LINGUISTIC CHANGE AND STABILIZATION
IN THE TRANSITION FROM
ADOLESCENCE TO ADULTHOOD

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2008
For John Stuart, with thanks
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ABSTRACT

LANGUAGE CHANGE AND STABILIZATION IN THE TRANSITION FROM ADOLESCENCE TO ADULTHOOD

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Apparent time studies have found that both stable and changing sociolinguistic variables demonstrate an age-graded pattern of use in any given speech community. Younger speakers, especially adolescents, use more non-standard or advanced variants than older speakers. Yet as teenagers prepare to enter college or the labor force, they appear to withdraw from non-standard or advanced variants. Real time confirmation of young people’s deceleration and stabilization is lacking. Longitudinal panel studies of this period of the lifespan are relatively scarce, and are generally concerned with the linguistic outcomes of dialect contact. This research demonstrates in real time that teenagers continue to modify their sociolinguistic repertoires in the transition from adolescence to young adulthood, and not always away from the direction of ongoing change.

Female students aged 16-18 at a high school in Philadelphia were recorded in two phases, each a year apart. Spontaneous speech data was collected in sociolinguistic interviews. Five linguistic variables were analyzed: two stable variables, (ing) and (dh)
and three vowel variables undergoing community change in Philadelphia: (aw), (ay0) and (e).

For both (ing) and (dh), only speakers in the highest socioeconomic group significantly decreased their use of non-standard variants over time. For the vowel variables, results varied considerably from speaker to speaker. However, there was a strong indication that speakers are likelier to slow their participation in older, more socially salient changes such as (aw) and (ay0), but to continue to participate in younger, non-salient changes such as (e). These results show that age-grading interpretations of the adolescent peak in apparent time are supported, so long as the variable in question is above the level of social awareness, and speakers become sensitive to overt community status norms as they age. The latter condition is more likely to be fulfilled by speakers from higher, rather than lower, social groups.

Finally, the study also uncovered a local social opposition between Irish and Italian peer groups in the school that correlates with one of the variables studied: (ay0). Irish girls have significantly backer nuclei than Italian girls, aligning themselves with the leaders of this change: working class men.
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Chapter 1 Linguistic change across the lifespan

And I was kind of wishing that I didn’t actually get in [to college]. That way I could just stay here, and be with my family and my friends and that kind of thing. But I’m going, so I’ll just have to make the best of it!

Joanna, 2005

1.0 Talking posh

In their well-known study of koiné formation, Kerswill and Williams (2000) collected speech data in Milton Keynes, a British “New Town” designated in 1967 to accommodate a growing post-war population. Britain also planned “town expansion schemes” which in the 1960s and 1970s brought council estates\(^1\) to the edges of small market towns in south-eastern England, including the town in which I grew up. These towns were already home to both long-settled residents and more recent middle-class migrants from the London suburbs, all of whom were suddenly brought into contact with thousands of re-housed working class Londoners, mostly from the East End.

The child of middle-class suburbanites, I sounded very different from the majority of my peers, whose home dialect was working class London English. There were very few of us at school who had more standard accents, and we were relentlessly teased for being “posh”\(^2\). Most gradually accommodated to the Londoners, leaving myself and another girl, who I shall call Victoria, the only posh holdouts. After high school, Victoria started a job in Canary Wharf, the new banking district of London, to which she commuted every day from home; and when I ran into her a few years later, she was transformed: more confident, more fashionably dressed and more sociable. Yet the most
striking change had been made to her accent, which had moved dramatically towards the London working-class norm. I remember feeling surprised, a little betrayed, and then worried: why was I now the only odd one out?

Looking back, it seems highly likely that my own post-secondary school transition (to Cambridge University) was responsible, since that turned out to be the first place I had ever been where the majority of my peers sounded like me. The different paths Victoria and I took, and our attitudes to the speech communities we had grown up in and to those we encountered later on, were reflected in our different adult ways of speaking. Yet we were alike insofar as we had resisted the peer pressure to participate in community linguistic change throughout our teenage years. How did we do it? In this dissertation I examine how different individual life experiences, both during and after the completion of secondary schooling, may affect an individual’s involvement in the linguistic changes going on in the community, and what this means for the sociolinguistic study of real time change.

1.1 Introduction

Labov’s (1966) pioneering study of New York’s Lower East Side demonstrated that community change in progress could be observed through synchronic age stratification, a method known as apparent time interpretation. In the decades since its publication, sociolinguists have used age distributions in apparent time to trace the course of linguistic change in many communities across the world (e.g. Haeri, 1994; Hibiya, 1988; Macaulay, 1977; Modaressi, 1978; Rickford, 1979; Shuy, Wolfram, & Riley, 1967; Trudgill, 1974 inter alia). The positive correlation between decreasing age and frequency
of use of an incoming linguistic variant was a diagnostic of community change in progress.

However, Cedergren’s (1987) re-study of the lenition of (ch) in Panama City, undertaken more than 10 years after her first apparent time study (Cedergren, 1973), revealed a peak in use of the incoming variant among adult speakers in their early 20s. That is, young adults realized lenited variants of (ch) with a higher frequency than both older community members and teenagers. Ash (1982) found a similar peak among young adults for the vocalization of (l) in Philadelphia. In more recent work, Tagliamonte and D’Arcy (2007) show that for six morphosyntactic and discourse-pragmatic variables in English (including eg. forms of the future tense, quotative LIKE and intensifier SO) there is an adolescent peak in apparent time. Linguistic change in progress, then, is not a monotonic function of age, but presents a more complicated picture, in which community change is accompanied by individual change across the lifespan. What we see in these peaks is a reflection of the individual’s sociolinguistic lability, and of his or her changing relationship with parents, peer group and the wider world. The observation is not new: recurring patterns with age (known as ‘age-grading’) had previously been noted in the case of stigmatized variants of stable variables, such as (ing) in New York, Norwich and Detroit, where younger speakers consistently used high rates of the non-standard alveolar variant. The consistent appearance of a peak in adolescence for non-standard sociolinguistic variants is consonant with a theory of normative pressure, which is assumed to be weakest during the teenage years, when peer influence is greatest. Engagement with more mainstream society in the adult years produces more appropriately conservative sociolinguistic behavior, and a retreat from non-standard
variants. Thus individuals change, while the community remains stable. Trend studies such as Cedergren’s, however, have demonstrated that individuals can also change, in similar ways, alongside a backdrop of community change.

