

Socio-phonetics and social change: Deracialisation of the GOOSE vowel in South African English¹

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This paper examines the degree of sociolinguistic change in the English of young middle-class South Africans of different ethnic backgrounds in relation to new post-apartheid opportunities and friendships. Once tightly controlled, social networks of young people of middle-class background are now deracialising. The paper examines whether young people of the major ethnic groups, Black, Coloured and Indian, are simply adopting prestige White middle-class norms, adapting them or resisting change. Forty-eight speakers were analysed within a Labovian framework in relation to the GOOSE vowel (long /u/ or /uw/). Over 4000 tokens were analysed acoustically using PRAAT and compared via vowel normalisation procedures based on Watt and Fabricius (2003). The results show that middle-class speakers of the three ethnicities are fronting the vowel, but in different ways. Black speakers show the greatest accommodation to erstwhile White norms. Females show greater resistance among Coloureds and Indians, but overall it is the Black females of the study who approximate most closely to the norms of the White reference group of their gender.

KEYWORDS: long /u/, GOOSE vowel, South African English, social change, language change, sociophonetics, ethnicity, social class

1. INTRODUCTION

It is a well-known fact of English phonetics that the GOOSE vowel (Wells 1982) – also known as ‘long u’ and variously transcribed as [u:] in IPA or [uw] in the North American tradition (e.g. Trager and Smith 1951) – is subject to considerable fronting in many varieties internationally. In the *Atlas of North American English*, Labov, Ash and Boberg (2006: 154) note that fronting is common over much of North America, especially after the coronals /t, d, s, n/. In a summary of phonological variation in the *Mouton Handbook of Varieties of English* Schneider (2004: 1117) confirms that fronting is operative in parts of the U.K., especially Scotland and the North, in Canada and the U.S.A., South Africa, Australia and New Zealand. Gimson (1962: 114–115) noted that centralisation was increasing in English Received Pronunciation (RP),

especially in the London region, with the older, rounded and fully back variant considered 'affected or over-cultivated'. In relation to London, he observed (1962: 114) that 'centralisation is characteristic of the regional dialect, both popular and modified'. Another less overtly prestigious variant noted by Gimson is the diphthong quality [əü] or [iü] associated with popular London speech (Cockney), showing loss of lip rounding in the first element. In the latest revision of Gimson's work Cruttenden (2001) endorses these views and adds that diphthongisation can now be found in General (as opposed to Refined) RP, especially in word-final position. He observes further that fronting and diphthongisation are found in other varieties of British English; and that in Cockney, unrounding (or minimal rounding) of the second element of the diphthong is a special characteristic.

Harrington (2007) shows strikingly that fronting is a feature of RP, via a diachronic acoustic analysis of the Queen's annual birthday broadcasts. In the period 1952 to 2002 there is evidence of fronting, which Harrington (2007: 5) attributes to greater co-articulatory pressures from preceding palatal and alveolar consonants. Hawkins and Midgley (2005) observe from their acoustic study of word list (henceforth WL) style of four age groups of RP speakers that 'the mean frequency of /u:/ has a higher F2 in successive age groups, with F1 unchanged or little changed, consistent with /u:/ sounding progressively more fronted and possibly less rounded with younger speakers'. Fought (1999) shows how the general U.S. change is diffusing into ethnic varieties like the Latino English of California. Fridland and Bartlett (2006) show that African Americans in Memphis, Tennessee participate in the fronting of /uw/ (also of /u/ and the first element of /ow/, i.e. the FOOT and GOAT vowels). Fronting is but one of many recent sweeping changes in English, with its short vowel shifts like the Northern Cities shift in the U.S. and Canada (Labov 1994), the Southern Shifts of the Southern U.S., Australasia and South Africa (Labov 1991; Lass 1990; Trudgill, Gordon and Lewis 1998), and reverse chain shifts in south-east England (Torgersen and Kerswill 2004) and incipiently in South Africa (Bekker 2009). As far as the GOOSE vowel is concerned, the change is one likely to have far-reaching consequences on English phonology, insofar as many varieties now lack a truly high-back vowel (see the descriptions in Docherty and Foulkes 1999). This paper contributes to analyses of the change by:

- a. characterising GOOSE in a variety in which it has not been studied in sociolinguistic detail – South African English;
- b. considering its impact in terms of globalisation and diffusion; and
- c. showing how an ongoing international change can be utilised as a tool of local social change and realignments.

The essential story is that of a degree of deracialisation in South Africa, young peoples' social realignments and new-class formation.

2. SOCIAL CLASS AND SOCIAL CHANGE IN POST-APARTHEID SOUTH AFRICA

The primary (but not exclusive) focus of this study is the new emerging middle class of young Black South Africans.² Their language practices increasingly favour not just English as a primary language, but an expressive style that is felt by some critics to be un-African (see Mesthrie 2008). It is this variety, and its dynamics that will be explored in this paper, amidst a detailed comparison with English of other comparable groups (Whites, Coloureds and Indians). Apartheid South Africa (1948 to 1994) was bent upon keeping Black people from succeeding in the modern industrial world. They were envisaged largely as a cheap labour force, fitted with the rudiments of education and to be kept apart from 'White' South Africa. [B]lacks (in the broad sense that included Coloureds and Indians) were segregated from birth (the hospital or neighbourhood one was born in), to schooling (with four different education departments each administering its own segregated schools), the work place (where the expectable differences between employer and employee were heightened racially), family (a proscription on inter-racial marriage), and finally to death (the segregated cemetery or crematorium). No middle-class mobility was envisaged for Blacks; though inevitably some differentiation did arise between professionals (lecturers, teachers, doctors, nurses, lawyers), urban workers and rural dwellers – see Wilson and Mafeje (1963) for an account of the stratification within a Cape Town township. From a sociolinguistic point of view such extreme social engineering and its eventual collapse created near-laboratory conditions for the study of speech divergence and subsequent convergence. Apartheid rigidified at least four main ethnic Englishes, sharply differentiated in accent and syntax. These were:

- L1 White South African English (WSAE) – an offshoot of largely southern British English;
- Indian (ISAE) – L1 for some speakers but L2 for many others;
- Coloured English (CSAE) – L1 for some speakers but L2 for many others; and
- other mainly L2 varieties like Afrikaner English (ASAE) and Black English (BSAE) – Afrikaner English is an L2 variety with some overlaps with L1 WSAE.

The cover term for all these varieties is SAE (South African English). The collapse of apartheid has not destroyed this ethnic variation, and working-class varieties of Black, Coloured, Indian and White Englishes can still be discerned, with some salient internal differentiation within the last group based on class and ethnicity (i.e. English versus Afrikaner). Confirmation of the radical differences in the phonological systems of these varieties can be seen from their descriptions in articles in the *Mouton Handbook of Varieties of English* by Bowerman (2004), Finn (2004), Mesthrie (2004), and Van Rooy (2004). Where these phonological differences impinge upon the analysis of GOOSE they will be discussed below.

The working classes and township dwellers have generally still to feel the benefits of post-apartheid opportunities.³ For them racial discrimination has been partly replaced by economic disparities, sometimes popularly called 'economic apartheid'. It is in the middle classes that the most significant changes have occurred. Here official policies have fast-tracked Black empowerment in the government and private sectors. People of colour now have greater opportunities for choosing their places of residence, friends and jobs, and the education and future professions of their children. Seekings and Natrass (2005: 309) cite studies claiming that the number of middle-class Black households rose by 78 percent between 1991 and 1996. Seekings (p.c. 2006) has also indicated that the proportion of Blacks in South Africa's middle class has risen from close to zero in the 1980s to about 50 percent in the early 2000s. The commercial sectors and their advertising wings have not been slow in noticing and capitalising on this dramatic change to their consumer base. A study was commissioned by the private sector of 'Black diamonds' – a term for young Black people at universities who are expected to shine in terms of educational and work opportunities in the near future, and to have consumer habits similar to the erstwhile White middle class. This is a new status group, likely to form the backbone of a new Black middle class, and possibly a new South African middle class in which race is de-emphasised. The Black diamonds have been to schools that were formerly reserved for White students. These are either elite private schools, in which the fees are only affordable by a select number of families; or ex-model-C schools, once restricted to Whites and charging a moderately high fee.⁴ 'Model C' refers to a particular option granted to White schools before the collapse of apartheid – that they would receive a government subsidy (unlike the private schools), charge fees over and above the subsidy, and open their doors to small numbers of Black pupils. Those numbers have increased in post-apartheid South Africa to the extent that there is now a major social division between pupils at model-C and private versus 'township' or DET (the former Department of Education and Training) schools. Within the former category, it is likely that there is a further differentiation between 'upper middle' (largely of private-school background) and 'middle class' (largely of model-C background). This has still to be confirmed by sociolinguistic studies.

