

## ***Two for /t/: flapping and glottal stops in New Zealand English***<sup>1</sup>

Janet Holmes  
Victoria University of Wellington

What are the current influences on changes in New Zealand English? Are we predominantly influenced by the USA, perhaps via Australia? Or does Britain continue to be the preponderant influence on the linguistic innovations adopted in New Zealand? This paper examines possible answers to these questions in relation to the distribution of two particular examples of the pronunciation of /t/ in New Zealand English: firstly, intervocalic /t/ in words like *letter* and *butter* and phrases like *sort of*, where American influence is apparent; and secondly, final /t/ in words like *let* and *but* and phrases like *hot-dog* and *get lost*, where the influence of Britain seems more relevant.

The corpus used for this analysis of both intervocalic and final /t/ in New Zealand English was a sub-sample of data selected from the Wellington Corpus of Spoken New Zealand English (WCSNZE). All contributors to the Corpus are speakers of New Zealand English, defined as people born in New Zealand or who arrived in New Zealand before the age of ten years. The Corpus includes women and men from a range of different age groups, and it includes people from different social and ethnic backgrounds.

The sample was selected to provide contrasts in the standard social variables of age, social class and gender as well as a contrast in style between formal broadcast interview speech and conversation between friends. The limitations on the size of the Corpus meant that not all these dimensions could be simultaneously contrasted. Table 1 describes the sample design.

Given the extensive discussion in the sociolinguistic literature over the last few years on the problems of allocating people to different social and gender categories, it seems important to provide information on the criteria used in this study. Information on gender and age was provided by speakers themselves by filling in a background information sheet at the time they contributed to the Corpus. For this study a distinction was made

---

<sup>1</sup> Paper presented at the Fourth New Zealand Language and Society Conference, Lincoln University, August 1994. This paper has benefited from comments by Robert Sigley, who also assisted with the statistical analysis. Laurie Bauer also provided many useful comments for which I am very grateful. The research on which the paper is based was funded by a grant from the New Zealand Foundation for Research, Science and Technology.

	<i>Middle class</i>		<i>Working class</i>	
	<i>Female</i>	<i>Male</i>	<i>Female</i>	<i>Male</i>
Conversation				
young	8	6	6	8
mid-age	6	6	-	-
Interview				
mid-age	6	6	-	5

*Table 1: Sample design*

between young speakers (18-30 years old) and middle-aged speakers (40-55 years old). As table 1 indicates, this contrast was made only within the conversational style of middle class speakers.

People were allocated to two different social groups on the basis of a consideration of two factors: occupation and level of education (cf Holmes, Bell and Boyce 1991). These two groups are labelled working class and middle class for convenience, but the division is as arbitrary as always in such research. It is generally recognised in New Zealand research that social class divisions are fluid, and the concept must be used with caution. Many finer divisions are certainly possible and remain an area for future research.

The two styles of speech contrasted in this study were conversation and formal interview. Given the potential influence of the addressee on speech style (Bell 1984), it seemed sensible to control this as far as possible. The conversations all involved people talking to a friend of the same gender and age in a relaxed setting, usually the home of one of the pair. Both members of the pair were included in the analysis. The formal interviews were radio or TV broadcast interviews with an interviewer of the same gender and approximately the same age. The styles being contrasted were thus clearly different, and the conversational data, in particular, provided a speech style of New Zealand English which has not been previously analysed in a quantitative study of this kind.

### **T Voicing**

Intervocalic /t/ is generally voiced in American speech. So T Voicing is widely regarded as a categorical and characteristic feature of standard American English. In other varieties of English including Canadian, British and New Zealand English, however, it is a variable feature. De Wolf (1990) and Woods (1991) indicate it is well-established in Canadian English, and in the early 1980s Wells (1982) noted that intervocalic T Voicing could be heard "in certain casual styles in British accents ranging from RP to Cockney" (1982: 250). Indeed Wells refers to it as "the first distinctively

American phonetic innovation likely to spread in time to all accents of English" (1982: 250). To what extent, then, do New Zealanders voice intervocalic /t/?

The only previous study of this feature in New Zealand speech is Bell's examination of the speech of broadcasters in the late 1970s (1977). His analysis showed that T Voicing was a genuinely variable rule in New Zealand English, and that the variability was socially significant. In support of his claim that individuals shift their speech style in response to their audience, he showed that New Zealand newsreaders increased their levels of T Voicing (from 20% to around 35%) on the commercial stations compared to the national stations, suggesting that T Voicing was perceived as a vernacular feature, rather than a prestigious innovation. His data supported his point that varying the audience can have an over-riding effect on an individual's style. But it did not address the interesting question of whether T Voicing is a feature which does in fact vary with the social status of New Zealand speakers, as the audience design research assumes. The sample selected from the WCSNZE made it possible to explore these questions.

The analysis involved an average of sixty tokens per speaker with a total of 3000 tokens in all. Overall the proportion of voiced to voiceless tokens was about 6:4. (66% voiced/34% voiceless). The results of the analysis for age, gender, social class and style are briefly described, with interactions between them discussed where appropriate.

### *Age*

The analysis demonstrated that T Voicing is an example of a phonological change in progress in New Zealand English. It is clearly more frequent in the speech of younger conversationalists (66%) than in that of middle aged speakers (50%) as illustrated in Figure 1. Younger people use more T Voicing than middle aged people and a chi square test confirm this is a significant effect. ( $X^2 = 35.37, p < 0.001$ ).

The fact that there is a significant age difference in the conversational data of middle class speakers suggests that T Voicing is increasing in New Zealand. This is confirmed by analysis of interview data from the Wellington social dialect survey where the contrast in the levels of T Voicing for working class Pakeha speakers in the young and middle age groups is even more marked (82% vs 61%).

### *Gender and class*

The data on gender and social class confirm the suggestion that T Voicing is a vernacular variant. Overall men use more T Voicing than women ( $X^2 = 13.15, p < 0.001$ ), and it is significantly more frequent in working class than in middle class speech ( $X^2 = 48.34, p < 0.001$ ).