It is vital that sociolinguists gain a better understanding of the individual peak, and the conservatism and perhaps stability which must follow it. Clearly, for community language change to occur, children must learn to advance beyond their parents’ vernacular, overtake their older peers and also stabilize or retreat later on, so that they may in turn be overtaken by their own children. This stability must set in before adulthood – although the question of whether ‘adulthood’ here should be linguistically or socially defined is one to be addressed in this dissertation. Regardless, without individual stability, community changes could not increment over time. The stability hypothesis, then, is not only crucial to the reliable interpretation of apparent time, but to a workable theory of community language change. Without a detailed understanding of how the dynamics of lifespan change intersect with community change, the rate of apparent time change may sometimes be underestimated (Labov, 2001:446).

In particular, we know little about the extent to which teenagers, who are responsible for many peaks, slow down or retreat from participation in linguistic change in later life:
If adolescence is the life stage in which speakers push the envelope of variation, conservatism is said to set in during adulthood. Adults have regularly been shown...to be more conservative in their use of variables than younger age groups. This conservatism has been attributed to the pressure for use of standard language in the workplace. (Eckert, 1997:164)

Yet young adulthood is in general a surprisingly understudied life stage in sociolinguistics, with more attention directed to adolescents, pre-adolescents and children (e.g. Cheshire, 1982; Eckert, 2000; Goodwin, 1982; Kerswill, 1996; Kerswill, Torgersen, & Fox, 2005; Mendoza-Denton, 1997). Large-scale sociolinguistic surveys generally include young people in their 20s, but this age group is rarely accorded any special sociolinguistic interest. Adulthood in any case tends to represent a default category against which other life stages are compared. Real time panel studies of linguistic change have not looked at young adults in detail either. De Decker’s (2002; 2006) study, which followed high school graduates into their first year of college, is a notable exception and will be discussed in a later section.

The present work is designed as a longitudinal study of the speech of teenage girls undergoing the transition to young adulthood in South Philadelphia. The main source of data is a collection of sociolinguistic interviews that I conducted with a panel of girls in their senior year of high school and first year of college, in addition to ethnographic observations and survey information. Specifically, it is an investigation of the extent to which speakers in this life stage do or do not continue to participate in ongoing community linguistic change, with particular reference to changes that are below the level of social awareness.
To achieve this, three phonological variables undergoing change in Philadelphia will be considered:

a) the raising and backing of the nucleus of /ay/ before voiceless consonants,

b) the lowering of /e/

c) the fronting and raising of the nucleus of /aw/.

The girls’ production of these phonemes in real time will be compared with their use of two stable linguistic variables over the same one year time period. Stable variables, by definition, involve linguistic alternates suspended in a stable, long-term relationship, often for many centuries. The two chosen for the present study are a) the alternation between velar and alveolar variants of (ing), and b) the alternation between interdental and stop variants of word-initial (dh), both of which have been the subjects of extensive prior research.

An ethnographic and sociolinguistic study of these variables in a real time investigation of individual linguistic change is justified on the following grounds.

- There have been few panel studies of linguistic changes from below, and almost none of these have included speakers in late adolescence to young adulthood: the period in which apparent time peaks occur;
- Little is known about individuals’ use of stable variables over the lifespan, although much has been hypothesized from apparent time data;
- Thanks to many decades of research by William Labov and colleagues, phonological variables in Philadelphia are among the best understood in the field,
and provide an ideal opportunity to carry out detailed intra-individual comparisons against a background of community change;

- The addition of *ethnographic* observations should help to explain any intra- and inter-speaker variability in individuals’ use of both stable and changing linguistic variables over the time period being investigated.

In the rest of this chapter, I will expand upon the four points made above. I will review the existing literature on linguistic change in real time in section 1.2. In section 1.3, I will situate the phonological variables in the context of the Philadelphia speech community. Specific details about the variables will be presented in later chapters. In section 1.4 I consider work in sociology and linguistics on the lifecourse, particularly the adolescent to young adult transition. Section 1.5 will describe the contribution of ethnographic methods to the understanding of linguistic change. In section 1.6 I outline the objectives of the dissertation.

### 1.2 Tracking linguistic change in real time

The apparent time construct has been supported as a reliable tool in inferring the progress of linguistic change over time (Bailey, Wikle, Tillery, & Sand, 1991). Yet as many linguists have noted (Bailey, 2001; Guy, 2004; Labov, 1994), the clearest picture of linguistic change must come from a combination of real time and apparent time evidence. Real-time studies are of two types: *trend* and *panel* studies (G. Sankoff, 2005). Trend studies replicate the methods and sampling criteria of an earlier study in the same speech
community. A panel study relocates the original speakers from the first study, allowing linguists to test for changes that occur within the life-span, such as age-graded changes.

In an ideal world, linguists would study linguistic change in progress as it occurs, in real time, by following people over the course of their entire lives, or a community over decades. There are obvious methodological difficulties associated with real-time work, such as maintaining contact with individual panel speakers, or constructing and matching cohorts in trend studies. Yet these types of studies have been successfully carried out, particularly in recent years, now that enough time has elapsed since the earliest apparent time studies to allow the testing of original hypotheses against newer, real-time evidence.4

As already mentioned in section 1.1, one of the first trend studies was carried out by Cedergren (1973; 1987) in her return to Panama City. Other notable trend studies of phonological change include Trudgill’s (1988) re-study of Norwich and Sankoff and Blondeau’s work on uvular /R/ in Montreal French (G. Sankoff & Blondeau, 2007; G. Sankoff, Blondeau, & Charity, 2001). Morphological change in Brazilian Portuguese (Naro & Scherre, 2003), Finnish (Nahkola & Saanilähti, 2004), and in Montreal French (G. Sankoff & Wagner, 2006) has also been tracked in real time via trend study methodology5. Studies of this kind have been instrumental not only in supporting the apparent time construct, but in understanding how different types of change diffuse through the social structure of a speech community over time.

