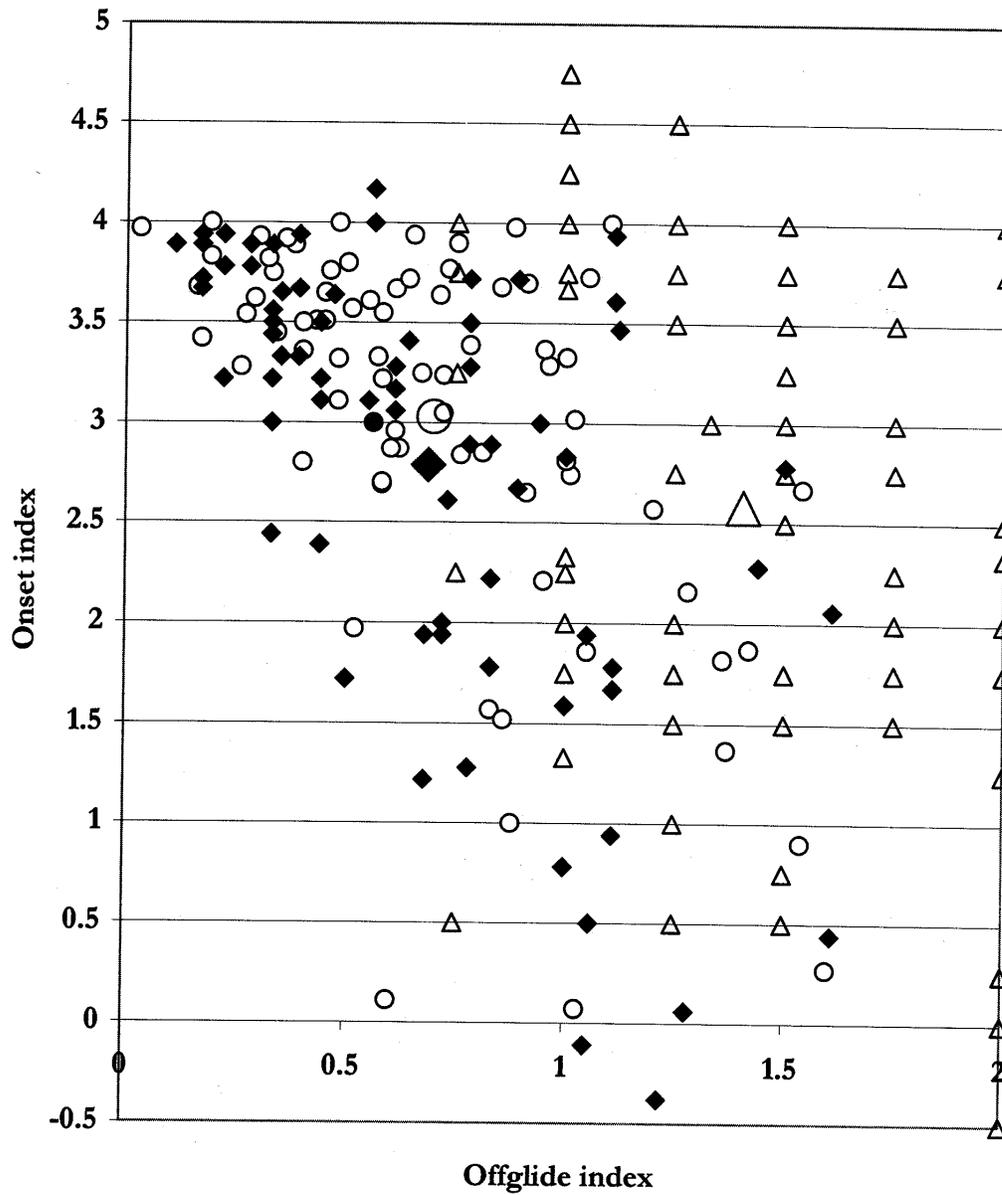
**Onsets:**

Index score	Realisation
6	[e]
5	[ɛ]
4	[ɛ]
3	[ɛ]
2	[æ]
1	[a.]
0	[a]
-1	[a]

**Offglides:**

Index score	Realisation
2	[vʊ]
1	[və]
0	[v:]

Figure 1: (au) in Wellington English: casual, reading passage and word list styles (Britain, fc)



○ casual conversation	◆ reading passage
△ word list	○ AVERAGE CASUAL
◆ AVERAGE READING	△ AVERAGE WORDLIST

Firstly, there is a tight clustering of realisations in the top left of the scatterplot, in both casual and reading passage styles, representing realisations with mid-open onsets and dramatically reduced offglides —around [ɛ<sup>o</sup> - ɛ<sup>o</sup>]. Secondly, very few speakers indeed are in the supposedly ‘standard’ location of (2, 0), i.e. [aʊ], and those that do reach this standard, only do so consistently in word list style. Thirdly, the average realisations for the sample, and the overall pattern of the scatterplot, shows that there is relatively little difference, overall, between casual conversation and reading passage styles, and that word list styles differ from these two largely in the nature of the offglide, a factor which may be accounted for as much by the nature of the task, as by stylistic difference (see also Bell 1984, Milroy 1987). Conversational Wellington English, then, on average, uses [ɛ<sup>o</sup>] (Britain, *fc*, for more on the contemporary status of this variable).

The question for this paper is not the *realisation* of the variable, per se – a number of studies, whether based on informal observation or analyses of word-list data, have commented on the non-open onsets of MOUTH (see below) - *but where these non-open onsets came from*<sup>3</sup>.

### **The traditional view: [ɛʊ] ← [aʊ]:**

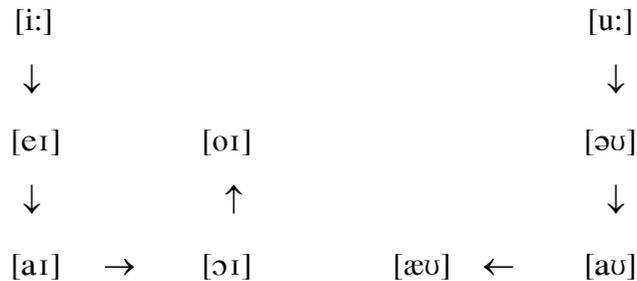
The usual answer to this question is that [ɛʊ] originates from a linguistic innovation which raised a presumed original (and RP-like) [aʊ] to its present position. The view also implicitly assumes that, as a result of the Great Vowel Shift, ME *ū* had fully diphthongised and fully opened to [aʊ] at the point at which NZE was formed. This view is held both by researchers of New Zealand English, and by sociolinguistic and historical linguistic commentators of English variation more generally. Woods, a leading analyst of early NZE (see 1997, 1999, 2000), for example, claims that ‘the use of a front and close nucleus of MOUTH ... is the consequence of innovative raising’ (1997: 110; see also 2000: 112). Maclagan et al (1999: 22) support the view that raising was involved. They claim that ‘in New Zealand, the first target of /au/ is typically progressively fronted and raised by lower social class speakers. Tokens

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<sup>3</sup> I shall ignore the offglides from this point. Britain (*fc a*) discusses them, their status in contemporary NZE and their origins further. I will, therefore, label the variants of the variable as if there is no variation in offglides (e.g. [ɛʊ], [æʊ], [aʊ]). This is merely for descriptive and comparative ease, and does not represent the actual position, as the scatterplot above highlights.

with a relatively open first target ([au]) were classified as conservative, those that started on [æ] were classified as neutral, and those with raised first targets ([ɛ]) were classified as innovative' (1999: 29). Watson et al (1998:185) talk about 'the raising and fronting of the first target of the HOW diphthong'. Finally, in a discussion of the purported Second Great Vowel Shift, Bauer (1979:64), although not looking in detail at MOUTH, shows it having moved from open mid-back position and fronting and raising to between [æ] and [ɛ]. He comments, interestingly, that 'the development of.../au/...seem[s] to go against the grain' (1979: 64).

More generally, Wells (1982: 310) introduces both what he calls 'PRICE-MOUTH crossover', changes altering [aɪ] → [ɔɪ] and [aʊ] → [æʊ], and 'diphthong shift' (1982: 256) as applying to New Zealand English. 'Cockney, and also the local accents of much of the south of England and the midlands, together with those of Australia and New Zealand, exhibit a set of changes almost as fundamental as the Great Vowel Shift of half a millennium ago. This is the *Diphthong Shift* (his emphasis) (see below, and Trudgill et al 2000, for further discussion of the application of 'diphthong shift' in NZE). His diagrammatic representation of the Shift is below (1982: 256).



Lass (1987: 298) supports this view, claiming that 'Aus/NZ show innovatory qualities in...*out*...the following points are worth noting: (i) the 'crossover' of the first elements of the bite/out diphthongs...?.

Finally, Labov includes vowel movements currently underway in NZ (and Australia and southern England) under his label 'Southern Shift' (1994: 202; Labov and Ash 1997:512-514;

see also, for example, Fridman 1999). Labov and Ash claim that the ‘oldest and the most widespread aspect of the Southern Shift’ is *Vw fronting*’ (1997: 513) - i.e. the fronting of the onsets of the GOOSE, GOAT and MOUTH lexical sets - and that the shift ‘is the organizing force in the vowel systems of South Africa, Australia and New Zealand’ (1997: 514)<sup>4</sup>. The ‘advanced’ nature of front mid-open variants is also argued for by Stockwell (1975: 347, 349; see also Stockwell and Minkova 1988) who suggests a historical route of archaic [ɔw], standard [aw], advanced [æw - ew]. Others have explicitly linked the evolution of MOUTH with a set of changes also part of the Southern Shift and which are ongoing in current NZE - the movement of the front short vowels (see Labov 1994; Woods 1997; 1999, 2000, Maclagan and Gordon 1996, Maclagan et al 1999). So it is claimed that MOUTH is raising from [au] to [æu] and [ɛu] along the front peripheral track of vowel space, just as /æ/ is moving from [æ] to [ɛ], /ɛ/ from [ɛ] to [ɛ̃] and /ɪ/ from [ɪ] to [ɛ̃] (but see Trudgill et al 1997). For example, Woods (1997, 1999, 2000) treats MOUTH together with the front short vowels in her analysis of change in early NZE, and Macalagan et al (1999) explicitly compare the two in their analysis of contemporary NZE, even comparing individual speakers who have apparently raised their front short vowels more than their vowel onset in MOUTH and vice versa.