Within the middle class conversational sample, it was possible to examine the interaction between age and gender. Figure 2 shows that in this sample young women use most T Voicing (70%) and that middle aged

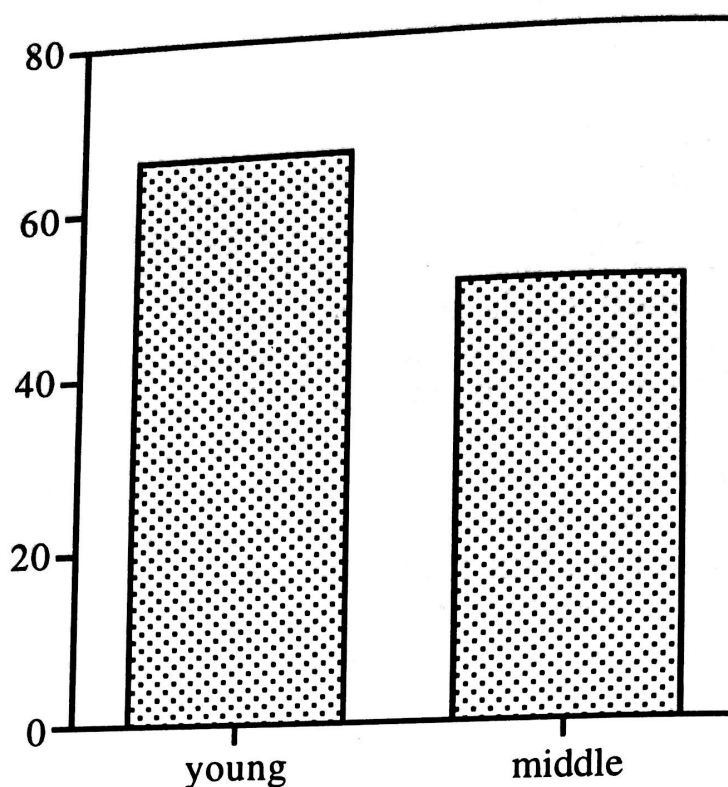


Figure 1: % of T Voicing by age

women use least (41%). The male speakers show no age differentiation (59% vs 58%) and their levels of T Voicing fall between the women's levels. This suggests that young women are leading this vernacular change within the middle class, a pattern which we have found for other vernacular variables we have been examining, and one which suggests this group plays an interesting role in linguistic change in New Zealand English.

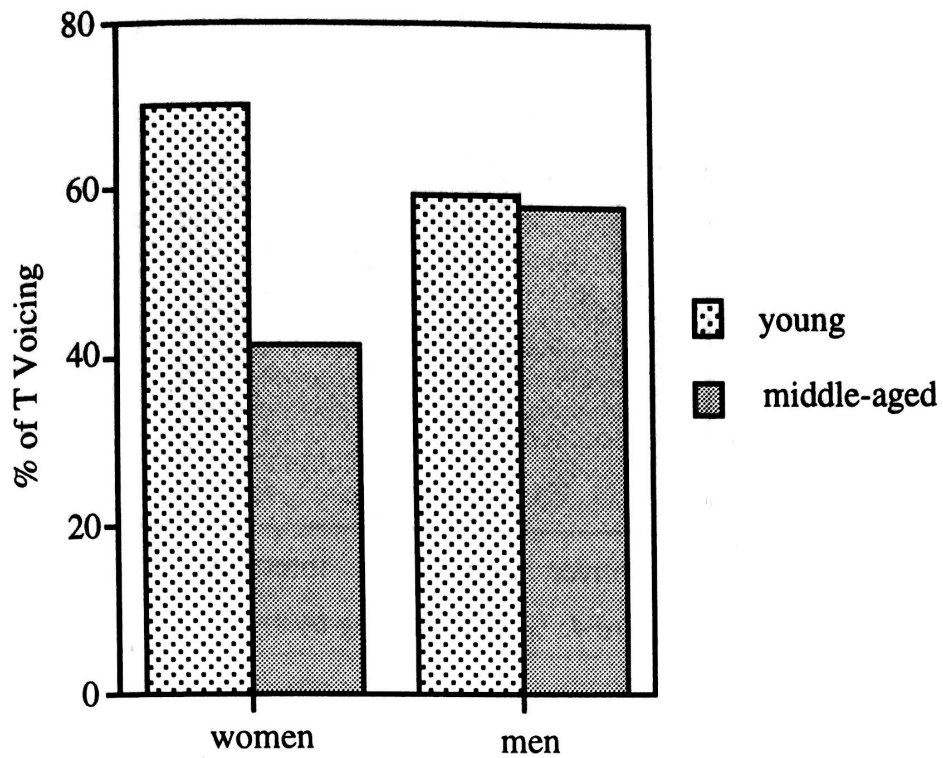
The interaction of class and gender illustrated in figure 3 confirms this suggestion. There is little difference between the levels of T Voicing of young working class women and young middle class women (70% vs 73%), but there is a very significant difference between the classes in the speech of young men (82% vs 59%;  $p < 0.001$ ). Young middle class women are well ahead of their male counterparts in the use of T Voicing. So it appears that it is this group who are leading the change to T Voicing in middle class usage.

The score of 70% T Voicing for middle class young women is very high, and demonstrates the levels of T Voicing which can occur in a relaxed conversational setting. The highest scores in the data were 82% voicing in the speech of young working class men.