3. DESCRIPTIONS OF GOOSE IN OLDER SOUTH AFRICAN ENGLISHES

The first scholarly study of South African English was that of Hopwood (1928), a British-trained phonetician who gives us the earliest description of the GOOSE vowel in South Africa. His description indicates that front values occurred in the White communities as early as the 1920s (the time of his fieldwork), i.e. within a century of the first English settlements in the country. This makes it likely to be a transported feature from the U.K., rather than one that began anew. Hopwood (1928: 22) records the change as '[ù'w] > [yü(w)]', using as an example the word *two* which he describes as '[tù'w] becomes [tÿü(w)]'.⁵

Since Hopwood generally employs a [j] for a palatal glide, the value of [y̥] is that of a centralised front rounded vowel. Hopwood observes further that the fronting of /u:/ 'is a Cockney English pronunciation'. There is reason to doubt that Cockney is the main source of variation in South Africa, since there are no traces whatsoever of the diphthong realisations of FLEECE and GOOSE associated with this London dialect (Gimson 1962: 114–115; Sievertsen 1960: 81–82). Fifty years after Hopwood's work, Lanham (1978: 153–154) maintained that the fronted variant was widespread in SAE, in both middle-class and broader varieties; for the latter, especially amongst younger members.⁶ He proposes that its most advanced variant is 'a fully central [ʊ] favoured by preceding [y]'. The [y] here probably refers to IPA [j], rather than a high front rounded vowel. Lanham further supplies the following thumbnail sketch (1978: 154) regarding fronted [u:]: 'Probably originates in Natal. Apparently below social consciousness; high index values [=increase in fronted tokens – RM] are maintained in formal style and little stylistic variation'. In Lanham's work 'originates in Natal' usually means that a variant has its roots in British English varieties that are intermediate between RP and working-class varieties. Lass (1995: 98) indicates a fronted [u:] for GOOSE with weak rounding. Weak though the rounding is, it is sufficient to distinguish the tokens *goose* and *geese*, the latter having fronted, unrounded quality.

Crucially for this paper, fronting was once uncommon in the varieties of SAE spoken by Blacks, Coloureds and Indians. Confirmation of this can be found in the descriptions of these varieties by respectively Hundleby (1964), Wood (1987) and Bughwan (1979), none of which allude to vowel fronting. Wood (1987: 136–137) in fact stresses the backing and rounding of /u:/ in Coloured varieties of English. Lass (1995: 99) forcefully contrasts this state of affairs with the White speakers as follows:

The central-to-front quality is an ethnic as well as a social marker; it is (on anecdotal evidence at least) perceived by black speakers as peculiarly 'White'. Vernacular Indian and Coloured varieties have a back vowel, often even backer than Conservative; and there is a strong tendency for Indian and Coloured speakers to avoid the fronter values even in very standard registers (the only exceptions being media personalities).⁷

Where Whites were concerned, one can paraphrase Lass (1995: 98) slightly as follows: the higher up the class scale and the younger the speaker, the fronter the vowel.⁸ In a subsequent article, Lass (2004: 377) put the case even more forcefully:

This central-to-front quality is peculiarly 'white': more specifically it is the normal local (rather than British-focused) value for White standard speakers. Coloured and Indian speakers tend to have a back vowel /u:/ in this category [...] and coloured or black speakers with this kind of pronunciation are often stigmatised by the political left as linguistic turncoats or ethnic/class traitors.

Lass's observation is more true of the early to mid-1990s (i.e. the end of apartheid) rather than the beginning of the 21st century (when post-apartheid social changes were well in the air).⁹ By 2000 fronting had started to spread to the middle classes of all communities, especially those youth having new social networks in non-racial schools in which whites were still present in significant numbers.

4. THE SAMPLE AND METHODS

This paper reports on 48 young, middle-class students from the country's four major ethnic groups: White, Black, Coloured and Indian. All 48 had been to (or were still at) model-C or private schools which were multi-racial to varying degrees. The students reported on in this paper were between the ages of 17 and 24, with one exception of a 29-year-old mature student returning to university. The majority of interviewees either lived in a university residence or at home with family; only a few lived in 'digs' (i.e. a rented house shared by students). However, all had been brought up in segregated suburbs, given that they were born before 1990. The families of about half of the 36 black students had since moved into suburbs that are predominantly White. The Indian students were all from Durban, where they were interviewed by the author in their homes. The Coloured students were from Cape Town and interviewed in their homes by a graduate-student researcher on the project. The Black students were from different parts of the country and interviewed mainly on the university campus by myself or one of the graduate students on the project. The White students were from Cape Town and Durban and were interviewed by students and me, either in their homes or on the university campus. The broader project of which this study is a part operates in five major cities and involves the country's four major ethnic groups. It is uncontroversial to use data from different cities for Whites and Blacks, since linguists are in agreement that there are few or no differences by region for the former and home (or ancestral) language for the latter (see Lass 2004 and Wissing 2002 respectively).¹⁰ For Indians and Coloureds the situation is different. Regional differences are salient here, and it is clear to speakers themselves (in my ongoing regional dialectological work) that there are major differences between Johannesburg, Durban and Cape Town, the country's three largest cities. Accordingly this study draws on the dominant city in which each group is numerically and culturally strong and where a focussed social dialect has arisen: Durban for Indian speakers and Cape Town for Coloured speakers.

There are more females than males reported on here (in the ratio 7:5 for each group), since they are in a majority at the current stage of the project. (It is hoped that this slight imbalance will be remedied as the project enters its second fieldwork phase at the time of writing). The project employs the technique of the 'Labovian' interview, long familiar in sociolinguistics. The modules I emphasised were:

- childhood games;
- primary and high school memories, including righteous indignation over wrongful blame;
- relations with students of different backgrounds; and
- favourite pastimes.

In lieu of the danger of death module, interviewees were asked whether they had witnessed, heard of, or been the victim of any robbery – as every South African has a crime story to tell. At the end interviewees read out a word list, a minor adaptation of Wells' (1982) lexical sets.¹¹ For this study only one item from the word list is relevant: the word *goose* itself.

Tokens were analysed in PRAAT (Boersma 2001; Boersma and Weenink 2008) and raw Hertz frequencies recorded in tables generated in EXCEL. In logging formant values we selected a slice across a short stable section of each spectrogram, which was averaged by PRAAT, and we ignored all transitions. Subsequently, normalisation of the frequencies were undertaken to take into account potential differences amongst individuals according to vocal-tract size. Normalisation followed what has come to be called the Watt-Fabricius method (Watt and Fabricius 2003), which involves calculating a centre point for each speaker and then dividing the raw frequencies for each vowel by this centre point. The range of values for this dividend on each axis is then roughly 0.2 to 2.0 on the x-axis (for normalised F2) and 0.2 to 2.2 on the y-axis (for normalised F1). In theory the centre point is the average of the highest front and back vowels and the lowest vowel – depending on the dialect this is usually [i: u: ʌ] or [i: u: æ]. However, since many English dialects do not have a back GOOSE anymore, Watt and Fabricius create a dummy high-back vowel (F_i, F_j), where F_i is the F1 value for FLEECE and F_j is *also* the F1 value for FLEECE. We might call this the dummy GOOSE vowel. To get values for the highest and lowest vowels we fed in word list tokens for the following items for each speaker: FLEECE, TRAP, BATH, GOOSE, FOOT and STRUT/CUT. The Watt-Fabricius normalisation option is available on the NORM website (Kendall and Thomas 2009), via which normalised average values per speaker were produced for the GOOSE vowel from all such tokens fed in. These averages are given in the dividends cited above; for convenience I label them 'W-F ratios'. There is an alternative choice offered on the website that normalises all values fed in and converts them first into ratios and then into a Hertz-like scale. This is the method used by Labov, Ash and Boberg (2006) in their *Phonological Atlas of North American English*, labelled the 'Labov ANAE method(s)' on the NORM website. The method, however, requires large amounts of tokens for each vowel. It is therefore inappropriate for a project in its early phase, like the present one, which starts off by examining large numbers of tokens of a single vowel, normalised with reference to small numbers of word list tokens of other (extreme) vowels, as discussed above.

In characterising the fronting of GOOSE, it is necessary to consider the structural constraints on this process. Different runs were trialled for environments which

were expected to favour or disfavour fronting. Although there is broad consensus in the literature over these environments, individual studies do differ in the ones they take as criterial, partly dictated by the structure of the dialects they are studying. Baayen, Dijkstra and Schreuder (1997) show that over 70 percent of fronted tokens in their CELEX database follow a /j/ or an alveolar. Labov, Ash and Boberg (2006) analyse data with a preceding /j/ separately, as manifestations of a separate phoneme or historical category. They further advocate (2006: 152) the exclusion of tokens with /u:/ before /l/, since /l/ is a retracting environment:

It is clear that in any analysis of the fronting of /uw/, vowels before /l/ should be placed in a separate category. In most dialects, the vowels of *tool*, *school*, etc. occupy high back position, while all other /uw/ vowels are shifted to the center or front.

Moreover, they go beyond alveolars as the favoured fronting environment for GOOSE to include all coronals. The coronals are consonants in whose articulation some manipulation of the front part of the tongue is involved: /t d s z n θ ð r l ʃ ʒ tʃ dʒ j/. The list is not cast in stone: e.g. there are debates amongst phoneticians about whether /r/ and /j/ qualify as members. Labov, Ash and Boberg (2006: 153) conclude that the evidence from their atlas 'firmly places /r/ with the non-coronals as far as /uw/ fronting is concerned'. To facilitate international comparisons, the following environments were differentiated in the current study:

- a. /r/ and /l/ before a GOOSE vowel, since these are known to affect acoustic readings.
- b. /l/ after a GOOSE vowel, since it is a general retracting environment in international varieties of English, and certainly has a general effect on SAE vowels (Lanham 1978: 152).