In order to ascertain if this is truly the case, if MOUTH really did raise from [au] to [æu], we must first establish the existence of the supposed [au] at some earlier period in the history of the variety. If [æu - ɛu] is the result of innovative raising, we should expect to find solid and consistent evidence somewhere of [au] being used as a vernacular form in earlier stages of the history of these varieties. *Such evidence is almost entirely lacking.*

### **Reviewing the history of studies of /au/ in New Zealand English:**

The earliest evidence we have of MOUTH in New Zealand English comes from Samuel McBurney’s observations, published in Ellis (1889). Below in Table 2 are presented his findings from across New Zealand with respect to MOUTH, transcribed into Ellis’ (1889)

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<sup>4</sup> See Britain, fc b, for a discussion of the view that this is wrong, for MOUTH, not just in the Australasian Englishes, but also in Southern Britain – another area claimed to be under the force of the Southern Shift.

paleograph, and ‘translated’ into IPA according to Eustace’s (1969) conversion method<sup>5</sup>. Two conclusions can be drawn from this data, I believe. Firstly, the early NZE he was describing was clearly quite mixed, with a number of variants being used across the country. Secondly, the dominant forms in that mixture are ones with front and mid-open onsets, Ellis’s {éeu} and {ææ’u}, precisely the same types of variants as are dominantly used in NZE over a century later.

**Table 2: The realisation of /au/ in varieties of early New Zealand English according to McBurney (in Ellis 1889: 241), with IPA equivalents from Eustace (1969).**

Ellis’ transcription (1889: 241)	IPA equivalent, following Eustace (1969)
{éeu}	[ɛ̃:ʊ]
{ææ’u}	[ɛ̃:ʊ]
{áa <sup>1</sup> ’u}	[ã:ʊ]
{á’u}	[aʊ]
{ə’u}	[əʊ]

Auckland	Some or several children used each of the variants
Wellington and Napier	More than half used {éeu}, some or several used {ææ’u}, and few used the other variants
Nelson and Christchurch	More than half used {éeu}, a few used the other variants in equal proportions.
Dunedin	More than half of the girls used {éeu}, more than half of the boys used {áa <sup>1</sup> ’u}, some or several used {á’u} or {ə’u}, a few used {ææ’u}

Next we have the analyses of the so-called Origins of New Zealand English project (ONZE) recordings of old New Zealanders, born in the second half of the 19<sup>th</sup> century and recorded in the late 1940s. These have been analysed for MOUTH both by Woods (1997, 1999, 2000) and Trudgill et al (2000), Gordon and Trudgill (1999) etc, but from different approaches. Woods (1997: 105) analysed 10 Otago residents from the ONZE corpus and, subsequently in the 1990s, recorded their children. Using a variable index score method similar to that used in my analysis of contemporary Wellington English, she found that, where 0 =

<sup>5</sup> Ellis’s paleograph has been put into { } to avoid confusion with IPA realisations [ ].

[äʊ - au], 100 = [aʊ - æʊ] and 200 = [æʊ - εʊ], men rose on average from 111 (in the ONZE tapes) to 171 (among their sons) and women fell from 147 (in ONZE) to 116 (their daughters). A close analysis of the 5 male and 5 female speakers from ONZE and their 5 sons and daughters shows scores ranging from around 75 to 145 for first generation (i.e. ONZE recording) men and 90 to 190 for first generation women and from 150 to 185 for second generation men and 60 to 195 for second generation women. Overall averages lead Woods, here and in later work (1999, 2000) to suggest that ‘the nucleus of MOUTH has become slightly closer over time’. The data do indeed show this, but demonstrate, nevertheless, that EVERY speaker has non-fully open forms as their dominant variant, with 8 of the 10 first generation ONZE speakers averaging forms between [aʊ - æʊ] and [æʊ - εʊ] (with 3 having the latter as the dominant form), and 6 of the 10 second generation speakers having non-open forms, with all these 6 having the most close variants dominant (see the data presented in Woods 2000: 122). In other words, in both the ONZE data and subsequently, both sexes remain consistently with realisations above the 100 mark, i.e. *they already have ‘raised’ onsets*.

Later, Woods (1999) analyses MOUTH among four individual speakers: Mary, a first generation New Zealander, born in 1874 of Scottish parents; two of her granddaughters, Florence and Louise, and one of her great-granddaughters, Sarah. Whilst her data show Mary with more open variants than Florence and Sarah, in particular (1999: 95), she later comments in a footnote that perhaps Mary was not typical: ‘Mary reveals a rather more conservative use of MOUTH than other elderly female speakers recorded in 1948’ (1999: 110). Trudgill et al’s (2000:313) acoustic analysis of the 1948 tapes, meanwhile, finds ‘all ten ONZE speakers analysed have some diphthong shift of /au/’ (see also Gordon 1998: 74).

Gordon’s ongoing analyses (see, for example, 1983, 1994) of prescriptive commentary, particularly by school inspectors and head teachers, about NZE has revealed telling detail about the state of MOUTH in NZE from the turn of the century. One commentator, in 1908, highlighted ‘a failure to appreciate the value of the common vowel sounds – e.g. ...*teown*’ (Gordon 1983:36), another, in 1912, said that many children in Wellington talk about ‘fleur’ for *flour* (1983: 37), yet another in 1912, that ‘If you take a class of thirty at the beginning of the year, I do not think you will find more than three or four who will say ‘house’

correctly....the word is ‘house’ not ‘heouse” (1983:37), and finally another in 1924 commented on ‘shout’ as ‘sheout’ (1983: 39) (see also Bauer 1994: 393, 394). In the 1994 article, Gordon adds more examples of the representation of MOUTH, such as *nee-ow* in 1912, *bree-aoon* in 1946 and *heyow neyow breyown ceyow* in 1948.

Woods, too, provides evidence of comment about mid-open onsets of MOUTH in the first part of the 20<sup>th</sup> century. Gray and Milne (cited in Woods 2000: 132) suggest that to ‘insure the purity of vowel sounds’ in NZE, words such as ‘house’, ‘pound’, ‘round’, and ‘bounce’ should be practised every day in schools. And Martyn Renner in the Education Gazette (again from Woods 2000: 132) said that ‘the pronunciation of such words as ‘shout’ and ‘now’ as *sheout* and *neow* was an “extraordinarily common defect in pronunciation’ (1924: 130).

Since then, informal observations and variationist analyses have shown mid-open onsets to be dominant in vernacular NZE. Baker (1945: 442), for example, notes [ɪau] in mid-20<sup>th</sup> century New Zealand. Turner (1966: 103) suggests [æu], and later comments (1970: 89) that ‘*bout* is kept distinct from *boat* by a raised first element to [æ] or even [ɛ]. These developments occur in New Zealand as well as Australia’. Orsman (1966: 681) suggests that ‘diphthong *au* of *cow* has a first element like the *e* of *very*, and a fronted second element *eu*. Some speakers turn it into a triphthong *ciu* by inserting a glide between the first and second elements (*about*, *abeiut*) rather than (*abaut*) for *about*’. Bennett (1970: 70-71) notes a [æu-ɛə] pronunciation and suggests a parallel with American speech since he claims the form is used in New England and the southern states of the US. Bartlett (1992) shows that MOUTH in Southland is realised as [ɛɪ]. Bauer (1986:240) proposes [æɔ] and later (Bauer 1994: 389) suggests that [äö] is the ‘more formal variant...or...associated with higher social class’ and [ɛɪ] ‘less formal or lower class’. Watson et al (1998), in an experimental laboratory study of almost entirely university educated informants between the ages of 16 and 33, find ‘a fronted first target of HOW’ (1998: 197-8) and conclude that ‘we arrive at [ɛɔ] for NZE HOW’ (1998: 204)’. These results are very similar to those of my Wellington social dialect analysis, in which the word list style ‘average’ realisation was around [ɛ̟ ɔ̟] (see Figure 1 above).

Bayard (1987) conducted the first variationist analysis on what he described as a sample 'fairly biased toward the upper end of the socioeconomic scale' (1987: 6) in which 'the tapes obviously reflect only upper-register usage (i.e. reading passage, word list, and minimal pair styles)' (1987: 7). He found that where 1=[æʊ], 2=[aʊ] and 3=[aʊ] speakers ranged from a mean score of around 1.2 for lower working class speakers, up to around 2.5 for upper middle (1987: 10). He also found this to be a stable variable (1987: 14). Speakers are therefore using relatively non-fully open variants even in the formal styles that characterise Bayard's data.

Maclagan et al (1999: 22) present a complex picture of the variable. They treat the variable as presently undergoing change in their analysis. Conservatism and innovation in the diphthongs /aʊ/ and /aɪ/ - sociolinguistic markers of NZE and both often endowed with the label 'stigmatised' - are explicitly contrasted with conservatism and innovation in the non-salient (at least to New Zealanders) front short vowels, in word list style. They suggest however, that in some respects, the diphthongs show a picture of relative stability. 'The situation observed in NZE today with regard to the diphthongs /aɪ/ and /aʊ/ may well indicate relatively stable sociolinguistic variation rather than ongoing changes, so the terms 'conservative variants' and 'innovative variants' are therefore not necessarily strictly correct... while these diphthongs seem to have represented stable sociolinguistic variation for some time, as evidenced by the long history of complaints...the pattern nevertheless seems to have shifted over time...there are now very few ...[aʊ] variants of /aʊ/ which earlier would have represented the most conservative, least stigmatised variants of the diphthong (1999:22). They appear to be claiming, therefore, that the non-open onset diphthongs have destigmatised over time, but they appear to imply at the same time that the non-stigmatised forms are the historically original variants. In their analysis, 77.6% (788 out of 1016) of tokens were realised with onsets of [æ] or [ɛ] (based on data in Maclagan et al 1999: 29). Their discussion here, then, is rather guarded about whether they believe a process of 'raising' to be the origin of the present-day realisations, although in an earlier paper (Maclagan and Gordon 1996: 9), they do support such a hypothesis.

The overall picture gained from this review of the history of MOUTH in NZE is that:

- In the early days of NZE, non-open front onsets of MOUTH were very common, and were the dominant vernacular forms in the early dialect mix, alongside other less widespread variants.
- These mid-open front onsets have been noted as characteristic ever since, by prescriptive observers, descriptive linguists, as well as sociolinguists.
- We have NOT found sufficient evidence of [aʊ] being used as a vernacular variant to warrant the raising hypothesis proposed by Woods (1997, 1999, 2000), Maclagan and Gordon (1996), Maclagan et al (1999), etc.

In order to find the thus far elusive vernacular [aʊ], we perhaps need to look further back to the settlement history of New Zealand. The raising hypothesis could possibly be saved if it could be shown that the settlers brought [aʊ] and that the raising occurred before the earliest descriptions of NZE.

#### **[aʊ], [ɛʊ] and the settlers:**

The discussion turns now therefore to the emigrants to New Zealand, and what forms of MOUTH they brought with them. Mufwene (1996) argues, in his detailed outline of the *Founder Principle*, that such a direction of analysis is crucial if we are to understand the genesis of dialect patterns in post-colonial speech communities. Important, he claims, in such an analysis are ‘the characteristics of the vernaculars spoken by the populations that founded the colonies’ (1996: 84), the ethnographic setting in which the...displaced population has come into contact with...other populations whose structural features enter into the competition with its own features’ (1996: 85) and ‘the demographic proportion of the newcomers relative to local populations’ (1996: 86) (see also, for example, Trudgill 1986: 126, 161; Montgomery 1989; Siegel 1993). We look here then at where the settlers came from and in what proportions, and follow this with an analysis of the variants of MOUTH that they would have brought and, again, in what proportions.