The discovery of interruptions to the assumed smooth progress of generational change has prompted a wave of interest in panel studies. Panel studies have provided mounting evidence to confirm that speakers can modify their use of changing
sociolinguistic variables beyond the developmental stages of childhood and pre-adolescence. While structural categories such as phonemes appear to remain unchanged (Labov, 1994:102-107), other linguistic elements subject to sociolinguistic variation, notably lexicon (D. Sankoff, 1993), morphology (Paunonen, 1996) and phonetics (G. Sankoff et al., 2001) appear to be malleable. Support for these findings have come from highly detailed phonetic studies of individual public figures, such as Harrington, Palethorpe and Watson’s (2000) study of the Queen of England’s public broadcasts, or Pharao’s (2007) study of chat show interviews with a Danish celebrity. In both cases, the speaker shifted some of their phonetic realizations in the direction of community change.

An intriguing study of individual lifespan change is that of the Yiddish singer Sarah Gorby, by Ellen Prince (Prince, 1987). Gorby, was tracked over the course of her decades-long recording career. Prince found that Gorby successfully maintained the vowels of a prestige dialect her native Bessarabian dialect (not the standard), in open-class, but not closed-class lexical items. Out of contact with other speakers of her native dialect for virtually her entire life, Gorby had apparently shifted to a more standard vowel pattern, but could reproduce the dialect variants in the more salient, open-class words. Prince’s findings suggest that not only are some linguistic categories more accessible to modification in adulthood than others, but that speakers may be especially aware of (whether in accepting or rejecting) more socially prestigious variants. Sankoff, Blondeau and Charity (2001) examined the use of apical versus uvular /r/ in Montreal French in the speech of 25 panel members, 7 of whom increased their use of uvular /r/ over the course of their lifespans. The most dramatic increases in use of the more prestigious incoming uvular variant occurred in the speech of a speaker named Lysiane B. As Lysiane steadily
climbed the socioeconomic ladder from 1971 to 1995, the frequency of her use of uvular /r/ climbed too.

While an understanding of individuals’ post-adolescent participation in prestigious change from above is crucial to the interpretation of apparent time, its sociopsychological motivations are relatively transparent. As in cases of stable variation, non-prestige variants are associated with the youth, while prestige variants increase in adulthood. More interesting is the question of why an individual such as the Queen of England, who arguably holds the most prestigious place possible in English society, would participate in non-prestigious change, long after she has left behind the young adult peak identified by Cedergren and others.

To explore this, it is helpful to make use of a major theoretical typology of change proposed by Labov (1966), in which he differentiated stable variation from ‘change from above’ and ‘change from below’. “Change from above” refers to linguistic change that is above the level of social awareness; it is also a reference to the frequency with which such changes originate in the higher social classes. “Change from below” refers to linguistic change below the level of social awareness, and originating in the middle or lower social classes.

Sociolinguistic panel studies have tended, as noted above, to examine linguistic variables above the level of social awareness, whether stable or changing. Panel studies of teenagers and young adults have had a similar focus. They have also tended to explain individual lifespan change as the result of dialect contact, rather than looking at individuals’ relationship to community-internal change.
Three such panel studies focus on contact between standard English and African American Vernacular English (AAVE). Baugh (1996) followed the fortunes of four young African-American men and found that three reduced their use of non-standard negation between adolescence and adulthood as a result of increasing contact with standard English. The fourth speaker was in jail by adulthood; his engagement with the wider linguistic marketplace had effectively been terminated.

Cukor-Avila (2000, cited in Bailey 2001) also reports on a ten-year study of four African American speakers in the town of ‘Springville’, TX. While the two adults remained stable for a variety of morphological and syntactic AAVE variables, the two younger subjects (aged 9 and 6 at time 1) changed in the direction of standard English.

Rickford and McNair-Knox (1994) report on changes in the use of African-American syntactic variables in the speech of ‘Foxy Boston’, an eighteen year-old who was interviewed over the course of the preceding five years. Although the focus of the study was interviewer-effects on style-shifting, the study also found that Foxy’s changing orientation towards her African-American identity as she progressed through high school and college had an effect on her overall rate of certain African-American variants over time.

In another study of ethnic identity construction, Carter (2006) examined changes in the speech of a Latina girl, Maria. At age 10 she was attending a majority-white elementary school in North Carolina, and by age 14, she had moved to a more ethnically diverse junior high school. The data from the later interviews demonstrated that Maria sounded “more Latina”, with lowering and backing of /æ/, backing of /uw/, lenition of intervocalic stops, and a more stress-timed prosodic rhythm. Carter attributes some of
these changes to Maria’s active attempt to adapt to the new social order of her junior high.

Sankoff (2004) used interviews with two of the panel members of the television documentary Seven Up as data for a longitudinal study of British English broad-a and the CUP vowel, both of which involve stereotyped phonemic variation. She shows that the two selected Northern men variably shifted to Southern variants as a result of their migrations in young adulthood: one to London, and the other to the USA.

The only study to look at a clear example of a system-internal linguistic change below the level of social awareness is De Decker’s (2006) investigation of /æ/-backing among young Canadians. The backing of /æ/ is the first step in the Canadian Shift (Clark, Elms, & Youssef, 1995) triggered by the cot-caught merger. De Decker followed a group of four girls who left their small town to go to college in nearby Toronto, where the Canadian Shift is more advanced. Over the three year period, two of the four girls expanded their favoring linguistic environments for /æ/-backing; one increased her retraction of /æ/ only in her original promoting environment; and the fourth girl, described as not enjoying the Toronto college night life, did not change. De Decker argues that young individuals who move to a city that is more advanced than their hometown with respect to a given linguistic change will accommodate to the new community norm. However, individuals who do not form social network ties in the new community will show no change.