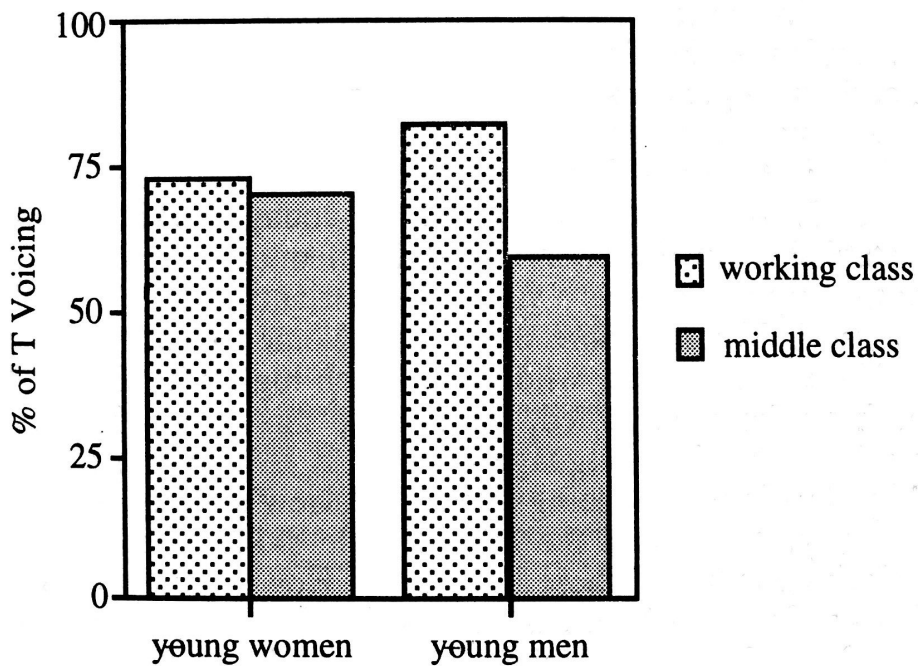
### *Stylistic variation*

As one would predict for a vernacular variant, speakers are more likely to voice /t/ in a conversation than in a formal interview as illustrated in figure 4. The difference is not very great, but it is a significant one, though not as significant as age, class and gender ( $X^2 = 5.75$ ,  $p < 0.025$ ).

*Two for /t/: flapping and glottal stops in New Zealand English*



*Figure 2: % of T Voicing by age and gender (middle class conversation)*



*Figure 3: % of T Voicing by gender and class*

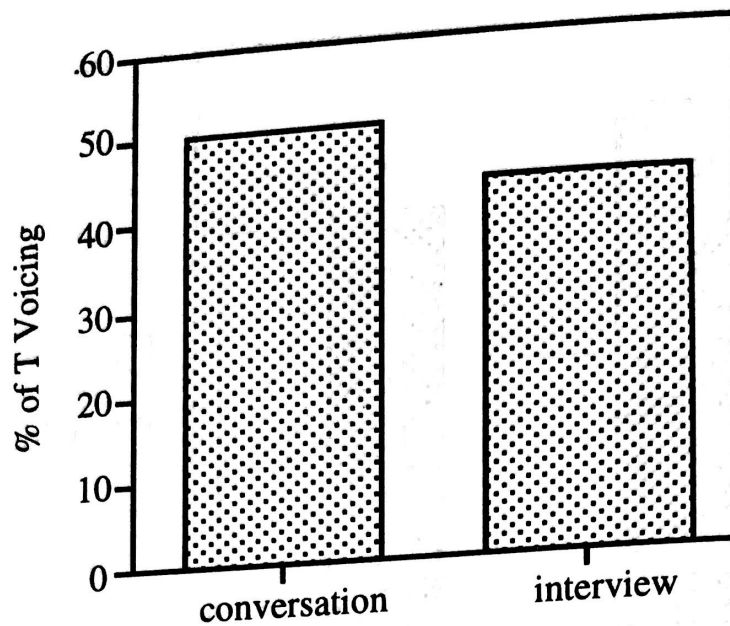


Figure 4: % of T Voicing by style

Given the sample size and design, it was possible to make this comparison only for the middle-aged middle-class cells. It is interesting to compare these figures with Bell's figures for newsreaders in the 1970s where an average of 35% was achieved by those on commercial stations compared to only 20% on the more conservative YA station. This seems to provide further support for the suggestion that T Voicing has increased in New Zealand speech in the interim since it seems reasonable to compare the broadcast interview style of middle class informants with the YA style of the 1970s, and this represents an increase from 20% to 43% T Voicing.

Table 2 summarises the results of a range of interactions between the social variables in the data. It demonstrates very clearly that T Voicing is most advanced in the conversational style of young working class males, and least established in the interview style of middle aged middle class women, confirming its status as a vernacular variant. It also shows that men consistently use T Voicing more often than women in all groups except younger middle class women, who use a much higher level of T Voicing than might have been expected, suggesting this group is playing an interesting role in leading language change. It is also worth noting the relatively high levels of T Voicing in the interview style of working class men. This may partly reflect the considerable skills of the experienced interviewers who conducted these interviews. However, it seems possible that it is also a reflection of the extent to which T Voicing is established in working class New Zealand speech.<sup>2</sup>

<sup>2</sup> See Holmes (1994) for a fuller discussion, including a discussion of the linguistic constraints on T Voicing.

	<i>Middle class</i>		<i>Working class</i>	
	<i>Female</i>	<i>Male</i>	<i>Female</i>	<i>Male</i>
Conversation				
young	70	59	73	82
mid-age	41	58	-	-
Interview				
mid-age	35	49	-	69

*Table 2: % of T Voicing by gender, age, class and style*

### **Glottal stops**

Social dialect studies of the distribution of the glottal stop in British urban speech in the 1970s identified it as a vernacular variant of final /t/, characterising informal styles and lower class speech (eg. Trudgill 1974, Macauley 1977). The glottal stop has always been particularly associated with London speech (Wells 1982), and more recently it has been identified as a feature of "Estuary English" (Rosewarne 1994, Maidment 1994), a variety midway on a continuum between Received Pronunciation and London speech. It has been suggested that features of Estuary English can be heard in the speech of young royals, such as the Princess of Wales (Rosewarne 1984).

Trudgill (1986) comments on the absence of glottal stops as variants of /t/ in Australian English, compared to the English of the London area. He suggests this is because the glottal stop is a relatively recent development, a late-nineteenth-century innovation in London, "and may, therefore, postdate the departure of English speakers for Australia" (1986: 133). From this we can infer that the later date of British settlement of New Zealand may account for the fact that the glottal stop can be heard in New Zealand but not in America or Australia as a variant of /t/.

Bayard (1990a) has investigated the frequency of glottal stops as realisations of /t/ in word-final position in the reading style of a sample of New Zealanders. He reports 5% of /t/s realised as glottal stops among the 24-71 age group compared to 29% among those aged 7-19. Glottal stops are clearly a feature of the speech of younger New Zealanders. There is also some suggestion of a correlation with lower socio-economic group, but age is by far the clearest factor correlating with use of glottal stops in his sample.