*Who were the settlers?*

The historical and socio-demographic evidence we have suggests that two places will be influential in our discussions of New Zealand settlement – *the British Isles*, since this is where the majority of migrants were born, and *Australia*, since many migrants passed through Australia for varying periods en route to New Zealand, and some migrants were Australia-born. Table 3 below presents McKinnon et al (1997)’s statistics for the origins of the overseas-born of 1881.

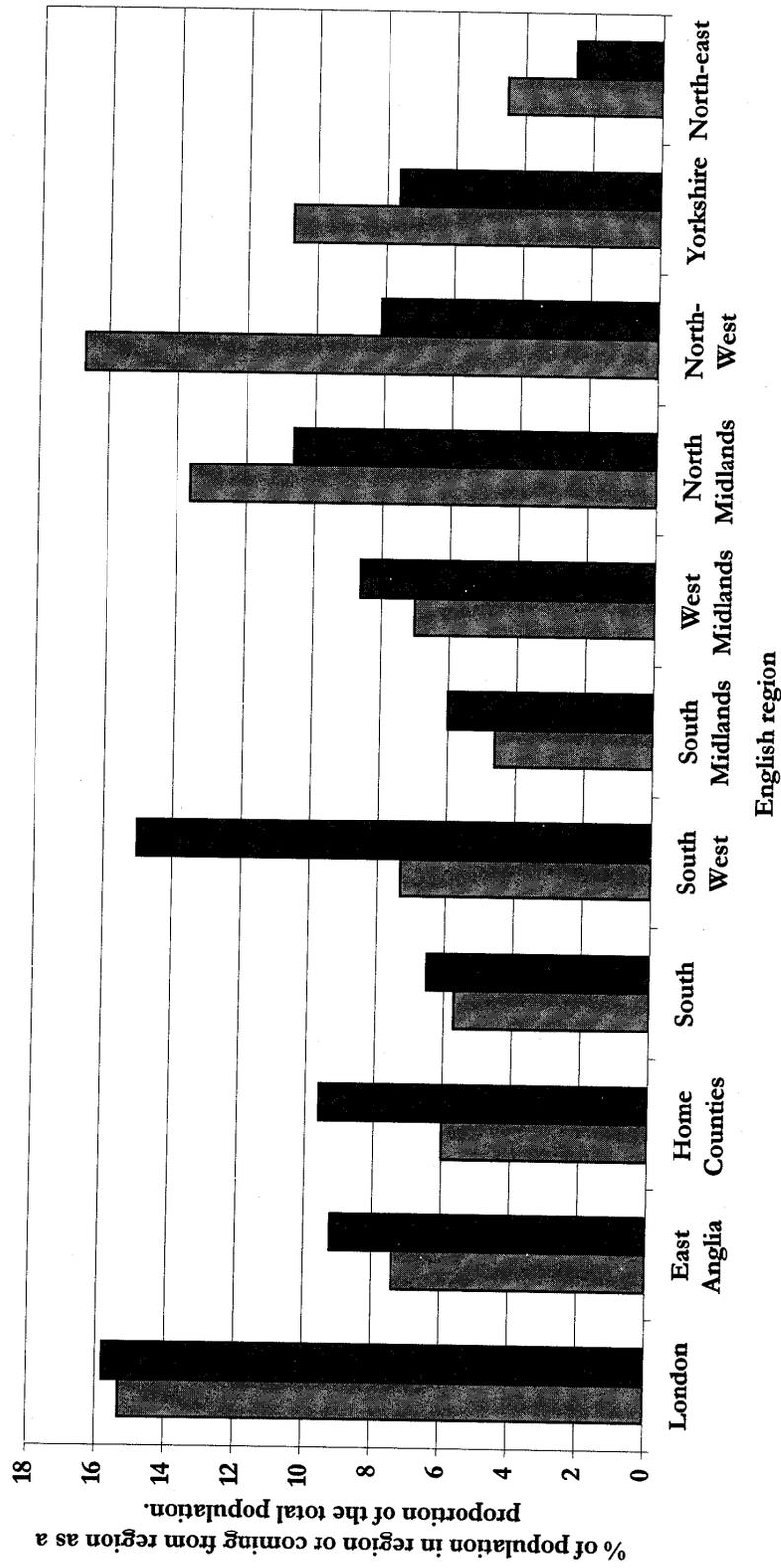
**Table 3: The origins of the overseas-born in New Zealand in 1881 (based on McKinnon et al: Plate 49)**

Country of birth	Number of overseas-born	% of total
England	119224	46.1
Scotland	52753	20.3
Ireland	49363	19.1
Australia	17277	6.7
Wales	1963	0.8
Others	18000	7.0
TOTAL	258580	100.0

In order to gain an insight into the history of MOUTH, however, greater geographical precision is required. A number of sources provide us with such detail on the geographical origins of the New Zealand settlers of the 19<sup>th</sup> century. In an analysis of the origins of settlers to Canterbury, Pickens shows that the southern counties of England, as opposed to the Midlands and the North, were more heavily represented in the early NZ population than we would expect given the population that these counties contributed to the country’s total. Figure 2 provides a more detailed breakdown for England.

For later in the 19<sup>th</sup> century, Arnold (1984), in his well-known work entitled *The farthest promised land*, claims that ‘clearly the great majority of the emigrants came from a wide stretch of southern England, with almost all counties south of a line from Herefordshire to the Wash feeling the pull fairly strongly. North of this line, only Lincolnshire was much affected, and the industrial North was little influenced. The most fruitful counties were all rural counties’ (1984: 102). And later, he claimed ‘New Zealand’s founding stock was drawn predominantly from village life in the Old World, and the village outlook which they brought with them was sustained and reinforced by the colony’s geography’ (Arnold 1994: 118).

Figure 2: Where did the immigrants come from?: The populations of English regions compared to the numbers of New Zealand settlers to Canterbury (South Island) coming from the regions (Based on Pickens 1977: 72)



■ Proportion of the population of England in 1851 ■ Proportion of the English migrants to Canterbury, New Zealand

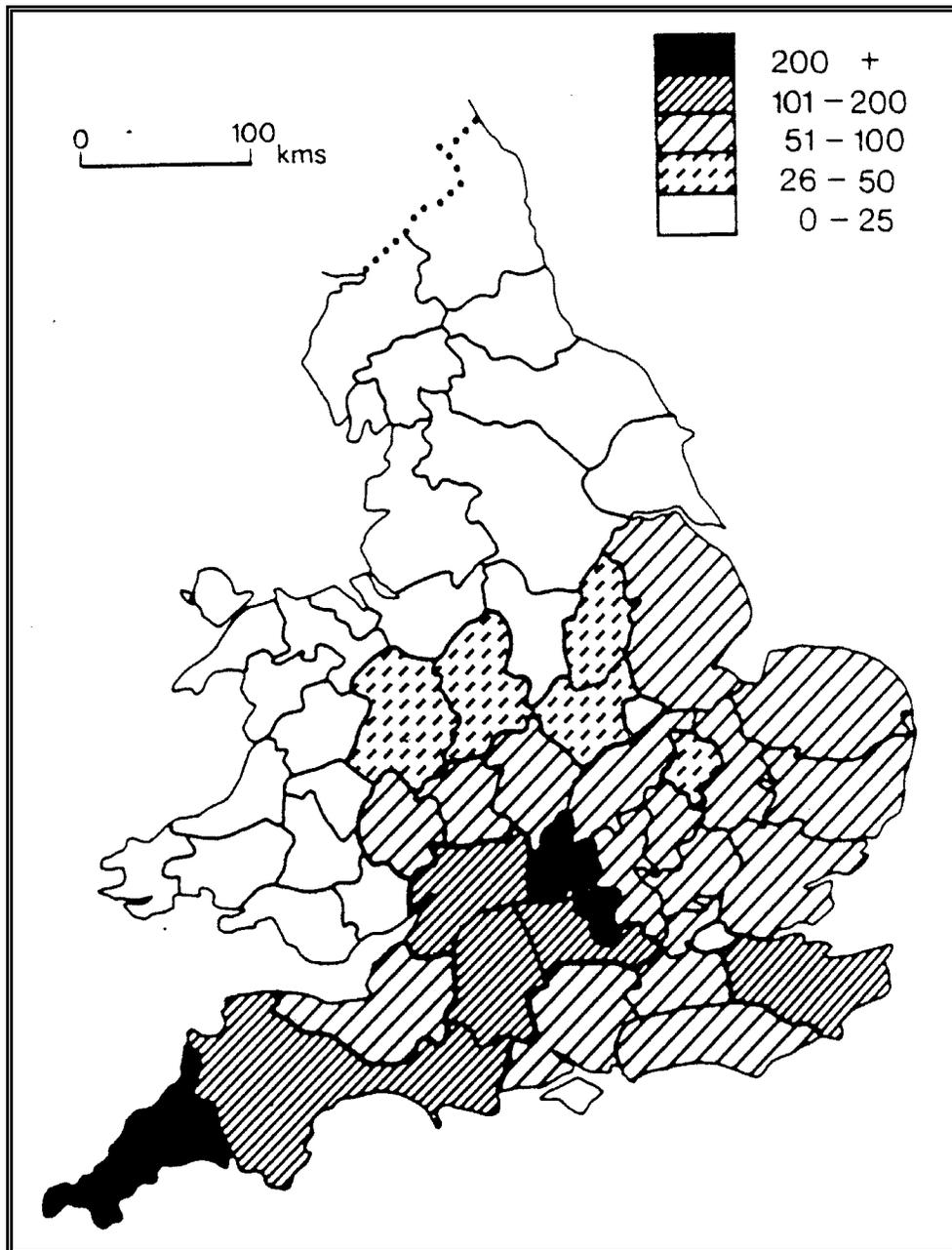
Figure 3, based on Arnold's (1984) research, shows the number of settlers coming from each county of England per 100,000 residents in 1871. It shows that the west and south-west were particularly well represented in the settler population, as were the south-east and East Anglia. The midlands were less well represented and the numbers from the north relatively low. In addition to settlers from England, many came from Scotland and Ireland. Pickens, for example, claims that whilst around 54% of mid-19<sup>th</sup> century migrants were from England, around 16% were from Ireland, and 15% from Scotland (Pickens 1977: 70).

An analysis of New Zealand migrant origins in 1874 based on McKinnon et al's (1997) data is shown in Figure 4. The detail they give is patchy – only giving precise details for some places – but the overall pattern is again the same: the dominant areas of settlement are the south of England, Scotland, Ireland, and (see below) Australia. Note that the largest bar in the graph – for 12 counties selected by McKinnon et al – does NOT include all southern English counties. East Anglia, parts of the southern Midlands, and the south and south-west are included in the Rest of England/Scotland/Wales category.