Factoring out (a) and (b) left three 'clean' environments for sociophonetic study:

1. Preceding consonant /j/ which is a fronting environment par excellence and deserves to be isolated as a special fronting environment. I call *knew*, *use*, *dew* and other such words in SAE 'J-words', which I prefer to analyse as a synchronic subset of the GOOSE lexical set, rather than as a separate phoneme class.
2. Preceding coronals.
3. Preceding non-coronals.

I follow the majority of studies in only analysing the preceding segment for influence on fronting, not the following segment.¹² There was only one token among thousands in which /u:/ was not preceded by a segment, viz. the word *ooh*, which only occurred once. Accordingly the environment 'word-initial' is not relevant for this analysis.

Table 1: The ten most-frequent tokens per phonetic environment. (Items in italics are those words with /r/ or /l/ that were effectively excluded from the coronal and non-coronal classes and hence from detailed analysis)

	J-words	n	Coronals	n	Non-coronals	n
1	you	414	do	418	<i>school</i>	901
2	use	150	<i>Zulu</i>	149	move	198
3	few	87	<i>groups</i>	97	<i>cool</i>	148
4	knew	55	<i>through</i>	62	who	70
5	students	49	too	53	food	23
6	new	46	Sotho	32	movies	16
7	university	44	<i>room</i>	30	<i>pool</i>	16
8	UCT	43	<i>grew</i>	23	boot	7
9	huge	31	choose	22	Scoot	4
10	music	26	<i>rule</i>	16	<i>coolie</i>	4

5. THE DATA AND ITS ANALYSIS

The most frequently occurring GOOSE tokens per environment are given in Table 1 above. By far the commonest token was *school*, as many of the questions and responses related to peer groups and activities at school. At the very bottom comes the word *goose* itself, about which not a single interviewee found an occasion to talk. Derivatives of base forms were included under each token: thus the count for *room* includes *room*, *roomy*, *rooms* and *bedroom*. Unstressed tokens of *do* were not counted, and no tokens of *to*, even though it is seldom reduced to [tə] in SAE and sometimes given full stress.

Altogether the number of vowel tokens analysed in PRAAT was 4102. This number could have been even higher but for a decision not to include more than 30 tokens of any word (like *school* or *do*) per speaker, since this could potentially skew the data. The number of tokens remaining after separation (and exclusion) of /r/ and /l/ was 2612. Obviously, unclear data caused by simultaneous speech or unusual background noise was discarded. All parts of the interview were considered fair game for analysis: it was not possible to divide the transcripts into formal and casual style, as this would involve somewhat arbitrary divisions.

Finally, in terms of preliminaries we need to fix grid points for describing the degree of fronting. This is not absolutely essential, as the differences in W-F ratios can be used to read off differences or similarities in vowel realisations across speakers or groups of speakers. However, since sociolinguistics also draws extensively on traditional phonetic terminology, it would be useful to match the W-F ratios, however roughly, with traditional positions in a vowel chart. No such mapping currently exists and it is a desideratum for the future that such a mathematical transform be developed. This transform would have to take into account the fact that the location of the W-F centre-point at (1, 1) does not give

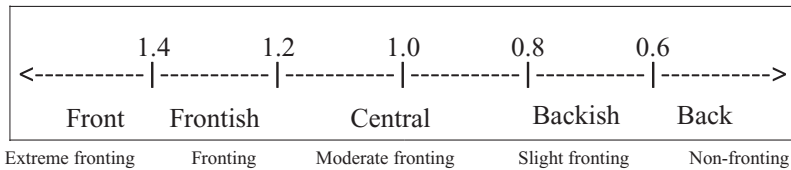


Figure 1: A proposed scale of fronting for high vowels by Watts-Fabrics ratios

four equal quadrants. Rather, there are more slots at the upper left quadrant (for F2) and bottom quadrants (for F1). Dominic Watt (p.c. April 2009) confirms that this would require some compression of the higher F1 and F2 values in the mathematical transform. For the purposes of this paper, which essentially looks at the frontness/backness dimension of a high vowel (i.e. in largely one dimension), I propose a preliminary linkage of the W-F ratios and the high vowels as follows. The backness scale runs from just over 0.1 to just over 2.0. Using units of 0.2 as convenient grid points, we can start with a backest value of 0.2 and a frontest value of 2.0, with 10 intervals in between. Taking 1.0 as the centre point (derived from the W-F normalisation method), an interval on each side gives a range of 1.2 to 0.8 for the category of central vowel. An interval on each side of this gives us an intermediate space between central and front (1.4 to 1.2, which I call 'frontish') and central and back (0.8 to 0.6, or 'backish'). In the traditional vowel chart these would still be in the central range (for high vowels), and therefore correspond to a notion of front-central and back-central respectively. Truly front values are to the left of 1.4 (i.e. from 2.0 to 1.4) and truly back values are to the right of 0.6 (i.e. from 0.6 to 0.2). The resulting grid is diagrammed in Figure 1 above.

5.1 *The reference group*

To take White South Africans as a reference group for analysing English in South Africa is not uncontroversial in current socio-political terms, despite the obvious historical introduction and maintenance of the language by British settlers and their descendants. But it is much less so for a socio-phonetic analysis of present-day, middle-class English. English-speaking Whites have been the most influential segment of the populace in terms of their socio-economic position and prestige for two centuries. They initially predominated in the private and model-C schools of the post-apartheid era and still do in many such institutions. This meant that they did form a prestige reference group for young children of colour. Given the small numbers and relatively early acquisition of English, these new arrivals at former White schools could be expected to have simply adopted a new dialect. However, many of these children already had a stable pre-existing variety of English and went home daily to neighbourhoods with different

linguistic norms from those of their schools. Thus, a ‘mechanical’ adoption of a new dialect was mediated by community norms. Middle-class Coloured and Indian children already had an acrolectal English in their neighbourhoods. For Black children things were more complex since:

- a. their home languages like Zulu or Sotho were very much alive;
- b. the variety of English in their neighbourhoods was very much a second language, with extensive differences from L1 Englishes; and
- c. there was often a bigger class jump to be made from township to private school.

Such factors created conditions for new dialect acquisition with elite cross-over accents. These are the prestige styles used by young people of colour, who have non-racial peer groups and behave in ways associated traditionally with Whites. Such persons are sometimes disparagingly labelled *coconuts* – i.e. people who are alleged to be ‘dark on the outside, white on the inside’ (see Bangeni and Kapp 2007; Makoe 2007; Mesthrie 2008). I propose ‘crossing over’ as the most appropriate sociolinguistic term for the habitual use (i.e. appropriation) of an accent that is not traditionally associated with people of one’s presumed ethnicity. This is different from Rampton’s (1995) concept of ‘crossing’, which drew attention to the playful and stylised use by young people of varieties not traditionally associated with them (which might also be occurring in different situations in present-day South Africa). Crossing over is not playful: it reflects the vernacular usage of the individual, and is therefore a crucial ingredient in issues pertaining to social, cultural and identity change.

For GOOSE there was a high degree of internal consistency within the White speakers for both genders, irrespective of whether the speakers were from different cities (Cape Town and Durban). Table 2 provides a bird’s-eye view of the norms of this group, showing the distribution of speakers for a total of 1091 tokens across the relevant categories of fronting, for each of the environments initially

Table 2: Distribution of twelve White speakers by degrees of fronting in seven environments (no. of tokens = 1091). (The environments have been arranged to show a staircase/implicational effect)

	Front	Frontish	Central	Backish	Back
Non-coronal - V - /l/, e.g. <i>school</i>	-	1	7	3	1
Coronal - V - /l/, e.g. <i>tool</i>	1	3	2	1	-
/l/ - V, e.g. <i>loose</i>	3	5	2	1	-
/r/ - V, e.g. <i>rude</i>	-	7	5	-	-
Non-coronal - V, e.g. <i>move</i>	2	6	3	-	-
Coronal - V, e.g. <i>do</i>	4	8	-	-	-
J-words, e.g. <i>you</i>	9	3	-	-	-