As for T Voicing, I examined the social variables of age, social class, gender and style. Sixty tokens per speaker were analysed giving a total of 3764 in total.

### Age

As expected with a variant that appears to be increasing in the speech of New Zealanders, glottal stops were more frequent in the conversational speech of younger people than in the speech of middle-aged people. See figure 5. This difference was highly significant ( $X^2 = 26.48, p < 0.001$ ) suggesting that glottal stops are continuing to displace more conservative pronunciations of (-t) in New Zealand English.

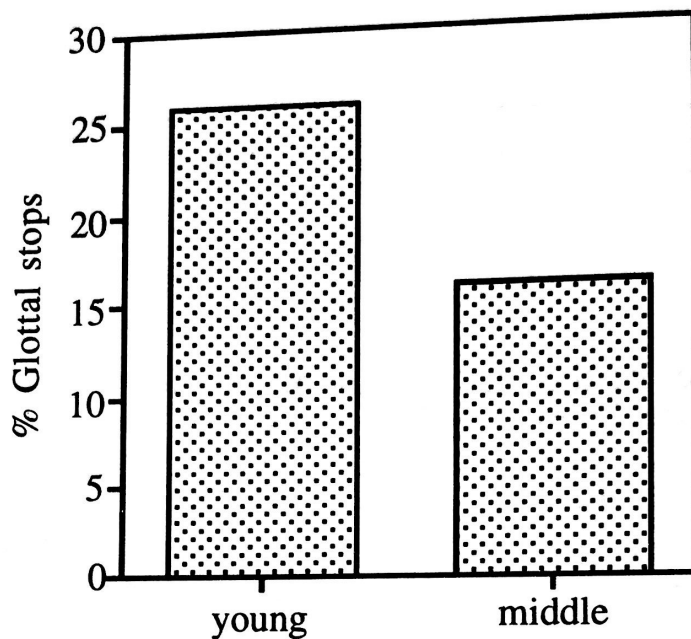


Figure 5: % of Glottal stops by age

Bearing in mind that the sample allowed the age contrast to be made only between middle class speakers of different ages, it is useful to note that this pattern was confirmed by the interview data from the Wellington social dialect survey which indicates younger speakers using 24% glottal stops compared to 14% among middle aged speakers and only 8% among the over 70s.

Bayard (1990a) reported 5% for the 24-71 age group compared to 29% among those aged 7-19 in his sample. The figures reported here are consistent with Bayard's figures, since his age groups were extended both up and down compared to those in this study. Both sets of results support the suggestion that glottal stops are steadily increasing in New Zealand speech as variants of (-t).

### Gender, style and class

The glottal stop variant of (-t) was slightly more frequent in the speech of women than men (24% vs 22%) but this difference is not statistically significant ( $X^2 = 2.37, p > 0.1$ ). Since stigmatised vernacular features are generally more frequent in male usage, this suggests that the use of glottal



stops in word-final and morpheme-final position is not a highly stigmatised innovation.

The stylistic and social class data, on the other hand, confirm Bayard's suggestion that the glottal stop is a vernacular variant in New Zealand English. Stylistic comparison was only possible for middle class, middle-aged speakers. For this group, it was clear that glottal stops occurred significantly more often in relaxed conversation (16%) than in interview style (10%), a pattern that is consistent with the view that this is a vernacular variant ( $X^2= 12.92, p < 0.001$ ).

Similarly the analysis showed that working class speakers used more glottal stop variants (31%) than the middle class informants (21%). Socio-economic contrasts tend not to be as marked in New Zealand data as in British and American social dialect studies (Holmes, Bell and Boyce 1991). Nevertheless, the social class difference in the proportion of glottal stop variants is highly significant ( $X^2= 36.31, p < 0.001$ ).

Examining the interaction between age and gender within the middle class conversational sample, it is clear that young women use the highest frequency of glottal stops (29%) and that middle aged women use least (9%). The male speakers show no age differentiation (21% vs 22%) and the frequencies of their glottal stops falls between the women's levels. as illustrated in figure 6. This is precisely the same pattern as was illustrated above for T Voicing in figure 2.

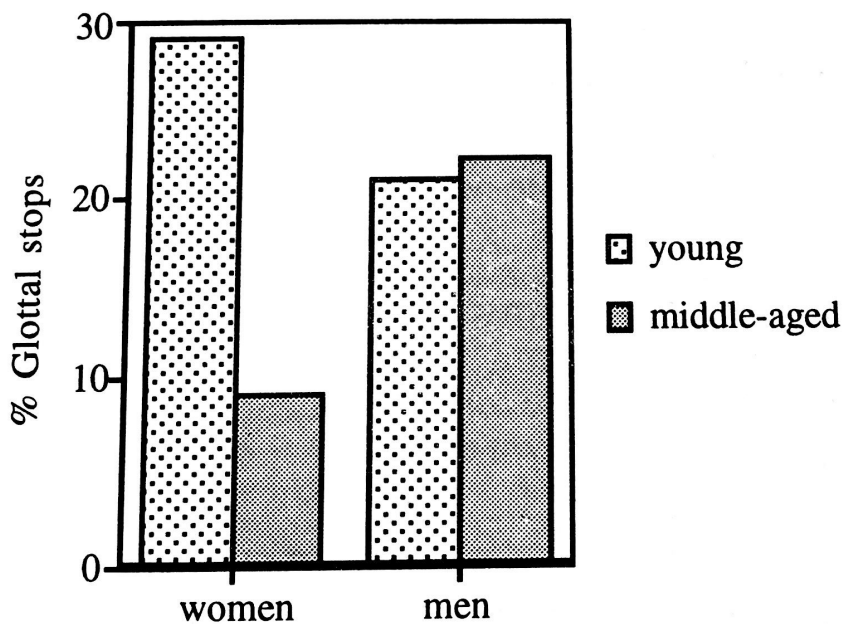


Figure 6: % of Glottal stops by age and gender ( middle class conversation)

The score of 29% for middle class young women is unexpectedly high; they have a considerable lead over their male counterparts in the frequency of

their use of glottal stops ( $X^2 = 7.01$ ,  $p > 0.01$ ). By contrast middle aged women use considerably fewer glottal stops and appear to be strongly resisting the change. It has been claimed that changes away from the prestige norm are generally led by working class males (Chambers and Trudgill 1980: 97-8), but, more recent reviews of results from a large number of social dialect studies provide evidence of women leading most vernacular changes, at least in the initial stages (see Moonwomon 1989, Labov 1990, Chambers 1992). This change appears to be a case in point.