Australia was also an important source of settlement in early New Zealand. Although the figures for *Australia-born* migrants appear rather small – McKinnon et al (1997: Plate 49) suggest the figure is around 7% of the total number of overseas-born in 1881 – many migrants spent time in Australia before moving on to New Zealand. Vaggioli ([1896] 2000:112), for example, shows that of the 12447 Europeans in New Zealand in 1844, 3464 or 27.8% lived in Auckland, the Bay of Islands or Hokianga<sup>6</sup>, and states that 'colonists who settled the upper half of the North Island were mostly migrants from Australia' ([1896] 2000: 112). In addition, McCaskill (1982: 6-7) claims that 'in socio-economic terms, much of the European community in northern New Zealand in the 1830s was a 'drop-out' extension of Sydney society with escaped convicts, former convicts, debtors, traders and land speculators enjoying an early kind of 'enterprise zone' free of oversight and the law'. In a detailed paper on migration between New Zealand and Australia, Carmichael (1993: 516) claims that many of the estimated 2000 first settlers to New Zealand had come from Australia: 'By 1854, the European population totalled 32500...12000 in Auckland, a garrison town with probably

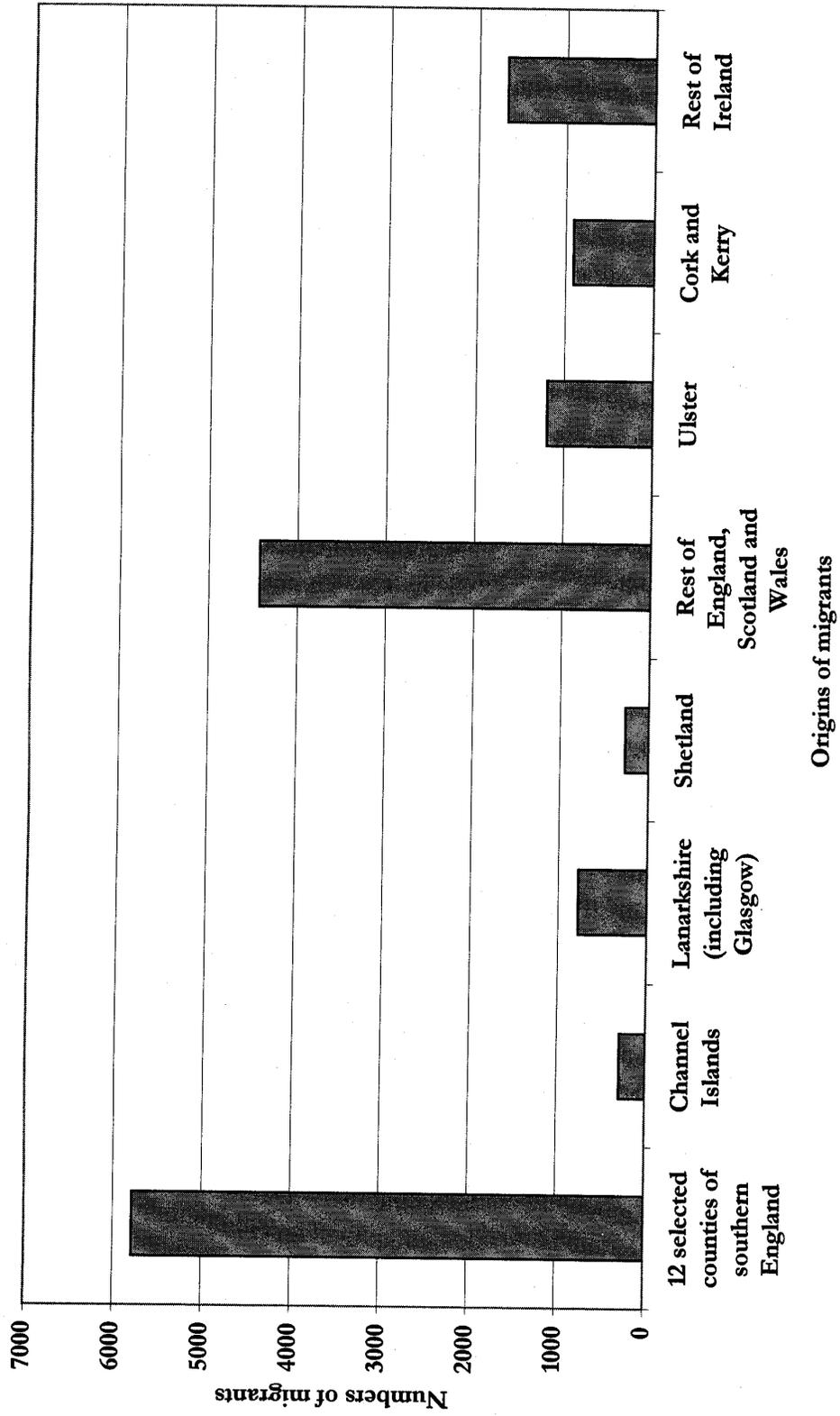
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<sup>6</sup> In addition, 5699 (or 45.8%) lived in Wellington, New Plymouth or Wanganui, and 3281 (or 26.3%) lived in Nelson or Akaroa in the South Island (Vaggioli [1896] 2000: 112)



**Figure 3: The origins of emigrants to New Zealand between 1873 and 1876. Figures represent the numbers of emigrants per 100,000 of the county population of 1871 (from Arnold 1984:103)**

Figure 4: Migrants to New Zealand from the British Isles in 1874 (based on McKinnon et al (1997: Plate 49))



over half its European population...having come from Australia'. In addition, he quotes William Fox (a former Premier of NZ) who described Auckland in the early 1850s as 'a mere section of the town of Sydney transplanted' (Sinclair 1959: 98; Carmichael 1993: 516). And Arnold (1994:120) suggests that 'many settlers had a period of Australian experience behind them, and an intricate network of interrelationships gave a significant Australasian dimension to colonial New Zealand'.

When looking at the dialect evidence from the 19<sup>th</sup> century, therefore, looking for which variants of MOUTH would have been well represented in early New Zealand English, we need to look in particular at those areas which sent relatively high numbers of settlers – the south of England generally, Ireland, Scotland and Australia. We have four sets of evidence that may shed some light on which forms were taken. The earliest source we have at our disposal is Ellis (1889). This is a dialect survey of the traditional type, based on information from over 1100 locations in Great Britain. Data in the form of spontaneous transcriptions of reading passages and word lists were sent to Ellis by a combination of trained dialect enthusiasts (such as Thomas Hallam) and interested locals. In some locations Hallam was sent to check the validity of the local data collectors' work and investigate some features more thoroughly. Since these data were collected primarily from older people, it gives us a picture of the vernacular dialects of people born in the early part of the 19<sup>th</sup> century. For the variable in question, Ellis gives consistent detail, reporting on the variants of MOUTH in each of his proposed dialect regions. Secondly, we have the data presented in Joseph Wright's (1905: 146-7) *English Dialect Grammar*, which presents a detailed account of the different variants of MOUTH at the turn of the century. Thirdly, we have the evidence, for southern England, from Kurath and Lowman (1970). Here, a traditional dialectological questionnaire-based data collection of 56 speakers was carried out in the mid-1930s. These data give us an insight into dialects of the mid- to late 19<sup>th</sup> century. Finally, we have the data from the Survey of English Dialects. These data were collected mostly in the 1960s of older speakers, and hence give us an indication of the vernacular speech of the turn of the century.

Figures 5a, 5b and 5c show the results of my analysis of the data in Ellis (1889), where I have presented the geographical distribution in England of the three dominant types of MOUTH variant. The 'isogloss' in northern England represents the northern limit of the Great Vowel

Shift for MOUTH. Areas to the north of this line – including Scotland - had, according to Ellis, yet to diphthongise the MOUTH vowel, i.e. variants such as [u:] are dominant. The south-east, East Anglia, the Midlands, and large areas of the south-west (in other words, a majority of the population of England at the time) show front mid-open onsets of MOUTH as dominant, according to Ellis's data. Common also, however, in the south and west, northern parts of East Anglia, the Home Counties, the West Midlands, and small pockets in Lincolnshire, Derbyshire and South Yorkshire have a central onset of MOUTH, around [ə - ɜ]. Together these front mid-open and central onsets of MOUTH dominate the south and Midlands of England, precisely those areas which sent large numbers of migrants to New Zealand. Realisations of MOUTH with open onsets - [aʊ] – have a much more restricted geographical distribution, and are found in the northern Midlands and the north-west, as well as in the extreme west of Cornwall and as a variant in London<sup>7</sup>.

Figures 6a, 6b, 6c and 6d below reproduce in map form the locales in Wright (1905) which use variants with [ɛ], [a], [ə-ɐ] and other variants ([ou], [u:]) respectively. Again, the pattern found in Ellis is reiterated – the South, East and South-West of England – as well as Ulster - the areas predominantly responsible for migration to New Zealand, are characterised by [ɛ] and [ə-ɐ] onsets, with [aʊ] restricted almost entirely to the north. Of these [aʊ] realisations, Wright comments that they are 'doubtless due in great measure to the influence of the literary language' (1905:146).

Figure 7 compares the data for MOUTH in Kurath and Lowman (1970). Their comments on the geographical distribution of the different variants will suffice here: 'in most of the eastern counties...the reflex of ME  $\bar{u}$  is a diphthong starting in mid-front or lowered mid-front position and gliding up toward [ʊ]. In the central counties this [ɛʊ - ɛʊ - æʊ] is universal. In Norfolk and...the western counties ME  $\bar{u}$  has yielded [əʊ]...it is noteworthy that the Standard British English type [aʊ] does not occur in the folk speech of the section of England dealt with here'.

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<sup>7</sup> Ellis finds all three major variants [ɛʊ], [əʊ] and [aʊ] in London.