These few studies of linguistic changes in the speech of young adults have drawn on small samples. It has been difficult to disambiguate the social factors determining the linguistic changes speakers made during young adulthood – in all these studies, contact
with an external speech community obscured the community-internal effects of normal entry to adulthood. Foxy Boston and the Baugh speakers ranged along a continuum of contact with the white community; the two young speakers in Cukor-Avila’s study appeared to lose their rural features as a result of contact with a local black urban community. Sankoff’s Northerners were exposed to the Southern British speech community, and one later migrated to the US. Even De Decker’s speakers, who remained within the standard Canadian English dialect zone, migrated to the urban Toronto speech community in order to attend college. While these studies are extremely valuable to an understanding of linguistic change across the lifespan, they do not illuminate the changes that can be effected among individuals within a single speech community. Until we have examined, in real time, the speech of young adults who are not geographically mobile, we cannot assume that lifespan change is only due to external dialect contact.

South Philadelphia, the neighborhood of Philadelphia chosen as the fieldwork locus for the present study, is a tightly-knit community in which several generations of one family may be found living on the same block, or within a few blocks of each other. While the community is reasonably prosperous and upwardly socially mobile, there are strong pressures on community members to remain geographically non-mobile. It therefore provided an ideal opportunity to examine young people’s participation in dialect-internal change from below, without the confounding factor of dialect contact. In the next section, I will outline some facts about the Philadelphia speech community and its vowel system. South Philadelphia is described in more detail in Chapter 2.
1.3 Linguistic variation in the Philadelphia speech community

The most comprehensive published description of the Philadelphia speech community is Labov’s (2001) *Principles of Linguistic Change: Social Factors*. In this book, as indicated by the title, broad theoretical principles emerge from or are tested against data from a large-scale survey of Philadelphia speech that was conducted by Labov and a research team in the early 1970s. In this section, I draw primarily on this survey, known as the project on Language Change and Variation (LCV), for my description of the Philadelphia speech community and on Conn’s (2005) trend study of Philadelphia which I refer to by Conn’s abbreviated dissertation title *Of Voice and Men* (OMM).

The LCV incorporated both telephone surveys and a social network study (Milroy & Milroy, 1985) of five city neighborhoods representing a range of socioeconomic backgrounds. Over 100 individuals were interviewed by the research team in the neighborhood study, which incorporated formal tests (such as the reading of word lists and subjective judgement tests) and ethnographic observations of life on each of the city blocks chosen to represent the neighborhood.

The fourth largest city in America in 1980 (US census, in Labov 2001:42) and a formerly mighty industrial port, Philadelphia’s recent history at the time of the LCV was one of economic decline and white flight to the suburbs, although at the present time of writing its downtown is undergoing a renaissance, with boutique hotels, condos and restaurants spreading to formerly blighted areas such as the Northern Liberties neighborhood adjacent to the central business district, Center City. The 1970s saw a large in-migration of African-Americans from the South (Hershberg, 1981:468) increasing
their population from 11% in 1930 to 33.6% in 1970. The LCV chose not to include African-Americans in the study, selecting majority-white neighborhoods for investigation. Labov (ibid:48) refers to the segregation of black and white vernaculars discovered in preliminary LCV work as the basis for this decision, with “the great majority of black speakers” using a form of African American Vernacular English that was not specific to Philadelphia.

Within the white speech community, the focus was primarily on vowel variables, almost all of which were undergoing change in the Philadelphia vowel system. This is represented in Figure 1.1 (Labov ibid:143), in which circles represent mean values for realization of the vowel, and the arrows the direction and speed of change. Longer arrows reflect more rapid changes, as reflected in apparent time distributions.
Figure 1.1 Movement of Philadelphia vowels in apparent time.

O = mean values for 116 speakers in the neighborhood study. Vectors connect values for groups 25 years older and younger than the mean. __F = free vowel; __C = checked vowel; __0 = before voiceless finals. In Labov (1994:59, Figure 3.6)

Another way of representing the ongoing sound changes is to place them on an S-curve of linguistic diffusion through the community:
Figure 1.2 Placement of Philadelphia sound changes on S-shaped curve. 
Slope of arrow (y/x) = age coefficient/100. In Labov (1994:67, Figure 3.11).

The tensing and raising of the nucleus of /ae/ in a number of phonologically and lexically defined contexts is an old change that has almost reached completion, and hence appears near the top of the S-curve (although see eg. Roberts & Labov, 1995 for an account of new environments for /ae/-tensing.). Originally a change from below, it has risen above the level of social awareness to become a local shibboleth that is occasionally commented on by Philadelphians. A self-report test administered in the LCV study found that tensed and raised variants of (aeh) were under-reported by subjects (more than advanced variants of (ay0), (aw), (uw) and (ow) were under-reported), and had “a high degree of social recognition and considerable social stigma” (Labov, 2001:204). One participant called a tense realization of *man* [məːn] “South Philly slang, not the best pronunciation”, while another said, “I don’t like it. It doesn’t sound too good.” (Labov, ibid:203). That tense short-a functions as a symbol of covert prestige in Philadelphia is also clear, however. In the present study, I gathered one of the most explicitly meta-linguistic comments on (aeh) yet recorded: a mother who noticed her daughter producing lax
variants in *laughing*, and said, “Did you just say [læfɪn]? Never fucking say that again.” (See Chapter 6 for the full context of this story).

Further down the S-curve, beyond the mid-range changes such as the fronting of /ow/ and /uw/, are the changes described as “new and vigorous” (Labov, 2001:132): the tensing and raising of the nucleus of /aw/, and the centralization of the nucleus of /ay/ before voiceless consonants, which Labov designates as (ay0). The new and vigorous variables were below the level of social awareness at the time of the LCV study (Labov, ibid: 203-204), with speakers showing little recognition of them in evaluation tests, and very little social differentiation appearing in the apparent time analyses. Conn (Conn, 2005:156) found similar results in evaluation tests for (aw) in the OMM study, but some significant differences for the evaluation of (ay0), in which advanced variants produced by a female speaker were downgraded, and those produced by a male speaker were upgraded. In general, however, these variables are not the topic of overt comment in Philadelphia, as is the tensing of /ae/, and as such remain changes from below in both the linguistic sense (of originating system-internally) and in the social sense (of being below social awareness). This makes (aw) and (ay0) ideal for a study of lifespan change, since speakers have no *overt* social motivations for adopting or rejecting them. If the non-mobile teenagers and young adults in the current study reduce their tensing of (aw) or their centralization of (ay0), then we cannot say that they are consciously adapting to non-local norms, but must look to other explanations.