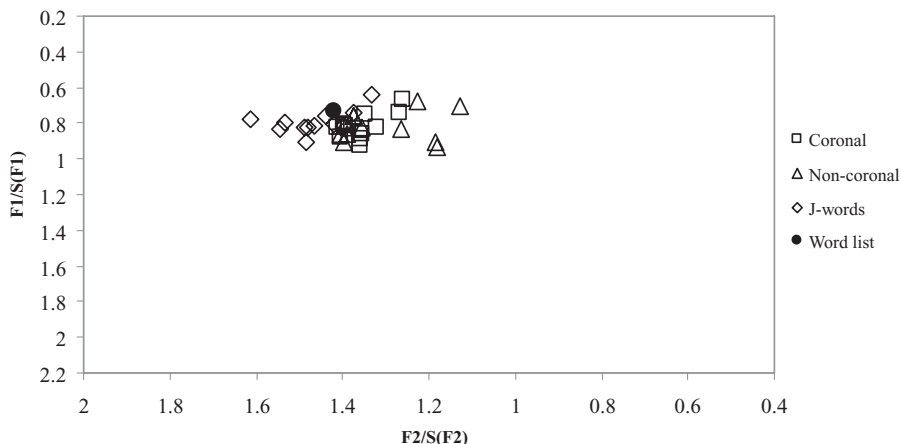


Figure 2: Normalised W-F ratios for White speakers in three environments. (The x-axis, labelled $F2/S(F2)$, denotes $F2$ values increasing from right to left normalised by the W-F method; the y-axis, labelled $F1/S(F1)$, denotes normalised $F1$ values increasing from top to bottom)

isolated in this study. The environments themselves have been arranged to show a staircase/implicational effect. Table 2 shows the environment in which a non-coronal consonant precedes and /l/ follows the GOOSE vowel to be the least favouring environment for fronting, and J-words the most favouring. Generally, a following /l/ proves to be a backing environment; while preceding /r/ or /l/ has a similar but less strong effect. Since this effect holds for all other ethnic groups in this study, environments with preceding /r/ or /l/ will be factored out in evaluating the degree of fronting. Note that since all varieties in this study are non-rhotic, 'vowel + /r/' is not a relevant environment. Furthermore, words with /r/ following /u:/ in the next syllable were few and far between (e.g. *rural*) and excluded from the ensuing analysis.¹³

Figure 2 shows the information of Table 2 (mean normalised Watts-Fabricius values for each speaker in the White group) for the three main environments of this study and for the WL style. That there is considerable fronting in the White group with overlaps in all three environments is evident from the figure.¹⁴ Although Figure 2 is not clear because of the overlapping tokens, the following trends emerge from it in conjunction with Table 2:

- a. In the non-coronal environment all speakers (11 of 11, with the twelfth having no tokens here) range between the midpoint of 1.0 and a fully front value of 1.4 or just beyond. Thus, all in all, GOOSE is more a central or frontish to front vowel, rather than a 'backish' vowel for White speakers, even in this environment. It is only in following /l/ environments that White speakers retain any vestige of a back or backish GOOSE vowel.¹⁵

- b. Turning to the coronal environment we see all 12 White speakers having ratios greater than 1.2, i.e. falling in the range of frontish to front.
- c. The J-word averages are all between 1.3 and 1.7, with the majority of speakers (9 of 12) being front, rather than frontish. This is accordingly the environment with the most fronting. (There were no occurrences of a following /l/ with any of the 432 J-words in this set: words like *Yule*, *you'll*, *duel* did not occur).
- d. The mean for WL tokens (*goose*) is fronter than other non-coronal means per speaker. This is a clue that fronting is a prestige feature, confirming Lanham’s remark cited earlier that it is maintained in formal style, though as we shall see there is some stylistic variation in the WL style.

Pairwise t-tests show a significant difference between the mean scores for J-words and coronals ($p = 6.74985\text{E-}05$) but not for coronals and non-coronals ($p = 0.084$). The difference between the WL means and those for non-coronals in interview style is also significant ($p = 0.0254$). As we shall see below, this fronting of GOOSE in the non-coronal and coronal environment alike differentiates the White group from the others in this study.

Figure 3 shows the same graph with gender separated out: and a mean group score per gender in each environment and in WL style. For the White reference group, males have slightly fronter (and lower) vowels in each environment than females. The difference in fronting is, however, not significant ($\chi^2 = 1.64$; $df = 3$). Gender matters will be discussed further in section 6.5.

As a prelude to the discussions in the next three sub-sections of how the other subgroups match up to White norms, the distribution of speakers is given in each category of fronting by ethnicity and phonetic environment. Table 3 shows the

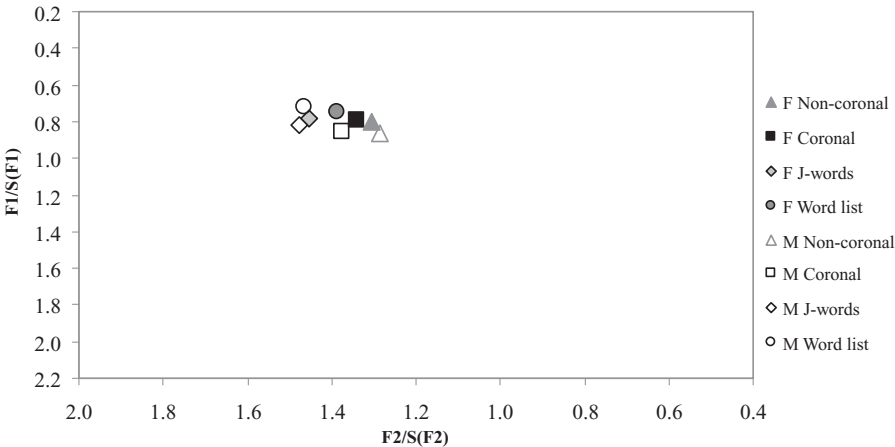


Figure 3: Mean normalised W-F ratios for White speakers by gender in three environments and WL style

Table 3: Number of speakers in each category of fronting by ethnicity and phonetic environment (shaded numbers give the main trend per ethnic group)

	Front	Frontish	Central	Backish	Back
J-words					
White	9	3	-	-	-
Black	8	3	-	-	-
Indian	3	5	4	-	-
Coloured	1	1	9	1	-
Coronals					
White	4	8	-	-	-
Black	1	7	2	1	-
Indian	1	4	5	2	-
Coloured	1	-	9	2	-
Non-coronals					
White	2	6	3	-	-
Black	-	3	6	2	1
Indian	-	1	6	5	-
Coloured	-	-	5	7	-

broad trends of GOOSE fronting, with the shaded numbers giving the main trend per ethnic group, with the highest numbers per group being highlighted. These trends are discussed more closely below. Table 6 and figure 9 in section 6.5 give another approximation according to the norms of the reference group (rather than an absolute phonetic grid) and a further breakdown by gender.

5.2 *Young, middle-class Black speakers*

Particular interest lies in the sociophonetics of Black students, who have faced the most far-reaching changes of all South Africans in a relatively short space of time. The new middle classes have moved from being among the more oppressed to among the more significant beneficiaries of legal and social change. The true advantage is felt by their children, who reap the benefits of good quality education in a relatively open society. Not surprisingly these children have made the greatest sociolinguistic transitions as well. I coin the term 'older Black South African English' for the variety in place during the apartheid era. Phonetically, this variety indexed the rift between Black and White cultures in the old South Africa. Even educated speakers and venerated politicians (with very few exceptions) drew on a system that was essentially that of a Southern Bantu language in terms of phonetics. In particular the vowel systems of Black and White English could not have been any more different. General White SAE tended to raise short front vowels, centralise /ɪ/ and to monophthongise PRICE and MOUTH (Lass 1995). None of these were evident in older Black SAE, except

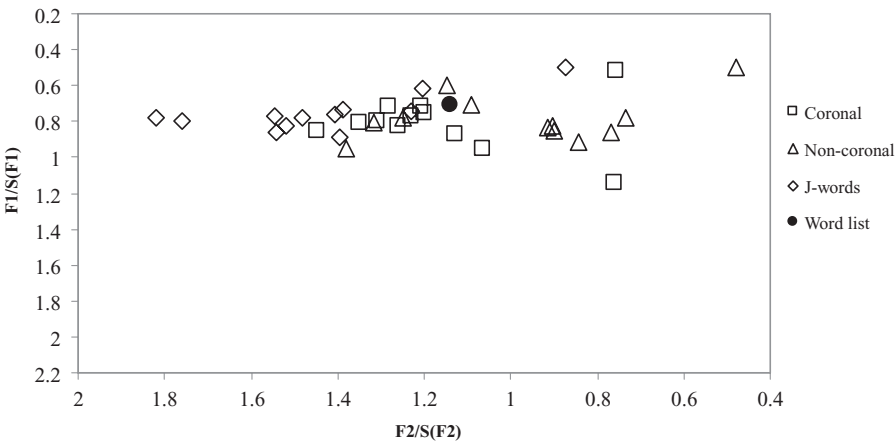


Figure 4: Normalised W-F ratios for Black speakers in three environments

for the realisation of some items in the TRAP set as [e] in some sub-varieties. The most salient feature of BSAE is the neutralisation of vowel length (Hundleby 1964; Lanham 1967). Thus, GOOSE in older BSAE is a back vowel without phonological length that has a tendency to merge with FOOT (see Van Rooy and Van Huyssteen 2000; Wissing 2002).¹⁶ The middle-class speakers studied here give no indication of any of the hallmarks of older BSAE. For them GOOSE is always long, in contrast to FOOT. More significantly GOOSE is fronted to varying degrees, as Figure 4 shows.

Table 3 and Figure 4 shows the following trends:

- a. There is a much greater spread of tokens for F1 and, especially, F2 compared to the White group. Nevertheless, there is a patterning of F2 according to phonological environment.
- b. For non-coronal environments one speaker has a fully back realisation, and another two a backish value (between 0.6 and 0.8). Six have central values and three a 'frontish' value.
- c. In the coronal environment, only one speaker has a backish value. Most speakers have central or frontish values (9 of 12), with one speaker being fully front.
- d. Almost all speakers (11 of 12) have front or frontish values with J-words; the one exceptional speaker has a centralised vowel. Most speakers show considerable fronting here (eight speakers have ratios between 1.4 and 2.0).
- e. The WL mean is fronter than or equal to that of non-coronals for most (nine of 12) speakers. See below, however, for discussion of significance.