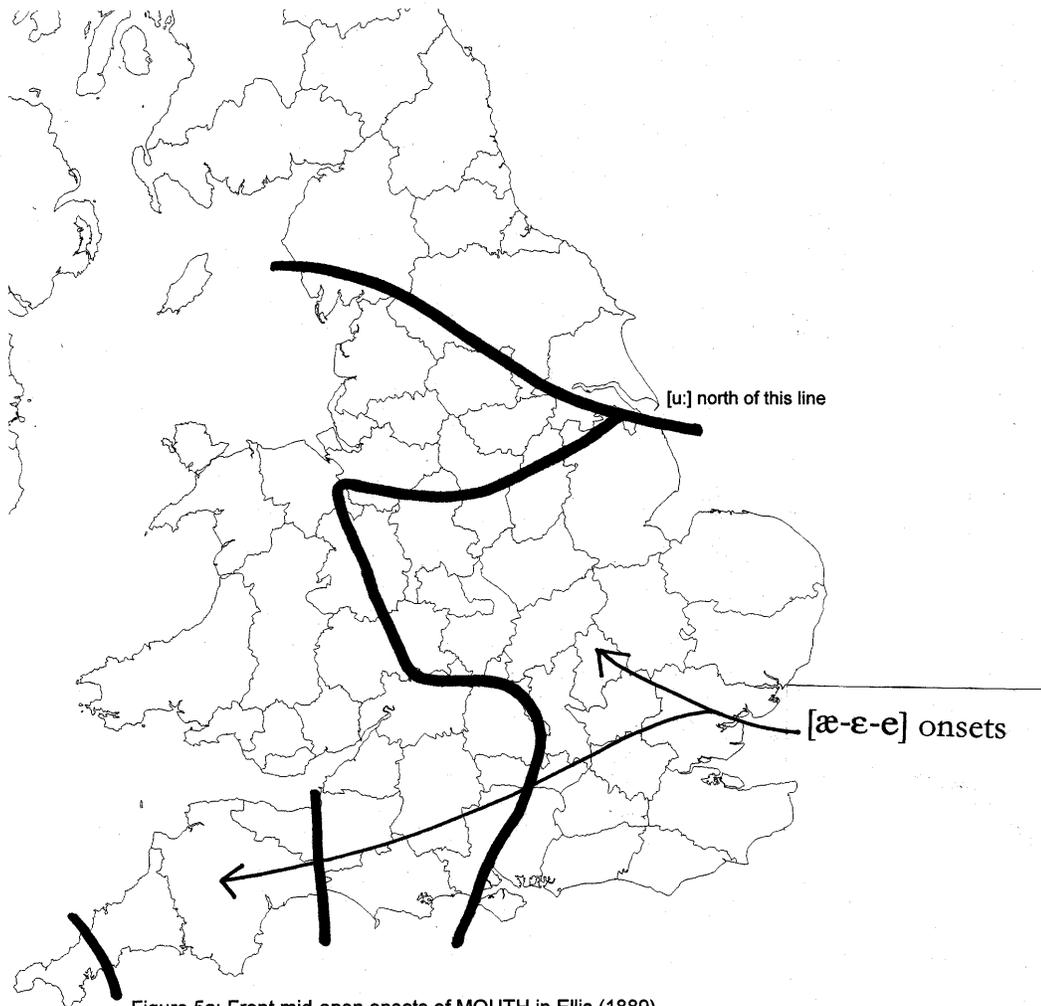


Figure 5a: Front mid-open onsets of MOUTH in Ellis (1889)

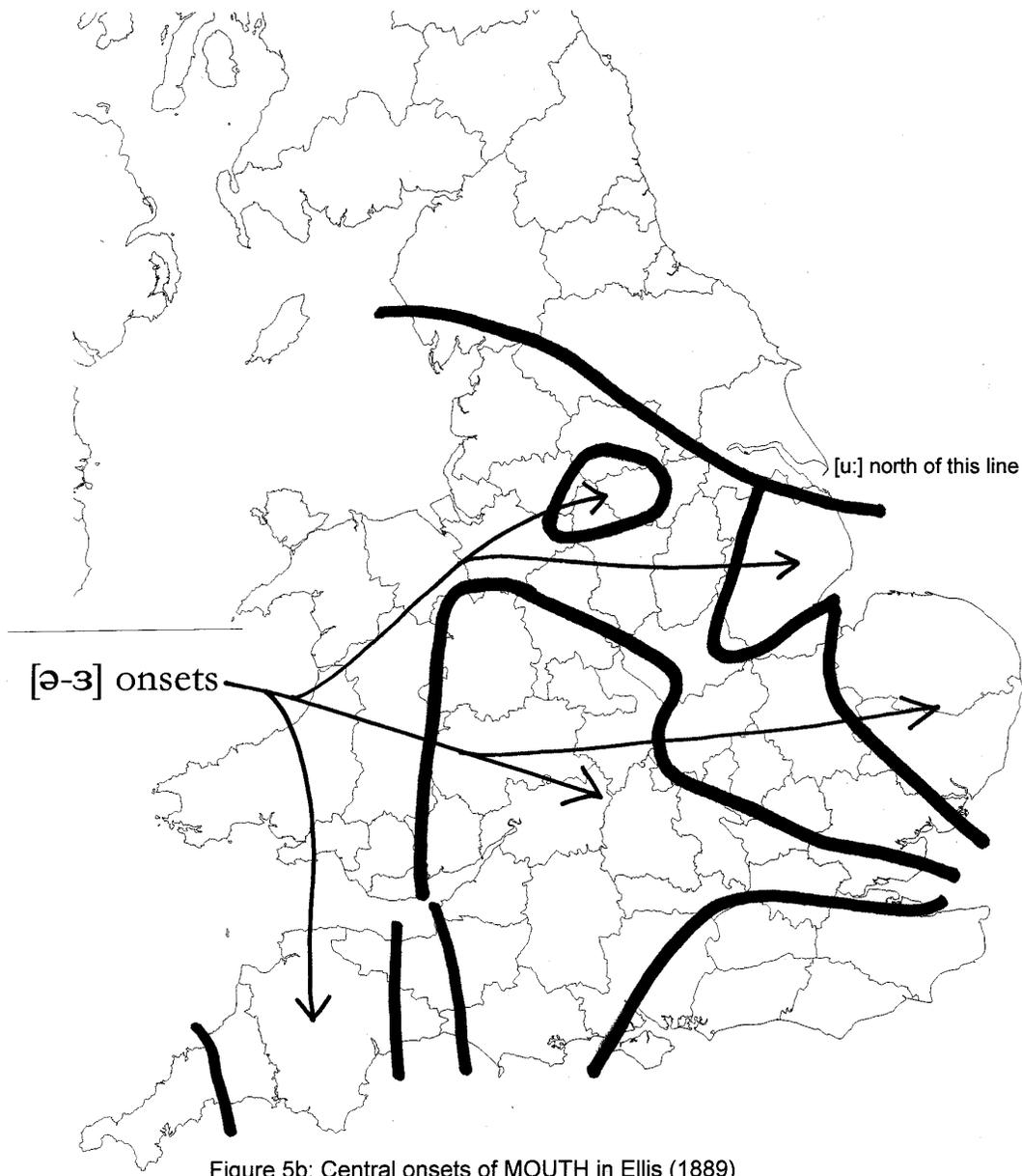


Figure 5b: Central onsets of MOUTH in Ellis (1889)

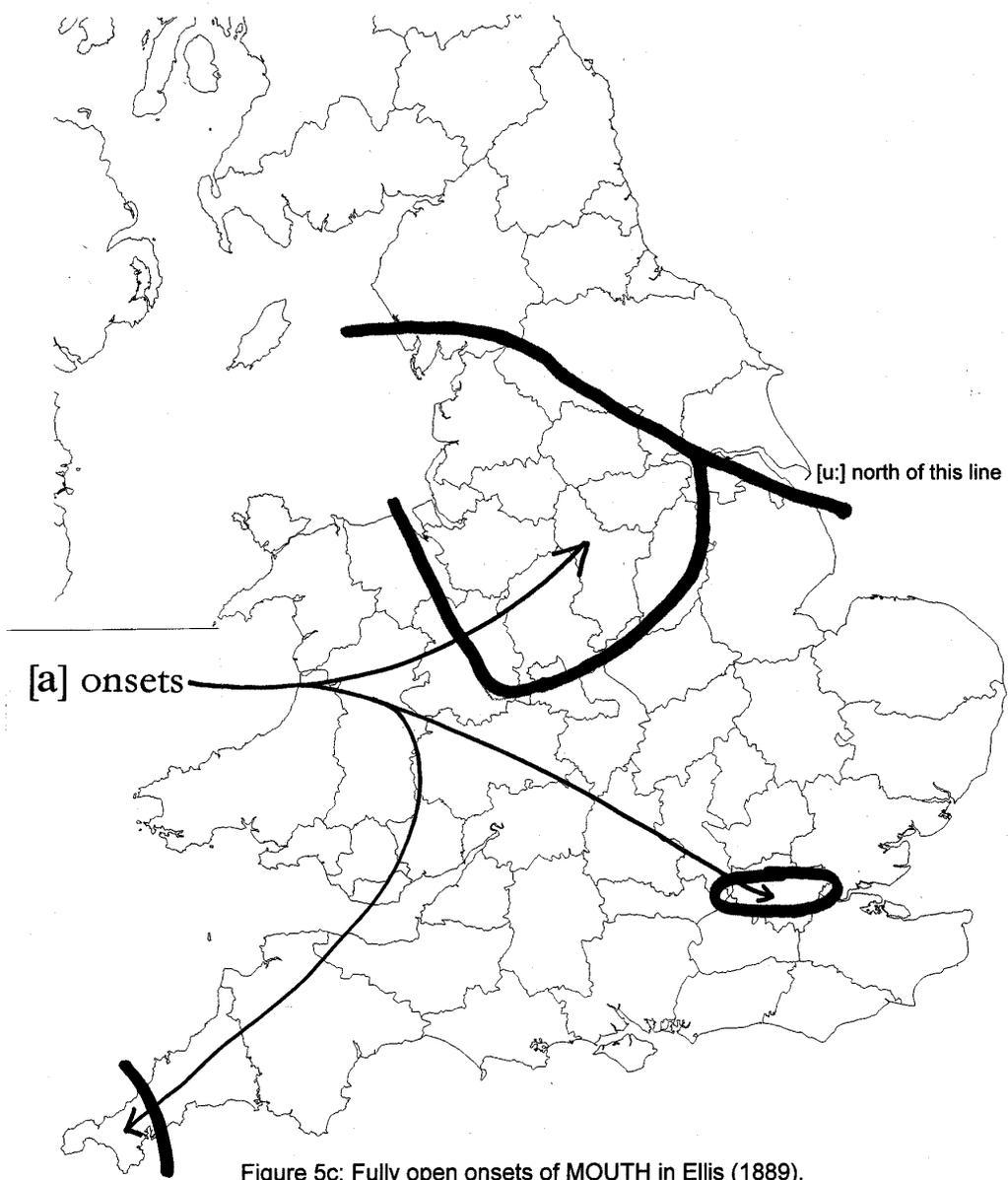


Figure 5c: Fully open onsets of MOUTH in Ellis (1889).