This suggestion gains further support from the behaviour of young women and men in different social groups illustrated in figure 7. Young working class women and men use significantly more glottal stops than their middle class counterparts. Interestingly, however, in both groups it is young women who are in the lead in the use of this vernacular variant. This raises two interesting points.

- (i) Comparing the patterns for glottal stops with those for T Voicing, it is noticeable that the gap between the social classes is much narrower with T Voicing. (See figure 2 above). Since the change to intervocalic T Voicing appears to be considerably further advanced than the use of glottal stops for final /t/, this could be interpreted as further evidence that the gap between different social classes narrows especially for women as a vernacular change approaches completion (Labov 1990).
- (ii) The fact that women are leading the change to the glottal stop variant in both social classes, whereas working class men were ahead in the use of T Voicing, suggests something different is going on in each case. This point is taken up in the discussion below.

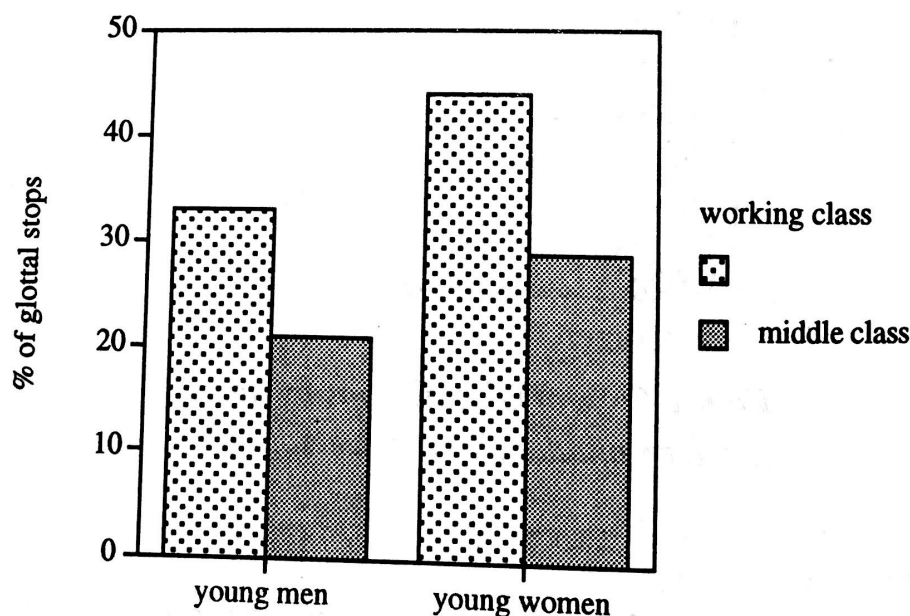


Figure 7: % of Glottal stops by gender and class

Table 3 provides a summary of the gender, age, class and style variation in this sample of New Zealand English. It shows that young women use more of the glottal variant than young men in both social classes. It also shows a slight lead by middle aged females over middle aged males in interview style, a very unexpected pattern, considering their conversational behaviour follows the more expected pattern for a vernacular variable. The distribution of glottal variants in the women's speech presents something of an interpretive challenge, then, just as the patterns of T Voicing for young women did not fit the standard distribution for a vernacular variant.

	<i>Middle class</i>		<i>Working class</i>	
	<i>Female</i>	<i>Male</i>	<i>Female</i>	<i>Male</i>
Conversation				
young	29	21	44	33
mid-age	9	22	-	-
Interview				
mid-age	11	8	-	16

*Table 3: % of Glottal Stops by gender, age, class and style*

### **Discussion**

There has been a great deal of discussion of the role of women in language change (see Eckert 1989, Moonwomon 1989, Labov 1990, Chambers 1992). There is well-nigh universal agreement that women tend to lead in sound changes associated with higher status speakers; the classic example is post-vocalic (r) in New York City. But the tremendous influence of Labov's 1966 study has tended to obscure the fact that such sound changes are relatively uncommon. Sound change involves vernacular variants much more often than prestige variants. The typical pattern is a sound change from below - both in the sense of below the level of people's conscious awareness, at least initially, and in the sense that the change spreads upwards through the community from the speech of lower or upper-working class rather than higher socio-economic groups.

Identifying the leaders of particular vernacular changes is a much more complex task. Many different and often contradictory factors need to be considered in different contexts and communities. Analysing change in progress involves considering not just the status of those typically using the innovative forms, but also such factors as solidarity and local network patterns (eg Milroy 1982), occupational opportunities or the linguistic

marketplace (eg Sankoff and Laberge 1978), geographical mobility, and so on (see Nichols 1983, Eckert 1989, Moonwomon 1989, Labov 1990). Birch Moonwomon suggests that tracing the role of women in relation to vernacular changes is difficult because "different vowel variables, or even different directions of movement for the same variant of a variable, have different values for subgroups of males and females" (1989: 243).

Labov (1990) points out that women from different social groups may respond differently to any particular linguistic innovation. Moreover, women play different roles at different points in the progression of any change from its first introduction to its final acceptance or rejection in any community.

As the innovators of most linguistic changes, women in intermediate social classes spontaneously create the differences between themselves and men. In adopting new prestige features more rapidly than men, and in reacting more sharply against the use of stigmatized forms, women are again the chief agents of differentiation (Labov 1990: 240).

While women may lead a vernacular change from below the level of consciousness at an early stage, their rate of adoption of the innovative variant may later slow down as they recognise its vernacular status, and they may then be overtaken by men. Initially, then, Labov proposes, women lead vernacular change in all social classes; later, however, as people become more aware of the change women lead in the rejection and retardation of the changes, and this is especially true, he suggests for lower middle class women.