Pairwise t-tests show a significant difference between the mean scores for J-words and coronals ($p = 0.006$) as well as for coronals and non-coronals ($p = 0.004$). The difference between the WL style values and those of non-coronals is not

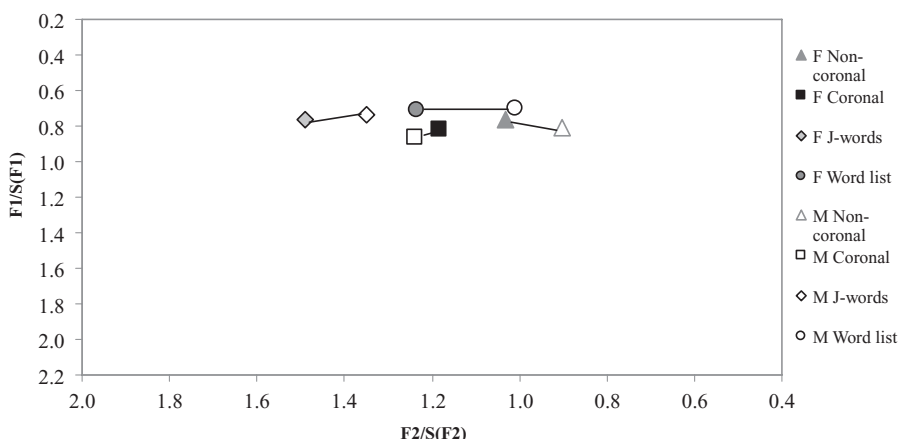


Figure 5: Mean normalised W-F ratios for Black speakers by gender in three environments and WL style

significant ($p = 0.775$). In these last two ways, the Black group is somewhat different from the White group, which shows more fronting in the non-coronal environment and WL style. Pairwise t-tests also show the difference between the two ethnic groups to be significant in the coronal ($p = 0.0114$) and non-coronal ($p = 0.0015$) environments where Whites have fronter values, but that there is no significant difference in the J-word environment ($p = 0.6561$). Overall the Black norms are a far cry from the vowel neutralisation and fully-back vowel typical of their immediately older generation (see Van Rooy 2004: 945–947). In effect they speak a different variety, more akin to what was historically WSAE. Figure 5 shows the internal differentiation by gender. The gender patterning is the opposite of that of the White reference group. A comparison of Figures 3 and 5 will show the following:

- The differences between male and female within each group (White and Black) is relatively small; chi-square tests show the internal differentiation to be non-significant for each group (for J-words for Whites by gender $\chi^2 = 1.64$, $df = 3$; for Blacks $\chi^2 = 1.32$, $df = 3$).
- Although males always have fronter (and often lower) vowels than females for the White group, this is not statistically significant.
- Contrarily, in the Black group it is the females who have fronter vowels than males in all environments, especially so for J-words and WL style. However, this difference is again not significant.

5.3 Middle-class, young Coloured speakers

Figure 6 shows a varied instantiation of the GOOSE vowel amongst the Coloured grouping, with the following trends:

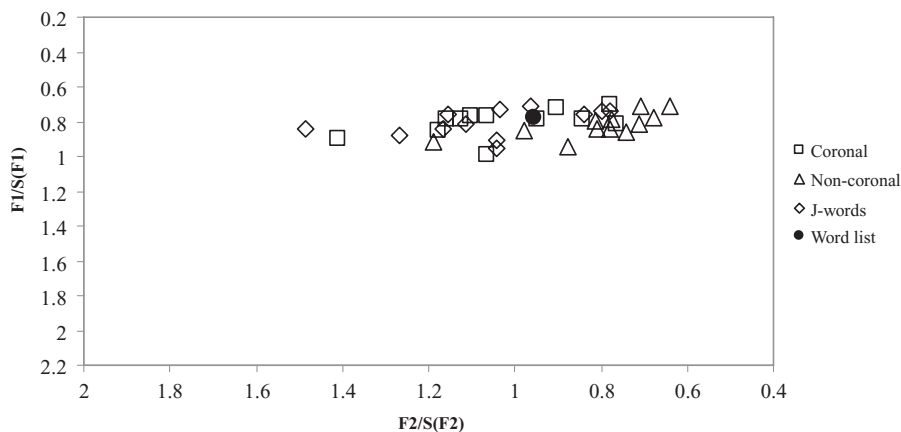


Figure 6: Normalised W-F ratios for Coloured speakers in three environments

- For non-coronal values, the Coloured group has the largest number of speakers falling into the backish ($n = 7$) category. The remaining five speakers have central values.
- For coronals, the figures are nine for 'central', two for 'backish' and one for 'front'. A t-test shows that the difference between coronals and non-coronals is significant ($p = 0.0003$).
- There is little differentiation between J-words and coronal classes, which fall mainly in the central range. Given the scale adopted above, nine speakers have J-word values that are central; one is just short of this cut-off point (i.e. is just 'backish'); two have values higher than 1.2 (i.e. frontish or front). The difference between the two environments is non-significant ($p = 0.5137$).
- One speaker is an outlier with noticeably fronter values than other speakers: J-word average 1.487; coronal 1.41; and non-coronal 1.187.

Coloured speakers in our sample thus show a different pattern from the Black speakers in relation to the reference group. While there is some degree of overall fronting since no speaker approaches a ratio lower than 0.6 (the cut-off point for truly back), the GOOSE values in all three environments are consistently backer than those of the reference group. (T-test results in the three environments are highly significant. White-Coloured: $p = 1.40618\text{E-}05$ for J-words; $p = 7.03469\text{E-}05$ for coronals; and $p = 1.57783\text{E-}08$ for non-coronals.) Moreover, as we have seen above, the Coloured group evinces a structural differentiation insofar as they do not differentiate J-words from 'other coronals' in their degree of fronting. But unlike the White group they differentiate backish coronal values from non-coronals. Coloureds are also significantly backer than the rest of the groups in the J-word environment (Black-Coloured: $p = 0.00068$; Indian-Coloured: $p = 0.00455$) but not in the other two environments.

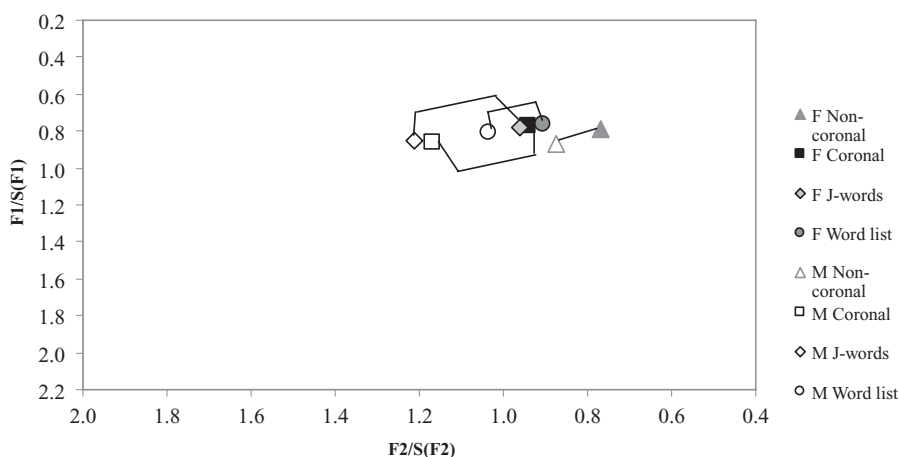


Figure 7: Mean normalised W-F ratios for Coloured speakers by gender in three environments and WL style

The Coloured speakers in the sample are thus still influenced by community norms of their early childhood, which present an opposing force to middle-class accommodation: viz. to speak in ways acceptable within their former home communities. Tracey Dennis (2008) gives ample documentation of these and other students' attitudes and sense of identity which confirm this view. Specifically, she found that there was a fairly strong tendency for the speakers to assert their identity as members of the Coloured community, but with a clear indication that they were not 'low-class' Coloureds (or *gam* in the local idiom). They did this by de-emphasising the role of Afrikaans in their lives and by downplaying the stigmatised features typically associated with Coloured people. From this study, it appears that this distancing from the Coloured working classes is accompanied not by 'cross-overs', but by partial accommodation to their White peers. For the middle-class Coloured speakers we can thus hypothesise that changes in the GOOSE vowel symbolise a modern, young persons' deracialising identity, without going all the way. Figure 7 shows a differential effect within this group for gender. This time there is agreement with the White reference group, insofar as males have fronter values in all environments and in WL style. Again, however, the internal gender difference is not significant ($\chi^2 = 3.34$, $df = 3$).

5.4 Middle-class, young Indian speakers

The wide scatter of values for the Indian group in Figure 8a can best be made sense of by recognising two main subgroups within the data. One group (A) of five speakers embraces fronting, the other (B) of four speakers does so less enthusiastically. These two groups have no overlap in the coronal and

Table 4: W-F ratios in three environments for three subgroups within the Indian sample

	Group A	Group B	Group C
J-words			
W-F > 1.4	2	0	1
W-F < 1.4	3	4	2
Coronals			
W-F > 1.2	4	0	3
W-F < 1.2	1	4	0
Non-coronals			
W-F > 1.0	5	0	0
W-F < 1.0	0	4	3

Pairwise t-test significances: (significant environments in italics).
A-B: 0.349 for J-words; *0.0004* for coronals; *0.006* for non-coronals.
A-C: 0.629 for J-words; 0.278 for coronals; *0.011* for non-coronals.
B-C: 0.094 for J-words; *0.017* for coronals; 0.717 for non-coronals.