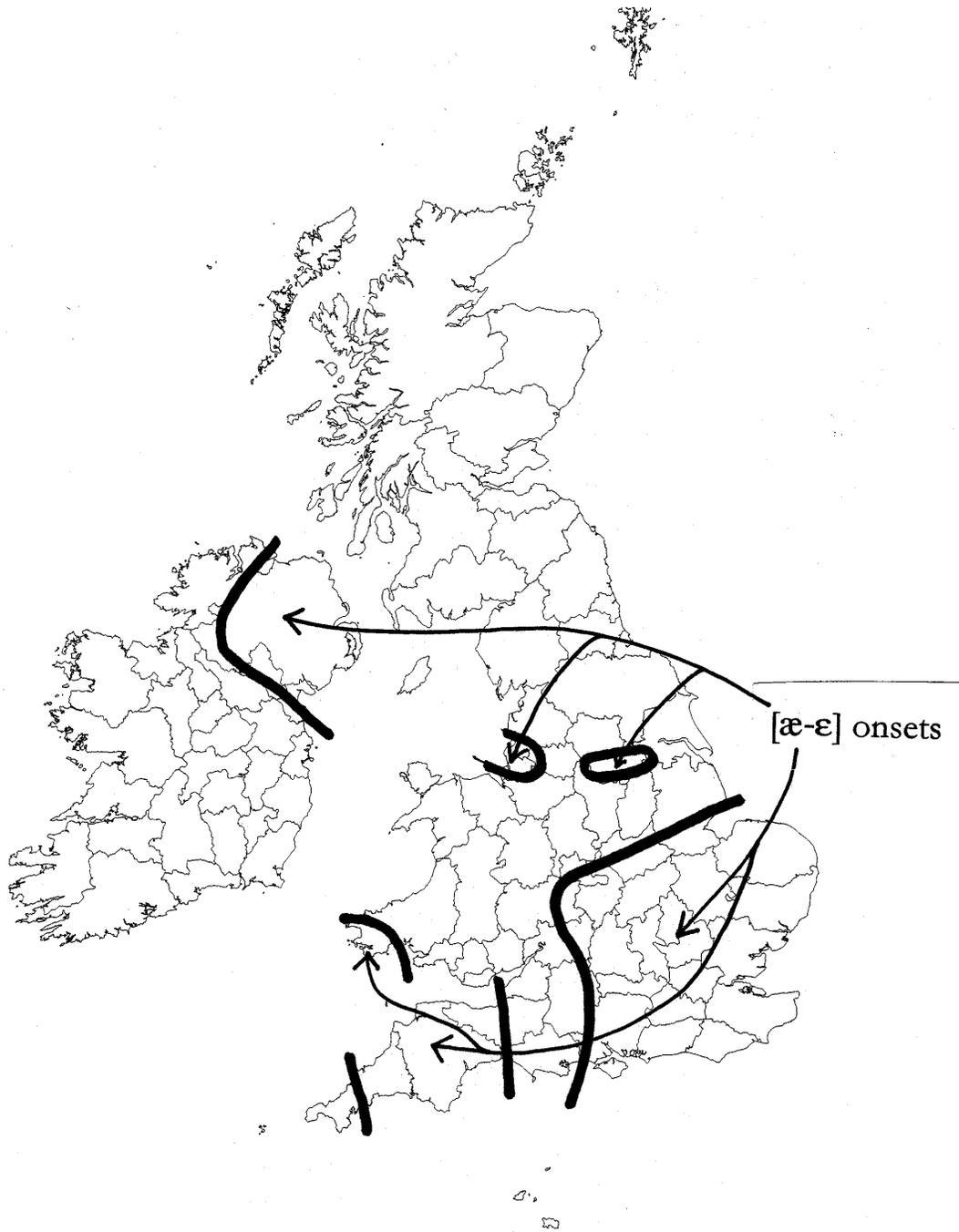


Figure 6a: Front mid-open onsets of MOUTH in Wright (1905)

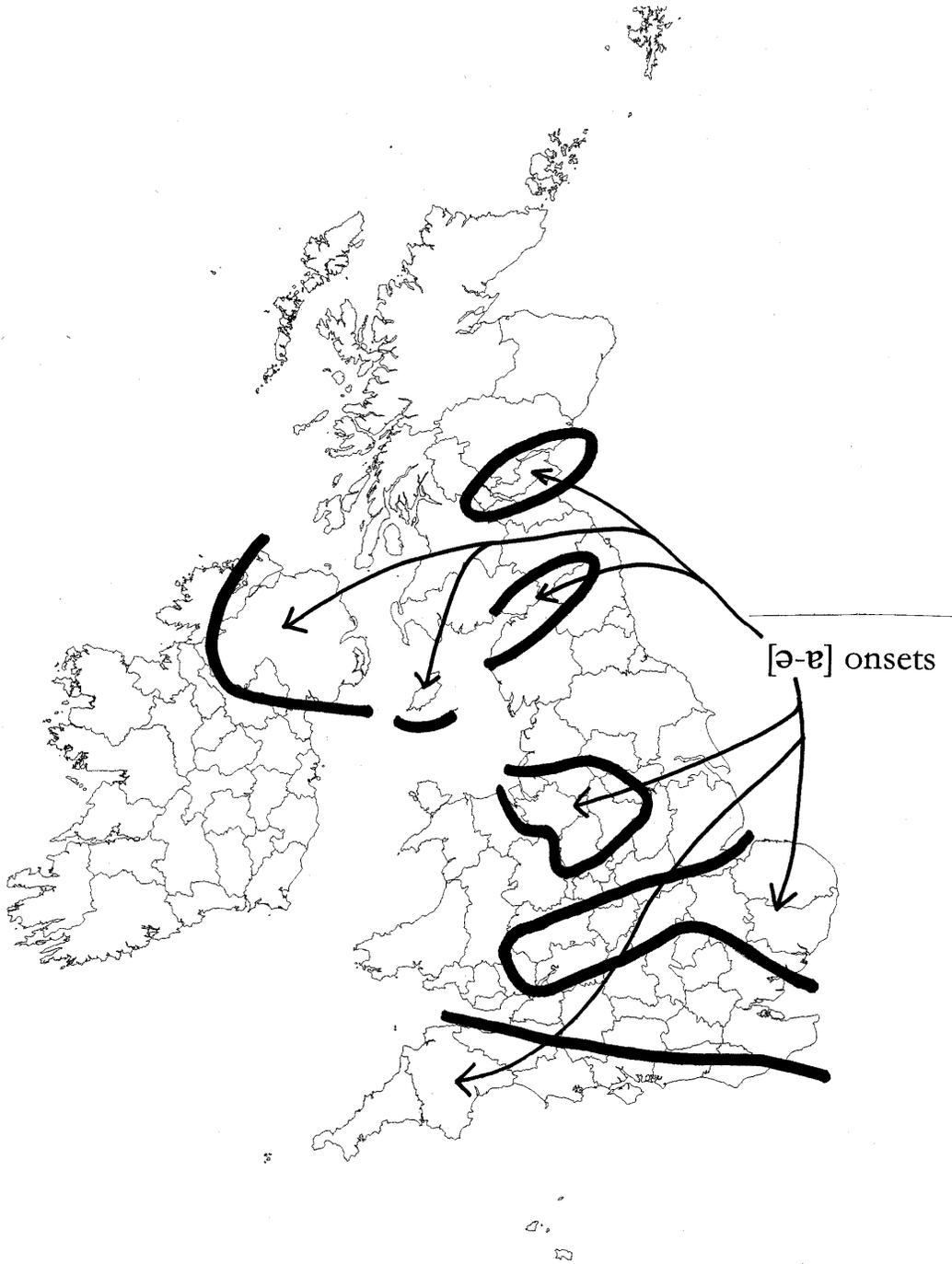


Figure 6b: Central onsets of MOUTH in Wright (1905)

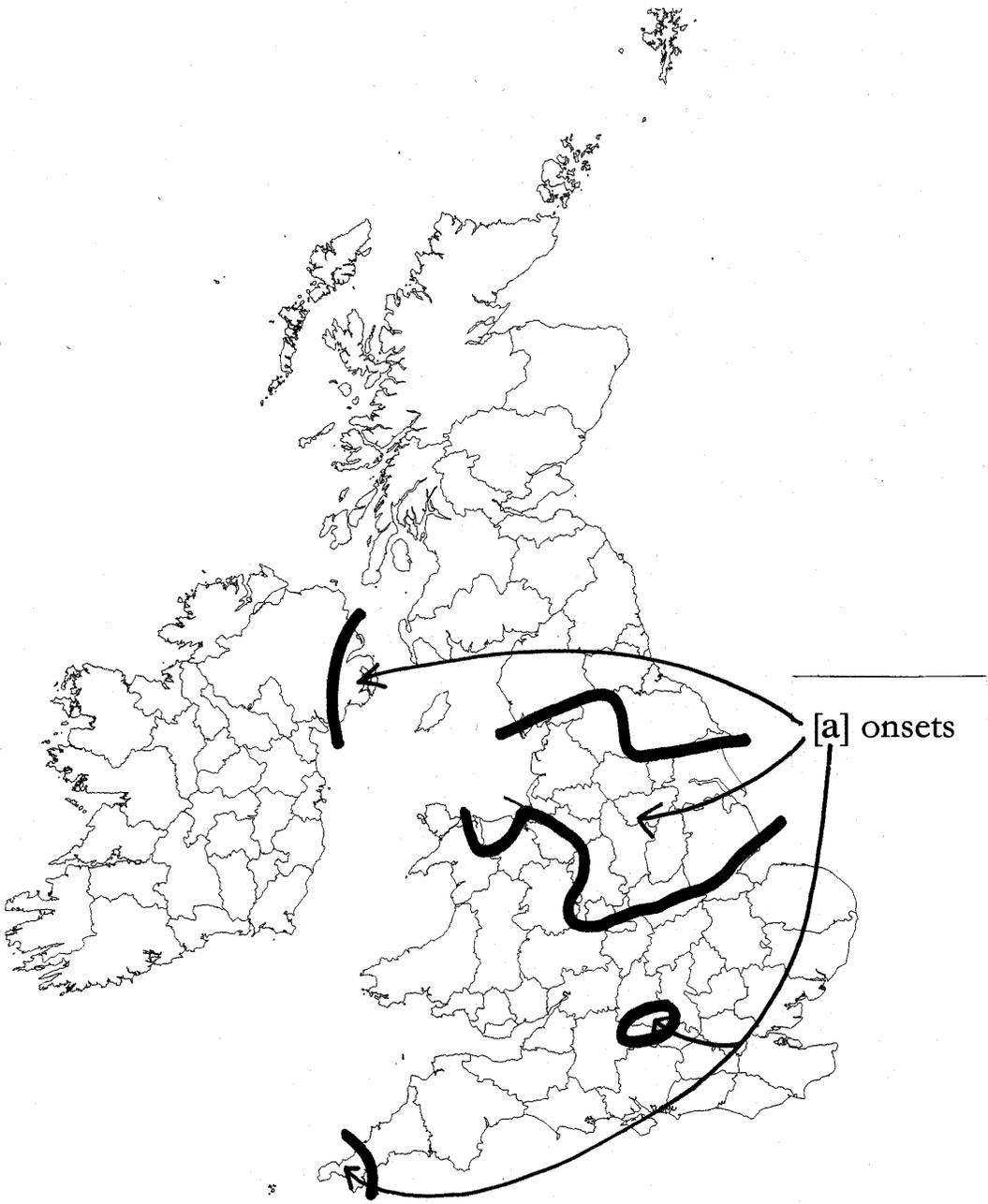


Figure 6c: [a] onsets of MOUTH in Wright (1905)