The data described above suggests the New Zealand pattern may be different. The levels of use of glottal stops and T Voicing are very different from each other, suggesting the changes are at different stages, but young middle class women are ahead of young middle class men in their use of both these vernacular forms. T Voicing is better established than T Glottaling, so, if Labov's suggestion is correct, we would expect young middle class women to be reducing the level of their use of this form. But this is not the case - at least in conversational data. So Labov's suggestion that women retreat from using a variable once it is well-established enough to be stigmatised is not supported by this data (unless one argues that it is still too early to make such an inference).

One explanation for this may be that, as mentioned above, socio-economic divisions are not as clear-cut in New Zealand as in the USA. Hence young middle class women may not be as anxious to establish clear linguistic divisions between themselves and lower socio-economic groups. Gordon's (1994) research on young people's stereotypes of the speech of young women from different social backgrounds suggests, however, that this is not the most obvious explanation. She shows that young women are very aware of the different social connotations of working class vs non-

working class speech, and that they hold a very negative stereotype of young women who use features associated with working class speech.

Another possible explanation is that forms acquire prestige because they are used by women, rather than the other way round (see, for example, Horvath 1985, Milroy 1989). If this were the case, intervocalic T Voicing would be identified as a prestige form rather than a vernacular form because it was associated with women's rather than men's speech. This explanation is not supported by the data on T Voicing in this study, but it has some explanatory power in relation to glottal replacement (see below). The size of the distinctions between female and male speech within each social class identified by Horvath in her re-analysis of Labov's 1966 data and by Milroy's reporting of Rigg's data are not replicated for T Voicing in this New Zealand sample. In both the Horvath and Milroy analyses, working class women used a greater proportion of the standard or prestige forms than both working class and middle class men, suggesting gender rather than class was the primary relevant factor. This is not the pattern in the data described here. Working class women's usage of T Voicing is less than that of working class men, but greater than that of middle class men, as one would expect for a variable associated primarily with working class rather than with male speech. Similarly middle-aged middle class women use T Voicing less than middle-aged, middle class men. It is young middle class women's usage which is unusual. They use a far higher proportion of these forms than one might expect if it was a straightforward vernacular feature.

An alternative explanation is that different vernacular innovations have different levels or types of prestige. The term "vernacular" has been used to cover a very large swathe of linguistic changes. Any change which proceeds from the speech of lower socio-economic groups through to that of higher groups, or from less formal to more formal styles is considered a "vernacular" change. But different vernacular changes have different significance. Eckert (1989: 250) identifies three different kinds of prestige, for example: (i) global prestige (traditionally "overt" prestige), "based on norms imposed in the standard language marketplace"; (ii) covert prestige "based on opposition to those norms"; and (iii) local prestige "based on membership in the local community". Of these the latter two are most relevant in accounting for "vernacular" changes. But the changes described above do not fit neatly into either of these latter categories, suggesting that even distinguishing three categories of prestige involves some oversimplification.

The description of T Voicing as a vernacular change assumes a New Zealand standard which is closer to British RP than to American English pronunciation norms. If one is working with a standard/vernacular dichotomy, this is not an unreasonable assumption in the light of the extensive evidence that New Zealanders treat RP precisely in this way (Bayard 1990b, Gordon and Abell 1990, Vaughan and Huygens 1990). There is little doubt that RP has overt prestige in New Zealand. I would

question, however, the automatic relegation of any other variety to the status which has become associated with the label "vernacular". Accent evaluation research suggests that we are dealing with something much more complex, where different traits are rated differently for different accents and by different listeners, and where a model based on a simple dichotomy is inadequate to represent this complexity. It seems in general, however, that North American accents are rated almost as highly as RP by many young New Zealanders (Bayard 1990b).

I am suggesting then that T Voicing has a different sort of prestige for at least some young New Zealanders — the prestige associated with an increasingly influential out-group which is steadily challenging the established New Zealand reference group. Bell's (1990) research on referee design in the media supports the view that advertisers perceive Americans as a relevant "referee" or salient out-group for New Zealand speakers. And in Bayard's accent studies, the North American accent was rated second to RP on most power traits, and second to the Australian accent on solidarity traits. American pronunciation, in other words, should not be regarded as "non-standard" or "vernacular", but as a potentially new prestige norm challenging the established overt standard. The term "covert prestige" seems inappropriate for a feature which is rated so highly in accent evaluation studies. Instead the term "innovative" (vs "conservative") which Bayard (1989) has used in analysing lexical usage seems more appropriate. So I am suggesting that we have two prestige norms, a conservative norm influenced by British RP and a new innovative prestige norm, associated with American accents.

This explanation helps account for the relatively high use of T Voicing by young middle class women in a way that is consistent with the evidence reviewed by Labov (1990). These young women are leading a change towards a new innovative prestige norm within the middle class, and there is no need therefore to reduce their level of usage with a growing social awareness of the change.

This interpretation is also consistent with the higher rate of reported use of American lexical items by young middle class women compared to working class women in Vine's (1994) study, and with the differences between Bayard's more middle class sample compared to the working class sample from the Wellington social dialect survey analysed by Meyerhoff (1993). Reported lexical usage must reflect a relatively conscious acceptance of the new forms, and this supports the view that these American forms carry some prestige for this group. Taken together, this evidence suggests that young middle class women are leading changes in New Zealand English which originate in American English or which are reinforced by their association with American accents.

An explanation of the female lead in the use of glottal stops is necessarily more tentative. The change from use of [t<sup>h</sup>] to a glottal stop for word-final /t/ is still at a relatively early stage, though a softening up through intermediate simultaneous glottalisation is very apparent in the

data.<sup>3</sup> My suggestion here is that this is an example of a sound change which is gradually increasing its sociolinguistic status from a vernacular to a standard or prestige feature.

The results described above indicate that the leading edge of change for this variable in New Zealand English is the conversational speech of young women. (See figure 7). Overall, the glottal variant is most frequent in working class speech, with young working class women using more than any other group. So here we have another vernacular variant which is being introduced most energetically by females rather than males, and where there is no evidence of any retardation of this change in the speech of young middle class women.