Table 5: Means in W-F ratios for three Indian subgroups in three environments (staircase shows difference between backish and central to frontish values)

	J-words	Coronals	Non-coronals
Subgroup A	1.376	1.304	1.155
Subgroup C	1.455	1.186	0.752
Subgroup B	1.213	0.811	0.787

non-coronal environments outlined. The remaining three speakers (group C, a residue) are intermediate between group A and B. They side with B for non-coronals, but with A for the coronals; while for J-words all three subgroups are largely undifferentiated. Table 4 shows these to be significant claims. Figures 8(b–d) and table 5 show the groupings pictorially. I discuss group B first.

According to Table 4 and Figures 8(a–d) the four speakers in Group B show the following patterns:

- a. Like the Coloured group they have central or backish values for non-coronals, much backer than those of the reference group. All four speakers in group B have W-F ratios below 1.0; whereas none of 11 in the reference group have values below this ratio.
- b. Unlike the Coloured group there is a differentiation between J-words and coronals. Vowels after coronals have backer values than those of the reference group (between 0.7 and 1.0 for all four speakers, compared to 1.2 to 1.6 for all 12 of the reference group). According to the scale of Figure 1,

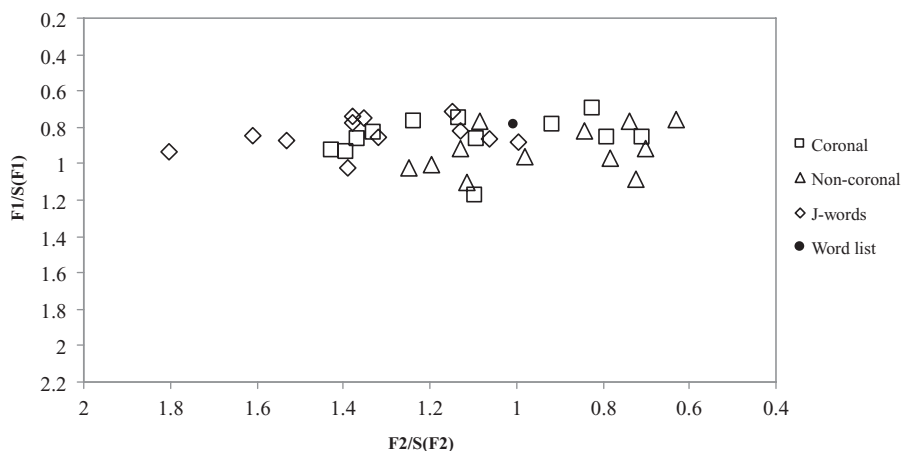


Figure 8a: Normalised W-F ratios for Indian speakers in three environments

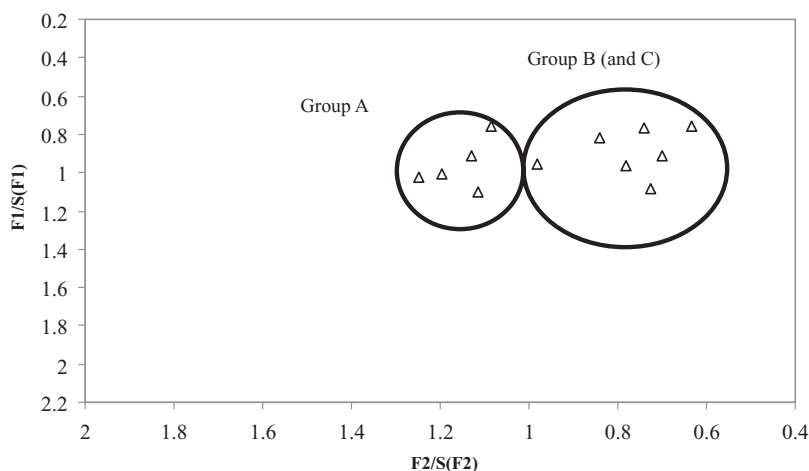


Figure 8b: Three subgroups of Indian speakers for non-coronals

the Indian sub-group B has central or backish realisations here, compared to the frontish realisations of the reference group (12 of 12 speakers).

- c. For J-words the Indian sub-group B is again backer than the reference group: with all four speakers having values between 1.0 to 1.4. By contrast, nine of 12 speakers in the reference group have W-F ratios *greater* than 1.4. This time there is a small overlap with the reference group in the region of 1.3. The reference group range is, in fact, 1.3 to 1.8.

Like the Coloured group this sub-group (B) of Indians can be said to show a degree of fronting (since no one averages below 0.6) that is now associated with youth and modernity (in contrast to Lass's remarks about the 1990s). However,

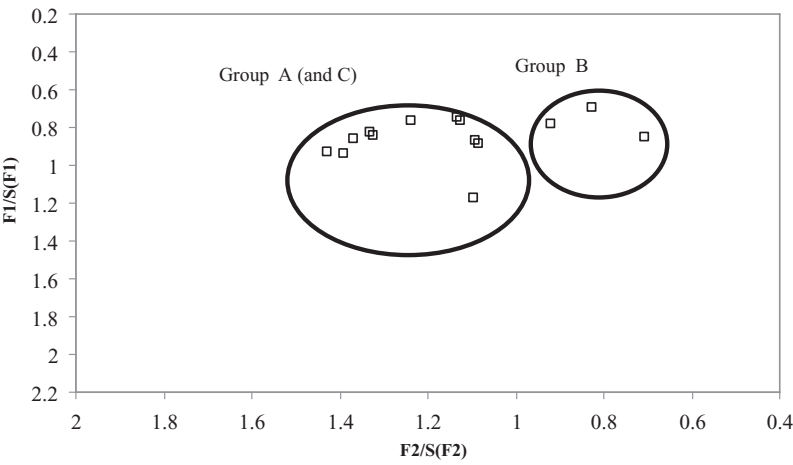


Figure 8c: Three subgroups of Indian speakers for coronals

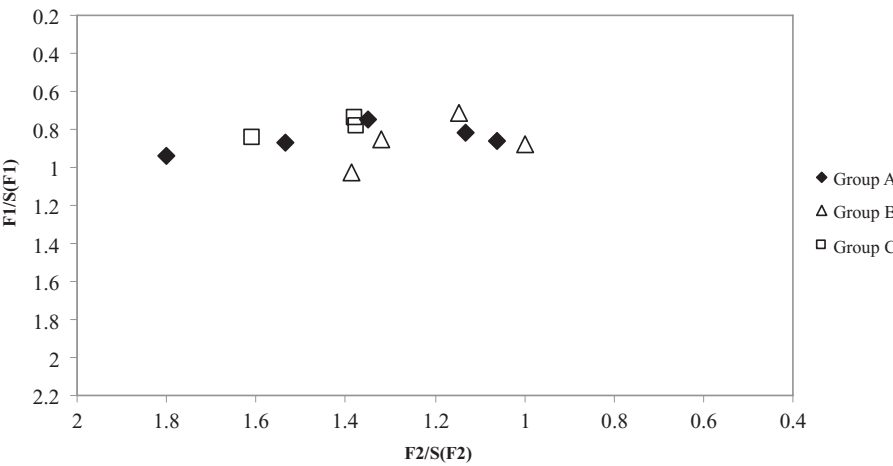


Figure 8d: Three subgroups of Indian speakers for J-words, showing overlapping patterning

it is equally clear that they resist the full fronting of the White speakers in all three environments, despite minor overlaps with J-words.

On the other hand there is a slightly larger subgroup (A) of five Indian speakers in Figure 8 whose values for GOOSE in all three environments are much more fronted than those of subgroup B. Subgroup A appears to accommodate much more to White norms. All five in this subgroup have W-F ratios in excess of 1.0 for the non-coronal environment. In this they are similar to all 11 of the reference group in this environment.

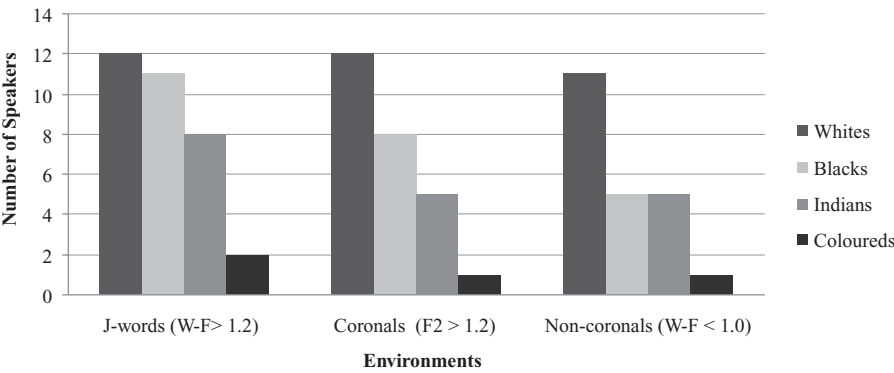


Figure 9: Speakers falling within range of White group by ethnicity

The t-test statistics accompanying Table 4 above shows that within the Indian group the two subgroups A and B are significantly different in all but J-words. As mentioned above, the remaining three speakers are intermediate between these two groups: falling in with group B with backish values for non-coronals, but with group A for coronals. It is not, however, possible to draw conclusive social differences between the three sub-groups at this stage.