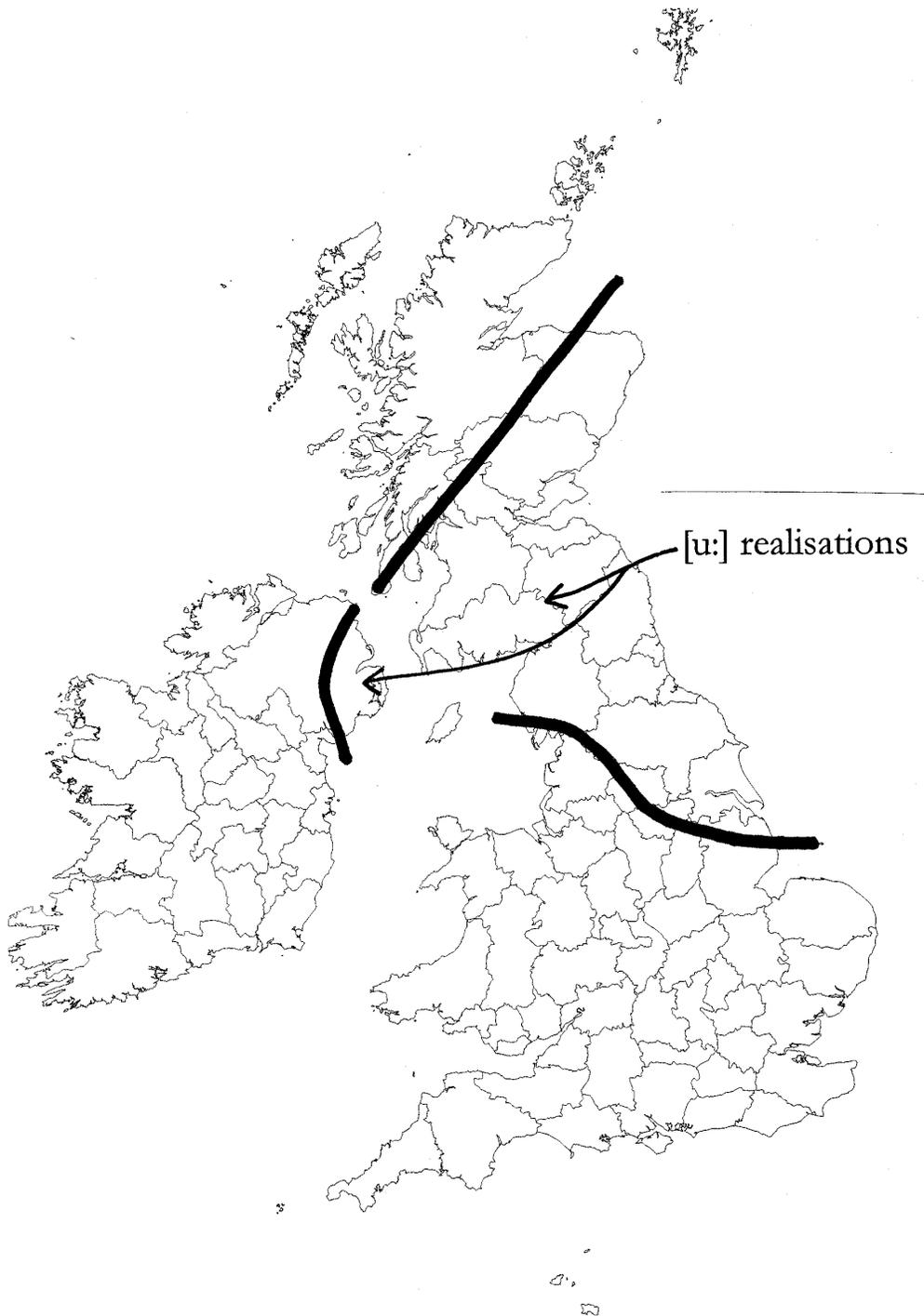
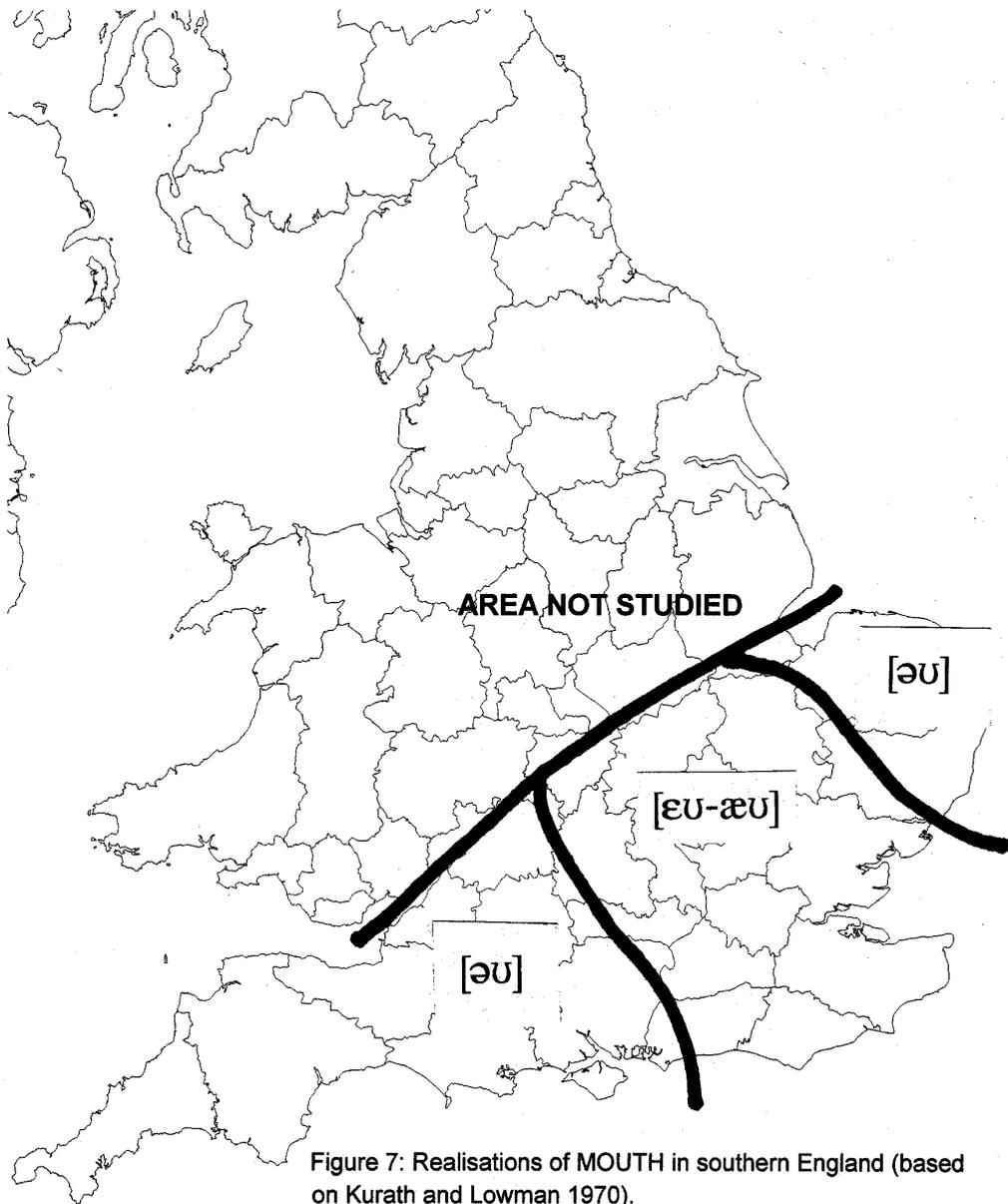


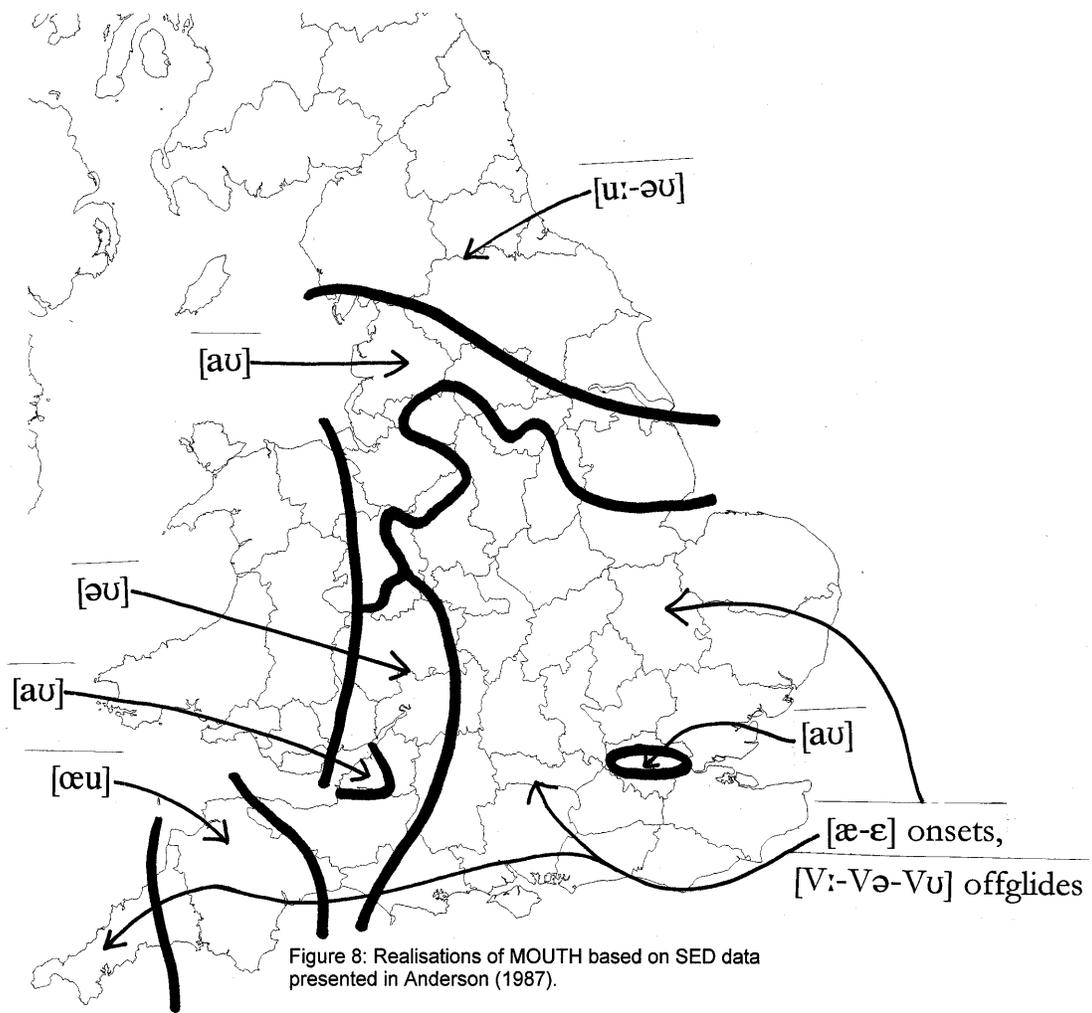
Figure 6d: [u:] realisations of MOUTH in Wright (1905)



Finally, Figure 8 presents the geographical distribution of the dominant variants in the SED, based on Anderson (1987). He suggests that ‘the commonest reflex of ME /u:/ [was] the [ɛʊ - æʊ - ɛʏ] type ...the Standard English development (to [aʊ - ʊʊ]) is relatively uncommon in the dialects...it is rather surprising that Standard English has selected this type. Probably it indicates the conservative nature of the standard language and its relative isolation from the sound systems of neighbouring dialects’ (1987: 41). The ‘commonest reflex’, once more, is found in those areas that were heavy providers of NZ migrants. On the basis of an analysis of the SED in relation to New Zealand English, Bauer agrees, claiming that ‘the distributions...show NZE to be based firmly on southern rather than northern varieties of British English’ (1999: 298).