The final vowel variable under consideration in this dissertation is the lowering of /e/, which Labov designates as the sociolinguistic variable (e). In the LCV this was described as “incipient”, meaning that it registered change across age distributions, but no
social or stylistic differentiation. Any change in the realization of (e) among speakers in the present panel study is likely to have occurred entirely without the speaker’s awareness. This makes (e) a potentially better contributor to a theory of lifespan change, although it is possible that we will find that (e) has not, in fact, emerged as a vowel change in progress, and that it will contradict the predictions that were made by the LCV on the basis of its tiny apparent time trajectory.

Controls are provided by the stable variables (ing) and (dh), which were well-studied by the LCV. As in other English-speaking communities (see Chapter 5 for more details), non-standard variants of these variables were associated in the LCV study with lower social class, men, and, importantly, youth. A dramatic peak in apparent time was recorded for both (ing) and (dh) among 16 year olds (Labov, ibid: 110, 112). We should expect the South Philadelphia informants in the present study to exhibit similar behavior in real time, with a decrease in the frequency of non-standard variants between their senior high school year and college. If they indeed behave as expected, then the vowel variable data can be understood to represent the linguistic changes of normal, non-anomalous individuals. The extent to which they avoid non-standard variants in the follow-up interview can also be seen as an indicator of their level of engagement with the standard language marketplace: an indicator that can in turn be used to interpret their real time use of (aw), (ay0) and (e). However, while the information provided by analyses of (ing) and (dh) will be helpful, they must go hand-in-hand with a detailed understanding of each speaker’s social transitions.
1.4 The transition from adolescence to young adulthood

In the social sciences and in sociolinguistics, gender has been theorized as the socially constructed counterpart of biological sex (Cheshire, 2002:427). Age as a sociolinguistic variable has come to be similarly deconstructed. Linear age, or maturity, is a biological category, but age is also conceptualized by communities in terms of the social experiences—such as marriage and childbearing—that are typically associated with certain life stages. These experiences may be generation-specific (Cheshire, 1987 and forthcoming), such as participation in the Second World War, or recurring and age-specific, such as childhood and old age. Divisions between generations and across the lifespan in pre-industrial societies may be very simple, perhaps recognizing only two major age-specific divisions: child and adult (Hunt, 2005:18). In industrial societies, many more age-specific societal functions have emerged, so that in the 21st century, Americans for example, have recourse to a wide array of labels such as 'toddler', 'tween', 'teen', 'thirtysomething' and so on. Alongside these highly differentiated recurring categories, the concept of age cohort has emerged, giving rise to generation-specific labels such as 'baby boomer' and 'Generation X'.

In sociolinguistics, the use of age as a sociolinguistic variable has moved away from general use of an early model in which speakers were grouped by calendar age, often decade by decade (e.g. Labov, 1966; Trudgill, 1974). Instead, researchers have taken into account the generation-specific experiences of speakers, such as relationship to the 'punctuating event' (Labov, 2001:315) of a world war. In their study of Cajun English in Louisiana, Dubois and Horvath (1999) rely on survey and interview information to
divide their speakers into three locally-meaningful age categories. Speakers in the oldest category grew up speaking French-influenced English, but the middle generation experienced stigmatization of their dialect as the community underwent urbanization and contact with an external standard norm. The young generation grew up during another community change, in which Cajun culture was celebrated, and Cajun dialect had become a means to signal ethnic pride. Dividing the community into arbitrary age-cohorts would not have captured the significant linguistic differences between the generations, each of which were affected by a different set of historical events.

While sociolinguists must be sensitive, then, to the specific historical experiences of a speech community, we should also bring this kind of awareness to our definitions of recurring age-specific categories within the human lifespan. Ideally, these categories will further our understanding of the mechanisms of linguistic change and will allow for comparisons with similarly constructed studies in other communities. Labov (2001:101) divides speakers in the Philadelphia LCV study into age groups that reflect their "acquisition and use of linguistic norms and their ability to put them into practice", at least in American society. These are:

1. alignment to the pre-adolescent peer group (8-9)
2. membership in the pre-adolescent peer group (10-12)
3. involvement in heterosexual relations and the adolescent group (13-16)
4. completion of secondary schooling and orientation to the wider world of work and/or college (17-19)
5. the beginning of regular employment and family life (20-29)
6. full engagement in the work force and family responsibilities (30-59)

7. retirement (60s)

Labov’s categories rely to some degree on prior knowledge of how sociolinguistic variation is acquired at certain life stages (Payne, 1980; Roberts, 1994). They also rely on the existence of a mandatory educational system from which people graduate by age 19, and the assumption that the adult years may include employment or children in the 20s, and retirement in the 60s. Naturally, they are general categories designed to create discrete age categories for quantitative analysis: they are not intended to capture the extensive individual variation that might exist. Yet even these general categories may have to be re-thought as American society adapts to demographic changes. The average American lifespan is lengthening, and college education is becoming the norm, so that, for example, childbearing may now occur late into the 30s, and retirement in the 70s. Sociologists now argue that the concept of a "life cycle", in which individuals move smoothly from stage to stage at normatively acceptable ages, is no longer relevant in a post-modern society that is constantly changing (Hunt, 2005:21). Rather than a predetermined series of steps, individuals see the life course as a series of "passages" to be negotiated, a series of opportunities and risks that must be faced alone, rather than through formal, institutionalized rituals (Giddens, 1991:78-79). Furthermore, individuals have considerably different experiences of the lifecourse because of structured inequalities such as gender, ethnicity and social class -- none of which are accounted for in Labov’s model.
Yet a one-dimensional segmentation of the life course should not be criticized too extensively, for it cannot take into account the multitude of individual lifecourse experiences, and does not attempt to do so. It provides a general outline, which sociolinguists are only beginning to refine and fill in, with work on the speech of the elderly (e.g. Coupland, Coupland, & Giles, 1991; Hamilton, 1994; Labov & Auger, 1998), the speech of children (Roberts, ibid; Smith, Durham, & Fortune, 2007) and the speech of pre-adolescents (Eckert, 2004).