5.5 Ethnicity and gender

Table 6 puts all the above facts regarding gender and ethnicity together, by comparing how each group and each gender within it compares with the White reference group.

In contrast to Table 3 with its predetermined grid, Table 6 takes the F2 range of the White reference group as a reference point for each environment. (This range is W-F > 1.0 for the coronal environment and W-F > 1.2 for the other two environments.) The total number of speakers within each of the other groups

Table 6: Number of speakers falling within range of White reference group by gender and environment. (Shaded numbers are subgroups where the percentage of speakers falling within the range of the target group is less than 25%)

	J-words (W-F> 1.2)			Coronals (F ₂ > 1.2)			Non-coronals (W-F < 1.0)		
	N	Female	Male	N	Female	Male	N	Female	Male
Whites	12	(7	5)	12	(7	5)	11	(7	4)
Blacks	11	(7	4)	8	(6	2)	5	(4	1)
Indians	8	(3	5)	5	(3	2)	5	(3	2)
Coloureds	2	(0	1)	1	(0	1)	1	(0	1)

that fall in line with these norms is given, with a breakdown according to gender in brackets. Highlighted in grey are those groupings showing minimal accommodation to White norms (i.e. where the percentage of speakers in the subgroup falling within the range of the target group is less than 25%). These are Coloured speakers (both genders) in all environments. Many more Black and Indian speakers fall within the range of the White group. The statistical picture per environment is as follows:

- a. Gender differences within each ethnicity: t-tests show very few significant differences for the different environments at the $p < 0.05$ level between the male and female group within each ethnicity.¹⁷ The only significant internal gender differences are in the J-word environment for Indians ($p = 0.005$) and coronal environment for Coloured speakers ($p = 0.020$).
- b. However, comparisons between each gender across ethnicities show some salient differentiation. T-test values are summarised in Table 7 below, where (S) denotes a significant and (NS) a non-significant difference.

Table 7 shows that for each gender there are significant differences between the reference group and all other groups in the coronal and non-coronal environments. For each gender the differences from the reference group are greatest for the Coloured group and least for the Black group. For J-words the gender patterning is different: for females the differences between the Coloured and Indian groups from the reference group are significant, but not for the Black group. Amongst males in this environment it is only the Coloured group whose difference from the reference group is significant.

To put it another way: there is a difference in all comparisons between the groups in three environments; except in three cells. These involve: (a) Black and White females; (b) Black and White males; and (c) Indian and White males, all in the J-word environment. Figures 10a–c and 11a–c show respectively similarities and differences for females by gender and ethnicity. A scrutiny of

Table 7: Significances of gender and ethnicity comparisons (S = significant; NS = not significant)*

	J-words	Coronals	Non-coronals
Females			
White-Black	t = -0.730 (NS)	t = 5.379 (S)	7.210 (S)
White-Indian	t = 8.228 (S)	t = 6.820 (S)	9.710 (S)
White-Coloured	t = 17.552 (S)	t = 17.2 (S)	22.667 (S)
Males			
White-Black	t = 2.167 (NS)	t = 3.406 (S)	5.676 (S)
White-Indian	t = -1.770 (NS)	t = 4.600 (S)	6.892 (S)
White-Coloured	t = 7.571 (S)	t = 5.940 (S)	9.857 (S)

*Significance at $p < 0.05$; df = 12 for 'females' table; df = 8 for 'males' table, except column 3 where df = 7