Other early researchers who have conducted smaller scale locality studies have also noted mid-open onsets in various parts of the British Isles. Wyld (1907:328) claims ‘Various vulgarisms and provincial forms of this diphthong exist, such as (æu, ɛu)’ and later (1953) finds raised onsets in Lancashire and, notably, in London, where he claims ‘In Middle Class London Cockney, the first element of the diphthong has been fronted, and a typical mark of the beast, as Lord Chesterfield would call it, in certain circles, is the pronunciation [hæʊs]’ (1953: 230). And Matthews (1938) investigating Cockney claimed (1938: 63) that *mountain* was pronounced ‘meowntain’. Sivertsen claimed that ‘by far the most common’ (1960: 67) realisation in London was [ɛə - ɛʊ]. Collins (1964:42) found [ɛʊ] in South Warwickshire, Kökeritz (1932: 65) remarked that [ɛʊ] was a ‘very stable diphthong’ in Suffolk, and noted (1932:67) Thomas Albrecht as claiming [æʊ] - [ɛʊ] for Essex in 1916. Wakelin (1986:28) shows onsets that are either front mid-open or slightly centralised [ɛʊ - ɛ̥ʊ - ɛ̥ʏ] for Cornwall, Devon and Somerset.

In sum, all the dialectological survey evidence, from Ellis (1889) right through to the most recent nationwide survey of the dialects of England, the SED, confirms that the dominant variants in those areas which sent most migrants from England to New Zealand are those with front mid-open onsets, similar to those used in New Zealand today.



We have relatively little evidence of the pronunciation of MOUTH in Scotland and Ireland in the 19<sup>th</sup> century, beyond evidence presented by Ellis (1889) that the Great Vowel Shift had not begun in the far north of England and Scotland (and hence had forms such as [u:] or possibly [ʊu]) and Wright’s evidence for the British Isles as a whole. Descriptions of present-day Scottish and Irish English suggest that these 19<sup>th</sup> century descriptions were largely accurate for MOUTH, since Lass, Wells and others all show relatively conservative central onsets for many locations today. Lass (1987: 269) finds Mid Ulster [ɔ̃], Southern Hibernian [ʌʊ] and Standard Scots [ʌɥ]. Hickey has suggested that 19<sup>th</sup> century Dublin had [ɛʊ] (personal communication; see also Hickey 1999: 212).

The earliest evidence we have of MOUTH variants in Australian English comes from McBurney, whose comments on NZE were examined earlier (Ellis 1889). His findings for MOUTH are presented in Table 4 below.

**Table 4: The realisation of /au/ in varieties of early Australian English according to McBurney (in Ellis 1889: 240-241), with IPA equivalents from Eustace (1969).**

Ellis’ transcription (1889: 241)	IPA equivalent, following Eustace (1969)
{éeu}	[ɛ̃:ʊ]
{ææ’u}	[ɛ̃:ʊ]
{áa <sup>1</sup> u}	[ã:ʊ]
{áu}	[aʊ]
{ə’u}	[əʊ]
South Yarra, Collingwood, Frankton, Dunolly, Ballarat, Tasmania, Sydney, Mornington	Almost all use {éeu}
Maryborough	Almost all use {éeu}. A few use {ææ’u} and {áa <sup>1</sup> u}.
Brisbane	Almost all use {éeu}. Boys possibly use mostly {ææ’u}
	Equal proportions of {éeu}, {ææ’u} and {áa <sup>1</sup> u} are used.

Perhaps even more so than in New Zealand, diphthongs with front mid-open onsets dominate. Ellis (1889: 237), commenting on McBurney's description, suggested that 'on the whole...a visitor from England to Australasia finds great resemblance to the mode of speech he has left behind him'. He claims that a characteristic of Cockney is 'alteration of the first factor of *ow* in *cow*, so that it is written *kyow* or *caow* [kjɛ'u, kæ'u]...[which] has nearly naturalised itself in Australia'. In a rarely cited article, Gunn (1975:11), talking about the role of the early settlers in the formation of Australian English, stated that '/æu/, the form established in Australia, must have been very common in these general or advanced speakers (see also Britain, fc b, for further discussion of Gunn's views, /au/ and its origins in Australian English). Subsequently, writers have agreed, as in New Zealand, that the dominant vernacular form in Australian English has had onsets in the area of [æ] or [ɛ]. Baker, back in 1945, suggested that Australia has [æu - əu - ɛu - eiu], Mitchell and Delbridge (1965) proposed [æu - æʊ], etc (see also Hammarström 1980: 15; Cochrane 1989, Clark 1989, Bernard (1989), Lee (1989), Harrington et al (1997: 179).

The demographic and historical sociolinguistic analysis of the New Zealand migrant population highlights a number of points very clearly indeed:

- Firstly, by far the most dominant variant of MOUTH among the settlers to New Zealand would have had a front mid-open onset. This is shown by the fact that those very areas which saw heavy migration to New Zealand are those areas which, as agreed by several dialect surveys, predominantly used mid-open onsets. These include the south of England, parts of Ireland, and Australia.
- The [au] realisations of MOUTH, necessary for the raising hypothesis to be valid, are found very sparsely indeed in areas which sent significant numbers of migrants, and are more popular in areas which sent relatively few migrants – the North of England.
- Other variants would have also been present in the dialect mix: these include variants with central onsets [əʊ], found far more extensively across England than [au], as well as in Scotland and Ireland, and noted as a minority form in New Zealand by McBurney (Ellis 1889: 241), and pre-Great Vowel Shift [u:] -type variants from Scotland and the far north of England.

It appears clear, I believe, from all this evidence, that the raising hypothesis for the origins of present-day MOUTH in New Zealand English must be incorrect, as [aʊ] would not have been found in sufficient quantity to have constituted the early dominant vernacular form. So what did happen?

### **Koineisation and front mid-open MOUTH**

As a number of authors have shown (Siegel 1985, Kerswill and Williams 2000, Britain 1997a, 1997b, 2000, and especially Trudgill 1986; Britain, *fc, c*; Trudgill and Britain forthcoming), one characteristic of speech communities that have witnessed high levels of dialect contact between speakers of distinct but mutually intelligible varieties is koineisation. Koineisation can have a number of different outcomes, perhaps the most common of which is levelling, whereby marked or minority linguistic variants in a dialect mix are eradicated in favour of more common, less marked variants which have a wider social currency in the locale (see Britain 1997b and Sudbury 2000, for example).

The demographic and linguistic evidence presented here for 19<sup>th</sup> century New Zealand, I would claim, provides solid evidence of koineisation-in-progress. The early speech community, as highlighted by McBurney, is characterised by a) dialect mixture – a range of variants of MOUTH in use in the early speech community but b) in this case, one overwhelmingly dominant variant of MOUTH – with a front mid-open onset. This mixed situation is a genuine reflection of the variety and proportions of forms imported by migrants from the British Isles and Australia. As the post-contact levelling process progressed, so the mid-open onsets of MOUTH gradually eradicated minority vernacular variants such as [əʊ] and [aʊ], until a situation was reached when the domination of front mid-open onsets in vernacular varieties of New Zealand English reached its present strength. So, importantly, I am not claiming that [aʊ]-type variants were not present in New Zealand, but that they were present in such insignificant proportions that they were levelled away as vernacular variants. Of course, they would have been retained somewhat among some speakers in some styles as ‘standard’ variants, demonstrating, I would like to claim, that the relationship between [aʊ] and [ɛʊ] in present-day New Zealand English is not one of parent

and child but one of standard and non-standard (and, given Britain etc, of a considerably weakened standard as time seems to be destigmatising the non-standard forms<sup>8</sup>). The relevant process which led to the domination of [æʊ - ɛʊ] therefore is one of dialect levelling rather than vowel raising.

### **Conclusions:**

In a somewhat controversial article, Roger Lass (1990: 245) complained about a lack of sophistication in research on post-colonial varieties of English, due, he claimed, to the obsession of ‘historical anglicists’ with ‘the line leading to the southern British standard. This reflects an old ethnocentrism: straight-line evolution to the southern Received Standard (which is ‘English’) and side-paths of antiquarian or specialist interest leading to ‘the dialects’ (1990: 245). Although the methods and theoretical approaches to the study of the post-colonial Englishes have advanced to some extent since Lass made his claim, I have presented here what I believe to be a good example of Lass’s complaint, combining both the obsession with the evolution of the standard and of a lack of sophistication in investigating the rather different non-standard-like histories of English around the world. The history of MOUTH in NZE has previously been analysed as if it has changed. It has been assumed that it must have changed from a Standard-like [aʊ], presumably because of the ‘stigmatisation’ of front mid-open onsets, and the presence of some standard variants in surveys conducted on the basis of formal and experimental reading styles. But the history of New Zealand English is not a history of divergence from Standard English, but one that has in many ways been shaped by the contact and koineisation of predominantly southern English, Scottish, Irish and Australian varieties. In the case of MOUTH, the settler dialects showed patterns which were not only quite *unlike* standard varieties (indeed, note the comments above of Kurath and Lowman 1970 and Anderson 1987), but which showed a dominance of the variants which prevail in the country today. Minor variants were levelled away in the early colonial

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<sup>8</sup> The issue raises the question of just exactly what ‘stigmatisation’ is. It is used widely in sociolinguistics, but rather loosely and often uncritically, without due consideration of how it actually affects the speakers themselves. What effect, for example, would the letters of linguistic pedants to the *Listener* have on children’s perceptions of appropriate dialect norms in the playground and beyond? Are forms that are spurned by the upper middle class elite and prescriptive cranks necessarily seen in the same way by the whole speech community? It is also not clear that the tools sometimes used to assess the salience of linguistic forms (e.g.

period, leaving front mid-open onsets ‘victorious’ at the vernacular level, but engaged in a much longer battle with more standard variants at the stylistically more formal level. Figure 1 appears to suggest that the fully open [aʊ] forms are losing this battle too.

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matched guise tests) are able to subvert the hegemonic ideology of the standard that many of us experience sufficiently to tap real attitudes and perceptions.

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