While this is perfectly consistent with patterns of vernacular change elsewhere, I would again suggest that the case for the label "vernacular" is by no means clear-cut. It is useful to go a little further and consider more carefully the current status of this phonological change in New Zealand English. Is it the case that the glottal variant of (-t) is currently regarded as a vernacular innovation associated with working class speech, or is it perhaps beginning to be perceived as a less stigmatised form? Is glottal replacement changing its social status, moving from being a stigmatised vernacular variant towards acquiring the status of a new prestige variant.

Bayard (1990a: 159) regards the glottal stop as a vernacular variant, and points to the influence of television programmes such as *Minder* and *EastEnders* (perhaps mediated through the usage of New Zealand punk rock bands) as possible explanations for the increase in glottal stop variants of (-t) in New Zealand speech, although he admits this is difficult to prove. Hence, in his view, it is British working class speech which is the most likely source of the spread of glottal stops in the speech of young New Zealanders.

In an analysis of Wirral English, however, Newbrook (1986) notes that the glottal stop is becoming established as a more standard feature in some contexts in Britain. In his sociolinguistic study of phonological features of West Wirral speech, he reports in relation to the phonetic variants of final and preconsonantal /t/ that young women "are leading in the introduction of 'young R.P.'" (1986: 186), namely the glottal stop variant, whereas the general pattern of language change in the area is towards the non-standard Scouse/Liverpool accent. He comments that there is no obvious explanation for this pattern, since it is restricted to some variables but not others. However, the adoption by young women of a vernacular form which is increasingly becoming standard in the speech of young people who could be regarded as prestige models from outside the area does not seem too surprising (cf Milroy 1982, Labov 1990). While well-established features of RP may be rejected as manifestations of upper-

---

<sup>3</sup> See Holmes (1995) for further discussion of linguistic constraints and of the proposed sequence [t<sup>h</sup>] -> [ʔt] -> [tʔ] -> [ʔ] (-> ∅).

middle-class southern pretentiousness, it seems possible that more innovative features may be perceived rather differently - perhaps associated with youth and glamour rather than with financial security, smugness and privilege.

In a sociolinguistic analysis of the speech of Cardiff adolescents, Mees (1987) suggested that, except before vowels, glottalisation seemed to have acquired a certain degree of prestige in young people's speech, with young women using more than young men in more relaxed styles, and the glottalised variant used most by upper middle class teenagers, suggesting it is a prestigious feature of Cardiff English. Similarly, discussion of Estuary English suggests that glottal replacement is a feature of the speech of the younger members of the royal family (Rosewarne 1984).

It seems, then, that we have here an example of a vernacular change which is gradually spreading from working class speech to middle class speech, and which is steadily changing its sociolinguistic status in the process. Young women in both social classes appear to be playing a crucial role, both in leading the change and in up-grading its status. This vernacular innovation is steadily losing its stigma and becoming "respectable", establishing itself as a new standard or prestige feature. This would account for its frequency in the speech of young middle class women in particular.

While young working class women led the vernacular change, a change which is also being adopted by working class young men and which is apparent even in the interview style of middle aged working class men, young middle class women are also steadily adopting it. It seems that this may well be the mechanism through which a vernacular innovation becomes integrated into the standard variety. As Milroy and Milroy (1993) suggest, the fact that women adopt a variant may be the source of its prestige, rather than the reverse. "The generalization suggested is not that females favour prestige forms, but that they create them, if females favour certain forms, they become prestige forms" (1993: 65). In addition, young New Zealand middle class women may perceive the recent association of glottal replacement with young RP in Britain, an association which would add to its appeal. The fact that it occurs at all in the speech of middle class middle aged women provides further support for this interpretation.

## Conclusion

The two phonological variables of /t/ considered in this paper appear to be at different stages in the process of linguistic change, but both suggest that young middle class women play an important role in relation to linguistic change in New Zealand English. T Voicing is now a well-established variant of /t/ which has entered New Zealand English through the vernacular style of working class speakers, but - in a change being led by young women - is increasingly establishing itself in middle class speech. The prominent role of young middle class women in leading this change at a relatively late stage seems to contradict Labov's claim that women tend



to reduce their usage of vernacular features as social awareness of the change increases. I have suggested, however, an alternative explanation which involves re-evaluating T Voicing as a competing innovative prestige form rather than a vernacular form which is challenging the established RP-derived standard form. This analysis also emphasises the complexity of social and contextual factors which contribute to an account of changes in progress in any speech community.

The analysis of the increase in glottal stops as variants of final /t/ provides further support for this point. The ways in which the glottal stop is spreading through different New Zealand social groups and styles may perhaps be attributed to its ambivalent status. It has been associated with vernacular and especially British working class speech in the past, but the change has proceeded so far in Britain that it is also heard in the speech of younger RP speakers. It seems possible that glottal stop variants of (-t) have characterised the speech of some New Zealanders since English was first introduced (Gordon 1991). The spread of this variant in recent times may be partly attributable to the influence of the media, as Bayard (1990a) suggests, though face-to-face interaction is doubtless also necessary, and this is an obvious area for further research. It also seems possible, however, that glottal replacement before pauses and consonants is in the process of changing its sociolinguistic status in New Zealand speech. If we examine the conversational style of young middle class women, it is clear that glottal replacement is losing its stigma and increasingly becoming a part of standard usage. Awareness of its increasing prestige in British speech may well accelerate the progress of glottal replacement in New Zealand English. If so we might expect that the glottal stop will make particularly speedy progress as a variant of final /t/, and will establish itself as a feature of New Zealand English within a couple of generations. Finally, this analysis has provided evidence that both America and Britain continue to function as salient referees or out-groups for New Zealanders, though the precise sociolinguistic significance of phonological innovations differs according to which of these groups they are drawn from.