This dissertation will examine in detail one of Labov's categories: the completion of schooling and orientation to the wider world and/or college, at ages 17 to 19. Recent work in sociology suggests that many American young adults are entering the workplace later in life, getting married and having children later. This period has been referred to as ‘extended adolescence’ and ‘emerging adulthood’ (Arnett, 1997) - a time in which young adults admit to not yet feeling like full ‘adults’. It is possible that differing notions of adulthood and adult responsibility contribute to linguistic variation in the ‘emerging adulthood’ period and beyond.

Sociologists and psychologists have recently become interested in the question of what contributes to young people’s subjective notions of adulthood. The traditional milestones on the path to adulthood – leaving home, finishing education, entering the workforce, getting married, and having children – are being reached at different times by different people. Benson and Furstenburg (2003) report:
Since the 1950s, the variability in the timing and sequence of entry into adult-like roles, such as living on one’s own, getting married and becoming a parent, has increased. Demographic transitions are not as tightly bound to strict timetables and expectations. Young people today tend to achieve transitions at varying rates, and many times attained adult-like statuses are not permanent, in that young people tend to enter and exit transitions over time.

Furstenburg & Benson (2003:3)

The transition from adolescence to adulthood, however and whenever it is made, is a time of upheaval not only in the lives of each individual, but importantly, in those of their peers. The strict age cohorts and highly comparable daily experiences of the high school are left behind; groups of friends who formerly did everything together must reconcile themselves to the fact that they are now all in different jobs, or different colleges, or perhaps one of them is still living at home, or raising a child. Regardless of whether an individual remains in their local environment and maintains a local social life, there is a good chance that their social networks have been perturbed.

With any change in daily social network interactions comes the potential for changing one’s status in the linguistic marketplace, or marché linguistique. The concept of marché linguistique (Bourdieu and Boltanski 1975) recognizes that some people’s daily lives and occupations require more linguistic involvement with the wider world than others. More importantly, the market pressure to use the standard language varies among individuals. When adolescents leave the high school, they are immediately ranged along a continuum of engagement with the linguistic marketplace.

In the South Philadelphia high school where I carried out sociolinguistic fieldwork, 95% of students graduate and of these, 90% go on to further education. Among the panel of girls to be described in the present work, only one girl was in a full-
time job at the time of second interview, because she had left, after one semester, the vocational college where she had intended to train as an accountant. I did also interview a teenaged mother, Jessica. At the time, she was still in high school and applying to local colleges. She intended to go to college full-time, leaving her baby in the care of her mother and grandmother. However, because she was brought along to a panel member’s second interview, I only met her once.

A comparison of the panel’s engagement with the linguistic marketplaces of work, college and full-time motherhood can therefore not be undertaken. Instead, I take into consideration the type of college each girl attended, the expected career outcome of the course, and the extent to which panel members maintained network ties to their family and friends in South Philadelphia after graduation.

One surprising fact (to me, at least) about this group of young women was their fear of living away from home and their worries about losing contact with their South Philadelphia friends. My own experience of this life period was of whole-hearted relief at finally gaining independence from my family (despite a very happy childhood and good relations with my parents). I deliberately applied to universities that were as far away from my home in south-east England as possible. Unlike many of my informants, however, I was not a first-generation college-goer: both of my parents had lived away from home while completing some form of vocational education. They accepted my decision to move away (not very far, as it turned out in the end) and allowed me to get on with my life at college without interference. It seemed to me that in South Philadelphia it was frequently the parents, not my informants, who were feeding their daughters’ worries by calling their cellphones and sending them instant messages. It is important not to
forget that the transition from adolescence to young adulthood involves not only orientation to the world of work and college, but orientation away from one’s parents.

In the current study, I will compare the transitions of speakers who move away from home with those who continue to live with their parents. The girls who live at home and attend college in Philadelphia are more than just controls. They are at the heart of this investigation.

1.5 Ethnographic methods in the study of linguistic variation

In her report on Chicano English in a participant-observation study of Los Angeles, Fought (2003) refers to Eckert’s observation on the importance of ethnographic methods:

> The use of ethnography in the study of variation allows the researcher to discover the social groups, categories and divisions particular to the community in question, and to explore their relation to linguistic form.

Eckert (1991:213)

Eckert’s own (1989) ethnographic study of a Detroit high school uncovered two saliently opposed local categories, *Jocks* and *Burnouts*, whose differing orientation to corporate school activities was reflected linguistically in their adoption of a vowel rotation known as the Northern Cities Shift (Callary, 1975; Fasold, 1969). Traditional social class categories did not correlate so well with the distribution of linguistic variants as did these locally-defined “communities of practice”10 (Eckert, 2000).

Two other ethnography-based sociolinguistic studies of teenagers in high schools are relevant to a discussion of this approach. Fought (1999; 2003) discovered that in a
Los Angeles ‘continuation’ school\textsuperscript{11}, Mexican-American participation in a majority California sound change, /u/-fronting, was conditioned not only by gender and social class, but by the speaker’s strength of affiliation with local gangs. Long-term participant-observation allowed Fought to differentiate a number of gang-related categories, including gang member, people who are associated with gangs but will never become members, ‘Wannabes’ who will eventually become members, and people unaffiliated with gangs, such as Moms.

Mendoza-Denton’s (1997) ethnography of a mainstream California high school attended by 65\% non-white students (Mendoza-Denton, ibid:19) also looks at the speech of Mexican-Americans. The linguistic variable, /u/-tensing, is characteristic not of the majority community, as in Fought’s study, but of Chicano English. Mendoza-Denton found that use of tense variants was associated with individual speakers’ construction of social identity. Speakers aligned with gangs favored tensing, while membership of other locally-defined groups, such as the Discos and Latina Jocks, disfavored tensing (Mendoza-Denton, ibid:84-86).