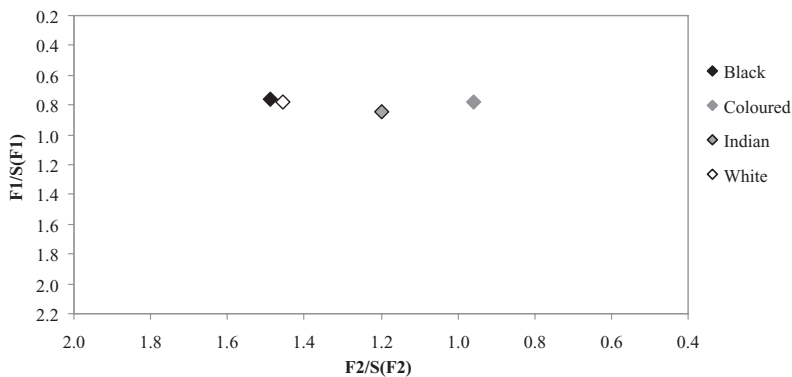


Figure 10a: Female group means for J-words

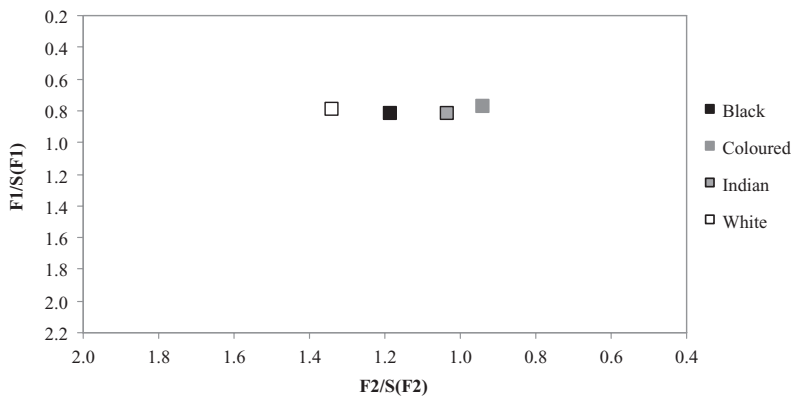


Figure 10b: Female group means for coronals

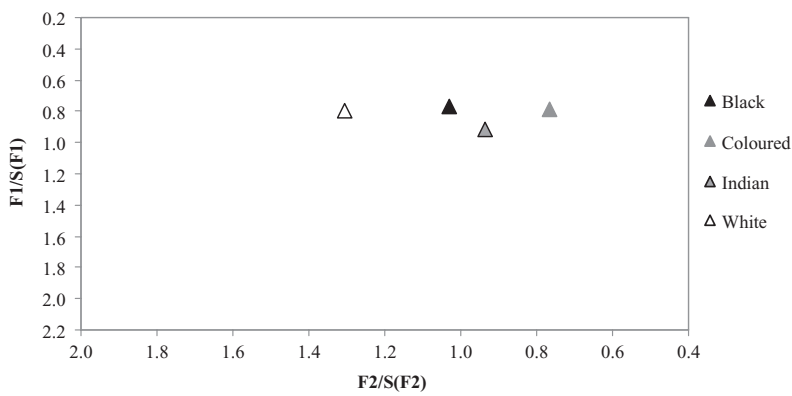


Figure 10c: Female group means for non-coronals

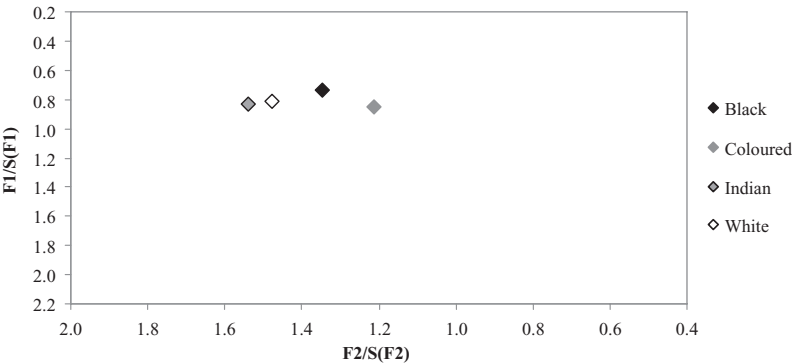


Figure 11a: Male group means for J-words

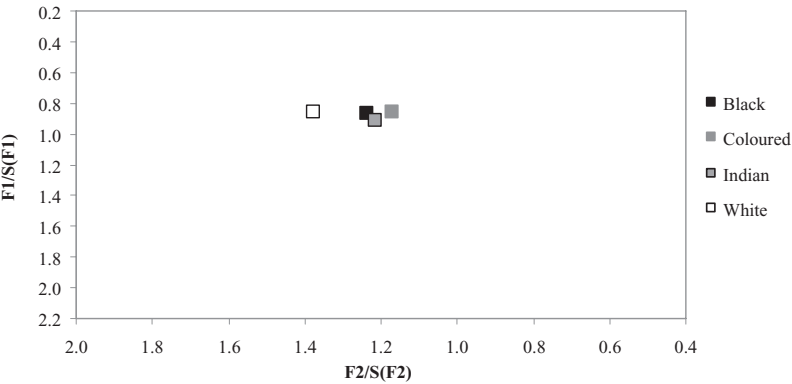


Figure 11b: Male group means for coronals

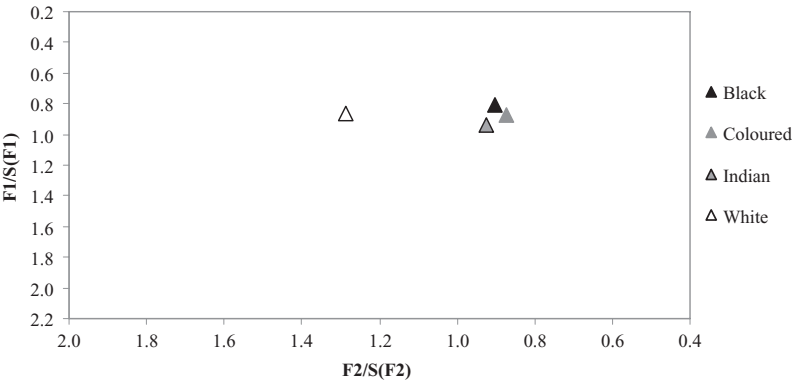


Figure 11c: Male group means for non-coronals

the gender distribution in Table 6, the t-statistics in Table 7 and the figures in 10 and 11 all suggest that overall it is Black females who are closest to the norms of their reference group, with the significance level showing most clearly in the J-environment. This result is not surprising since their confident and statusful use of norms formerly associated with White females is readily apparent to a casual listener. Although Black females are in the lead amongst all other groups in matching the norms set by the erstwhile elites, they are still backer in coronal and non-coronal environments. It could well be that the set of J-words is the easier environment (or phoneme class, depending on our analysis) than the structurally differentiated coronal/non-coronal environment (with further complications involving a following /l/) to match the norms of a reference group.

6. CONCLUSION

This study demonstrates that middle-class, L1 English-speaking South African students of all backgrounds are fronting the GOOSE vowel. Fronted realisations were once firmly associated with 'whiteness', as evident in the quotes from Lass in section 4. In the intervening 12 years since his observations, this vowel has been adopted to varying extents by middle-class speakers from other groups. In doing so they have turned it into a marker of youth and middle-class status, thereby deracialising the vowel to a large extent. It appears that Black females show the greatest acculturation to the White norm for GOOSE. This shows up best in the J-word class, where there is no statistically significant difference between them and the White female reference group. Whilst participating in a moderate degree of fronting, Coloured speakers show the greatest resistance, females more than males. The Indian speakers do differ from the older realisation of a back [u:] in their parents' generation (Mesthrie 2004: 957). Within the data set, two sub-groups of Indian speakers emerge: one which resists a full cross-over into the 'White' vowel space; and one which embraces it appreciably – again, especially in the J-word class. Here it is relevant that ISAE had developed an acrolect by the 1970s, a variety which had prestige and status within the community. This acrolect constrains seven of the 12 speakers from making radical shifts in the direction of WSAE. Young Black South Africans of this study had no such reference acrolect, and hence had few options but to adopt the norms of the new peer groups in which Whites were in a majority. However, Black females consistently embrace the elite norms more than Black males or any other group. Elsewhere, young Black speakers of less privileged school backgrounds than those of this study might be embarking on creating an acrolect (see Da Silva 2007), possibly carving out a difference between lower and upper-middle class in the process. Dennis's work (2008) confirms that Coloured speakers do feel the pressures of peer groups from within their home communities and do not make as many accommodations as the other two groups. Wood (1987) had proposed that

Coloured speakers in the apartheid era had a continuum parallel to that of Whites, with its own prestige norm that only partially overlapped with that of Whites. One area that might bear future investigation is that the older traditional norm for Coloured speakers involved considerably backer values for GOOSE, THOUGHT and BATH than other varieties of SAE. This would mean that younger middle-class Coloured speakers might show greater degrees of fronting from an original departure point than suggested in this paper, whilst still showing values that are backer than their multiracial peers. We await an acoustic confirmation of this possibility via detailed studies of older speakers.

The new deracialisation itself calls into question ways of characterising South African English. Labels like 'Black South African English' are still valid for a majority of speakers, but not really for the new elites of this study. I have been careful to describe the latter as 'Black speakers', without calling their lect 'Black South African English', since it is in fact a cross-over variety with almost no overlap with the norms of their previous generation. We await an appropriate label for this melting-pot, middle-class English.

As we expand the number of people studied in the future, we will be able to test the claims made in this paper and add nuances according to speakers' places of residence (i.e. whether former White suburb or not, and duration of stay), finer details pertaining to social networks, community orientation and so forth. It is noteworthy that sociophonetics offers important tools for uncovering, characterising and understanding the subtleties of middle-class deracialisation and its linguistic underpinnings.

NOTES

1. This paper emanates from two projects sponsored by the National Research Foundation (FA2005031800008: English Social Dialectology in South Africa) and the South African Research Chairs Initiative (together with the Department of Science and Technology). I thank the NRF for making large-scale social dialectological research possible in South Africa. Thanks are due to interviewers and research assistants on the project: Tracey Dennis, Alida Jacobs, Kirsten Morreira, Oscar Masinyana and Robyn Stephenson. Thanks are also due to Bertus van Rooy and Paul Foulkes for conducting acoustic workshops in Cape Town and Potchefstroom, to Paul Foulkes and two anonymous referees for comments on aspects of an earlier draft of this paper; and finally to all of the following for their prompt and helpful responses to my queries on NORM and normalisation: Dominic Watt, Paul Foulkes, Erik Thomas, Anne Fabricius and Tyler Kendall.
2. Traditional South African terminology distinguishes 'Black' from 'Coloured'. The former are prototypically indigenous people speaking a Bantu language. The latter are prototypically people of multiple ancestries, one of which is an indigenous one, who speak English or Afrikaans or, in small numbers, a Khoe-San or other African language. However *black* (in lower case) is still sometimes used to denote a composite group of Blacks, Coloureds and Indians once discriminated against by the apartheid

state (a.k.a. 'non-whites' in apartheid-speak). I follow this distinction in this paper so that 'black' is to be distinguished from the more specific 'Black' in upper case. At the start of a sentence [B] denotes 'lower-case b'.

3. *Township* in South Africa tends to refer to zoned urban housing for black people along segregated lines.
4. There is currently no free education in South Africa, though schools in poorer areas are flexible in what they charge and are instructed by the Department of Education not to turn down students who cannot afford fees at all.
5. His other examples are *school*, *jewel*, etc. Interestingly, he notes that this is true for *duke* as well, thereby suggesting that the expected RP value of the time was yod-less. *Duke* has a yod (or [j]) in all varieties of SAE today.
6. Lanham's (1978) terms are 'respectable SAE' for middle-class White SAE and 'extreme SAE' for broader white varieties. The term 'Respectable' was not intended to be judgemental, and is slightly less in use these days.
7. 'Conservative' denotes a variety that is RP-oriented in South Africa, spoken by middle-class people with relatively recent British connections (Lanham 1978).
8. As Lass indicates this formulation applied to 'Respectable' speakers, i.e. speakers of White middle-class English that was not overly oriented towards RP. RP-oriented speakers resist this change.
9. From my involvement as editor and contributor on these projects I can confirm that Lass's first observation was written in about 1992; the second article was essentially a spin-off and an expansion of the first – based on research in the same time period, despite the later publication date.
10. Lanham (1978) and Lanham and Macdonald (1979) do use labels like 'Cape English' and 'Natal English' but mainly in a historical sense and for broader rather than middle-class sociolects. It is an essential part of Lanham's model that in the days of early diamond and gold mining (1860s and 1870s) different regional varieties of the country came into contact, with a resulting diffusion of regional features. Since then regional differences have been less salient.
11. I do not use a reading passage analysis in my work, as reading tends to present problems to working-class and rural communities I have studied. For the Wells' word list I had to substitute the word *cut* for *strut*, as many working-class speakers are unfamiliar with the latter word and tend to stumble over it. The list used is as follows: *kit, sit, beat, bit, dress, trap, nurse, butter, foot, goose, pot, money, park, fair, lot, price, bake, cut, bath, goat, thought, fleece, broke, mouth, hall, fish, poor, choice, pork, green, fire, braai*.
12. A shorter follow up study is envisaged, testing whether the following environment plays any role (especially in conjunction with the preceding one). Likewise, the influence of preceding /h/ is worth pursuing, as it may well have a fronting effect for some speakers, despite being a non-coronal.
13. In doing this we follow the suggestion of a reviewer of this paper, who advocated excluding /l/ and /r/ environments for acoustic reasons.
14. This cohesion shows that at least for the GOOSE vowel, White speakers are united across the two cities, Durban and Cape Town, from where all 12 speakers originated.
15. Nevertheless, this is probably enough for speakers to consider /u:/ to be phonologically a back vowel. I am always surprised when students having considerable GOOSE-fronting easily accede (with few exceptions) to the phonologists' description of /u:/ as a back vowel.
16. Vowels may be lengthened in penultimate and final syllables in BSAE.

17. The t-test results are as follows in the order: J-words; coronals; non-coronals.
 Whites: $p = 0.638; 0.234; 0.793$.
 Blacks: $p = 0.367; 0.748; 0.428$.
 Indians: $p = \mathbf{0.005}; 0.233; 0.0927$.
 Coloureds: $p = 0.208; \mathbf{0.020}; 0.224$.

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