## References

- Bauer, Laurie 1986. Notes on New Zealand English phonetics and phonology. *English World-Wide* 7, 2: 225-58.
- Bayard, Donn 1989. "Me say that? No way!": the social correlates of American lexical diffusion in New Zealand English. *Te Reo* 32: 17-60.
- Bayard, Donn 1990a. Minder, Mork and Mindy? (-t) glottalisation and post-vocalic (-r) in younger New Zealand English speakers. In Allan Bell and Janet Holmes (eds) *New Zealand Ways of Speaking English*. Clevedon, Avon: Multilingual Matters; Wellington: Victoria University Press. 149-164.
- Bayard, Donn 1990b. 'God help us if we all sound like this': attitudes to

- New Zealand and other English accents. In Allan Bell and Janet Holmes (eds) *New Zealand Ways of Speaking English*. Clevedon, Avon: Multilingual Matters; Wellington: Victoria University Press. 67-96.
- Bell, Allan Graham 1977. *The Language of Radio News in Auckland: A Sociolinguistic Study of Style, Audience and Subediting Variation*. PhD thesis. Auckland: University of Auckland.
- Bell, Allan 1982 This isn't the BBC: colonialism in New Zealand English. *Applied Linguistics* 3: 246-58.
- Bell, Allan 1984. Language style as audience design. *Language in Society* 13, 2: 145-204.
- Bell, Allan 1990. Audience and referee design in New Zealand media language. In Allan Bell and Janet Holmes (eds) *New Zealand Ways of Speaking English*. Wellington: Victoria University Press. Clevedon, Avon: Multilingual Matters. 165-194.
- Chambers, J.K. 1992. Linguistic correlates of gender and sex. *English World-Wide* 13, 2: 173-218.
- Chambers, J.K. and Peter Trudgill 1980. *Dialectology*. Cambridge: Cambridge University Press.
- De Wolf, Gaelan Dodds 1990. Patterns of usage in urban Canadian English. *English World-Wide* 11, 1: 1-31.
- Eckert, Penelope 1989. The whole woman: sex and gender differences in variation. *Language Variation and Change* 1,3: 245-67.
- Gordon, Elizabeth 1991. The development of spoken English in New Zealand. In Graham McGregor and Mark Williams (eds) *Dirty Silence: Aspects of Language and Literature in New Zealand*. Oxford University Press. 19-28.
- Gordon, Elizabeth 1994. Sex, speech and stereotypes: why women's speech is closer to the standard than men's. Paper presented at the Fourth Language and Society Conference, Lincoln University. August 1994.
- Gordon, Elizabeth and Marcia Abell 1990. Attitudes to New Zealand English. In Allan Bell and Janet Holmes (eds) *New Zealand Ways of Speaking English*. Wellington: Victoria University Press. Clevedon, Avon: Multilingual Matters. 21-48.
- Holmes, Janet 1994. New Zealand English flappers: an analysis of T Voicing in New Zealand English. *English World-Wide* 15, 2: 195-224.
- Holmes, Janet 1995. Glottal stops in New Zealand English: an analysis of variants of word-final /t/. *Linguistics* 33,3: 433-463.
- Holmes, Janet, Allan Bell and Mary Boyce 1991. *Variation and Change in New Zealand English: a Social Dialect Investigation*. Project Report to the Social Sciences Committee of the Foundation for Research, Science and Technology. Wellington, Victoria University.
- Horvath, Barbara 1985. *Variation in Australian English: The Sociolects of Sydney*. Cambridge: Cambridge University Press.
- Labov, William 1966. *The Social Stratification of English in New York City*.

- Washington D.C.: Center for Applied Linguistics.
- Labov, William 1990. The intersection of sex and social class in the course of linguistic change. *Language Variation and Change* 2: 205-254.
- Macaulay, R.K.S. 1977. *Language, Social Class and Education: a Glasgow Study*. Edinburgh: Edinburgh University Press.
- Maidment, J.A. 1994. Estuary English: hybrid or hype. Paper presented at the Fourth Language and Society Conference. Lincoln University August 1994.
- Meyerhoff, Miriam 1993. Lexical shift in working class New Zealand speech: variation in the use of lexical pairs. *English World-Wide* 14,2: 231-48.
- Milroy James and Lesley Milroy 1993. Mechanisms of change in urban dialects. *International Journal of Applied Linguistics* 3,1: 57-77.
- Milroy, Lesley 1982. Social network and linguistic focussing. In Suzanne Romaine (ed) *Sociolinguistic Variation in Speech Communities*. London: Edward Arnold. 141-52.
- Milroy, Lesley 1989. Gender as a speaker variable: the interesting case of the glottalised stops in Tyneside. *York Papers in Linguistics* 13: 227-236.
- Moonwomon, Birch 1989. Another look at the role of female speakers in sound change. In *Proceedings of the Fifteenth Annual Meeting of the Berkeley Linguistics Society*. Berkeley, California: Berkeley Linguistics Society. 238-247.
- Newbrook, Mark 1986. *Sociolinguistic Reflexes of Dialect Interference in West Wirral*. Frankfurt am Main: Verlag Peter Lang.
- Nichols, Patricia 1983. Linguistic options and choices for Black women in the rural South. In Barrie Thorne, Cherie Kramarae and Nancy Henley (eds) *Language Gender and Society*. Rowley, Mass.: Newbury House. 54-67.
- Rosewarne, David 1984. Estuary English. *Times Educational Supplement* 19 October 1984.
- Rosewarne, David 1994. Estuary English - tomorrow's RP. *English Today* 37: 3-9.
- Sankoff, David and Suzanne Laberge 1978. The linguistic market and the statistical explanation of variability. In David Sankoff (ed) *Linguistic Variation: Models and Methods*. New York: Academic Press: 239-250.
- Trudgill, Peter 1972. Sex, covert prestige and linguistic change in the urban British English of Norwich. *Language in Society* 1: 179-95.
- Trudgill, Peter 1974. *The Social Differentiation of English in Norwich*. Cambridge: Cambridge University Press.
- Trudgill, Peter 1986. *Dialects in Contact*. Oxford: Blackwell
- Vaughan, Graham M. and Ingrid Huygens 1990. Sociolinguistic stereotyping in New Zealand. In Allan Bell and Janet Holmes (eds) *New Zealand Ways of Speaking English*. Wellington: Victoria

- Vine, Bernadette 1994. Only a man would say that! Observations on American vocabulary in the speech of Wanganui women. Paper presented at the Fourth New Zealand Language and Society Conference. Lincoln University. August 1994.
- Wells, J. C. 1982. *Accents of English*. Cambridge: Cambridge University Press.
- Woods, Howard B. 1991. Social differentiation in Ottawa English. In Jenny Cheshire (ed) *English Around the World*. Cambridge: Cambridge University Press. 134-149.