Ethnographic fieldwork, then, provides a powerful means of uncovering the local meanings of linguistic variants and thus a way of accounting for patterns of use in the data. While /u/-tensing is ethnically marked in the wider California speech community as a feature of Chicano English, in the local context of Sor Juana high school it does not index (Silverstein, 2003) traditional conservative Mexican values of home and family. Rather, it “is somehow indexical…of a Latina-based identity” (Mendoza-Denton, ibid:86), and it is this identity that is displayed and promoted among the highly non-
traditional Latina girl gangs, and further reinforced through their extreme rates of /t/-tensing. Particularly in a study of speakers who are similar in terms of age, social class and ethnic background, it is important to have a sense of the social boundaries imposed by the speakers themselves. For the present study, social factors such as age, gender, race and social class were controlled in order to focus on the differences in post-high school transition. I could have gone about this by asking a school guidance counselor to give me a list of students divided by application to various colleges, but for reasons I enlarge on in Chapter 2, I preferred to avoid any association with official school bureaucracy. Instead, I chose to locate a sample of students via social network contacts, after becoming a familiar presence in the cafeteria and hallways, in a non-institutional role.

The work described in this dissertation was not designed as an ethnographic study, but it incorporates the observations I made during both of the two-month-long periods I spent in the South Philadelphia high school. Ethnographic work is necessarily time-consuming and intensive, and since this is also the case for a longitudinal panel study in which each informant is interviewed twice, a compromise had to be reached. I was a participant-observer in the high school, but only for short periods, and only for as long as I needed to obtain my original (necessarily large) sample or reinterview speakers who consented to a second interview. No ethnographer is ever fully satisfied that they have come to understand the community they are observing, and I was left with many frustrating holes in my knowledge. However, as I describe in Chapter 4, the incorporation of ethnographic fieldwork allowed me to not only locate a cross-section of teenagers with different post-high school aspirations, but to give the appropriate level of attention to locally salient categories that I would otherwise have ignored.
1.6 Objectives and outline

The dissertation is organized as follows. The present chapter is an introduction to the goals of the study and the existing literature on real time change, the Philadelphia speech community, and ethnographic methods. Chapter 2 describes the social context of the study and the selection of speaker samples for analysis: 22 speakers for analysis of (ing) and (dh) in real time, 18 speakers for synchronic phonetic analysis of (aw), (ay0) and (e), and 9 speakers for real time vowel analysis. Chapter 3 is a detailed discussion of the social landscape of the high school. Chapter 4 contains the stable variable analysis and Chapter 5 contains the phonetic analysis.

NOTES

1 Government-owned housing for low-income families, similar to US housing projects.
2 “Posh” is defined by the Oxford English Dictionary (2007) as “([C]hiefly Brit.): typical of or belonging to the upper class; (affecting to be) superior or genteel; ‘snooty’, pretentious.”
3 Another theoretical possibility is one in which no-one stabilizes and all community members advance at the same rate. This would however produce a flat graph in apparent time, and the phenomenon explicated here is one in which there is a slope with age. The scenario is in any case rare, if not unknown.
4 However, the first re-study of this kind is recognized as Gauchat (1905)/Hermann (1929).
5 I restrict the definition of real-time study in this section to the sociolinguistic study of spoken language. Historical linguistics and sociohistorical linguistics (Romaine, 1982) have also successfully tracked linguistic variation in real time via written texts, but they fall out of the scope of this discussion.
6 Relations between black and white vernaculars in Philadelphia was studied in a subsequent research project by Labov and reported on in, inter alia, Labov & Harris (1986); Graff et al (1986) and Ash & Myhill (1986).
7 The Project on Language Change and Variation (LCV) ran from 1973 to 1977, and was a study of language change in progress across the city. It is described in more detail in the previous section, 1.3.
“Life course” is the term currently preferred in sociology, since it avoids the connotations of recurring, fixed stages that are attached to “life cycle”. For a detailed account, see Hunt (2005).

Very little linguistic work with this age group has been within a quantitative variationist paradigm, however. Eckert (1997:165) comments that “[t]he retiring and retired age group has been the least studied of all [age groups].”

Eckert and McConnell-Ginet (1992:464) define a community of practice (CofP) as “an aggregate of people who come together around mutual engagement in an endeavor” and comment that “practices emerge in the course of this mutual endeavor”. Jocks, for example, are mutually engaged in furthering their college careers and the school’s reputation, and thus their behavioral and linguistic practices reflect standard norms.

For students who had left or been expelled from mainstream schooling. Fought (2003:23) describes it as “the landing place for students who have had serious academic or personal trouble at the main high school, including repeated truancies, violence, failing grades, pregnancy and so on.”
Chapter 2  Data collection in South Philadelphia

Danielle:   I would never be able to live anywhere else but South Philly. Like I don’t know how people move to Jersey.
Courtney:  I’m a city girl, and that’s it.
Danielle:  So am I. I cannot stand- like yeah, don’t get me wrong, I- what you see like in magazines or whatever, them big beautiful houses. I would love to live in them, if it was in the middle of South Philly.

2.0  Introduction

The data for this dissertation are drawn from sociolinguistic fieldwork I conducted at intervals over a year and a half with students and alumnae of a private, Catholic high school in Philadelphia. The fieldwork consisted of ethnographic observations and sociolinguistic interviews. The interviews included formal methods such as the reading of word lists; this data is not, however, discussed in the present work.

2.0.1  Selecting a high school as the research site

A high school was chosen as the research site because school is where teenagers in the target age range of 17-18 spend the majority of their waking hours. Furthermore, it is precisely the transition from the regimented, age-stratified school to the more diverse world of work and college that I wanted to investigate. Unlike other typical field sites for observing teenagers, such as youth clubs or neighborhood hangouts (e.g. Cheshire, 1982), a school potentially brings together a cross-section of young people from different socioeconomic backgrounds, who aspire to a broad range of post-high school careers.
2.0.2 Age, gender, ethnicity

In order to examine the effect of type of post-school transition on speakers’ language, it was crucial to control for as many other extra-linguistic variables as possible. Age was restricted to speakers aged 16 to 18 years old\(^1\); and in the interest both of creating rapport with my informants, and controlling for gender, I interviewed only girls.

All the speakers in the linguistic analysis are white. There has been a great deal more research on the speech of white Philadelphians than any other ethnic group in the city, and studies suggest that non-whites in Philadelphia generally do not participate in mainstream white linguistic changes, even where ethnic communities are fairly well integrated (Adamson & Regan, 1991; Henderson, 1996; Poplack, 1978). In the Philadelphia public school district, however, segregation of whites from other ethnicities can be almost total, at least at the high school level. Public high schools are 13.3% white on average\(^2\), 64.4% African-American, 15.8% Hispanic and 5.6% Asian. An examination of the 2004-5 statistics available for 44 Philadelphia public high schools\(^3\) showed that no school had a white population greater than 57.2%, and that only 8 schools had white student populations greater than 40%. 20 schools (that is, almost half) had fewer than 5% white students.

Thus, to ensure access to a large number of potential white informants, I selected a private Catholic school from within the Archdiocese of Philadelphia. The student population in 2005, the year in which I began fieldwork, was 79% white.
2.0.3 Socioeconomic status

The socioeconomic background of the students in this study was naturally (and for this study, ideally) limited by the location of the selected school in the lower middle class district of South Philadelphia. Although it is a private school, many students are supported by parish and diocesan bursaries, making it an affordable choice for local Catholic families. These Catholic families are the descendants of mainly Irish and Italian immigrants who have been settling in South Philadelphia since at least the mid 19th century (see section 2.1 below).

To sum up, a private Catholic high school with a majority white student population was selected as the major research site. The school, henceforth referred to as Sacred Heart, is situated in an inner-city neighborhood representative of the interior Philadelphia social classes, and it is expected that students from this socioeconomic stratum are positioned to make a broad range of different post-high school transitions. Age, gender as well as race were controlled for, so that the effect of transition type and socio-economic background on participation in mainstream Philadelphia phonological change could be examined in real time.

2.1 South Philadelphia

Philadelphia was a major port in the USA’s colonial period, and until the completion of the Erie Canal in the nineteenth century, it was the country’s largest industrial center. It had one of the highest concentrations of manufacturing industries (textiles, printing, publishing, foundry and machine manufacture) on the East Coast (Hershberg 1981).
Much of the nineteenth century industrial boom in Philadelphia was powered by European immigrant labor, especially Irish and Germans.

Figure 2.1 Philadelphia’s wards, 1850. (http://marie.bravepages.com/phila.htm). South Philadelphia comprises the former wards of Passyunk, Moyamensing and Pennsport.
With shipyards on its western border with the Schuykill River, and along its eastern border with the Delaware (see Figure 2.1), South Philadelphia was attractive to unskilled immigrants, and expanded rapidly. According to Goode and Schneider (1994:31), whose account of Philadelphia’s ethnic history forms the basis of much of this summary, 30% of the city’s population was Irish, and 16% German by 1880. There were also waves of African-American domestic migrants in the first half of the 19th century. The crowded South Philadelphia peninsula, originally a collection of independent communities that were officially incorporated into metropolitan Philadelphia only in 1854, provided no opportunity for immigrants to cluster in ethnic neighborhoods. The result was a patchwork of ethnicities living side by side in unhealthy tenement housing.

In the late 19th century and early 20th, huge numbers of Italians began to arrive. These new arrivals, along with other immigrants from southern and eastern Europe started to form ethnic enclaves around sites of community importance, such as churches, clubs and stores. General territories emerged, many of which are still important today: the Irish along the rivers, with the Italians in most of the central part of South Philadelphia (see Figure 2.2). African-Americans occupy a thin vertical strip between the eastern Irish in the Second Street neighborhood, and the Italians. (North-south streets are numbered incrementally from Front Street on the Delaware, going westwards to the Thirtieth Street neighborhood, traditionally Irish, on the Schuykill.)
Figure 2.2 Map of South Philadelphia in 2007, with principal modern-day ethnic territories.

Between the World Wars, Philadelphia, like the rest of the country, faced economic depression. Thousands of African-Americans streamed into the city from the rural South,
looking for industrial jobs that turned out to be extremely scarce. As the trickle of whites to the suburbs became a flood, these jobs slowly became available, but African-Americans still faced poverty and discrimination. In addition, the suburbanization not only of residences but of jobs, especially by the 1970s, caused valuable tax money to leave Philadelphia, and to hasten the city’s decline. Population decreased by approximately 10% in the 1970s, and a further 10% in the 1980s.

South Philadelphia is a microcosm of the city’s slow fall. The influx of African-Americans, especially in the formerly Irish neighborhood along the Schuykill, led to racial tensions and violence. This, coupled with the loss of industrial and shipyard jobs, prompted those white South Philadelphians who could to follow employment to the suburbs and to New Jersey. Almost all the teenagers I interviewed for this dissertation seemed to have a relative in Jersey, or in nearby Delaware County.

Today, Philadelphia is recovering from its long years of decay. The majority of city jobs are now in the service sector, especially healthcare and education, and a generous tax-break policy has encouraged construction and renovation in the downtown area. In South Philadelphia, there is still work to be found in the shipyards and in construction, but like elsewhere in the city, prospects are often better in hospitals and service jobs. Both blacks and whites face some competition from Asians, especially Vietnamese, who have been moving into South Philadelphia in the last two decades. Also moving in are young professionals who cannot afford the rising downtown housing prices. The construction of larger townhouses on wider streets in the southerly Packer Park neighborhood even seems to have attracted those South Philadelphians who left for the suburbs a few decades ago.
2.1.1 The socioeconomic status of South Philadelphia

South Philadelphia is the neighborhood represented in Labov’s Language Change and Variation project (Labov, 2001) by the pseudonymous Clark Street and Pitt Street. Both were in South Philadelphia, and were demographically very similar, but in the Italian-dominated, slightly more prosperous Clark Street median house prices were somewhat higher than in Irish-dominated Pitt Street. Median house price on Clark Street was $11,000 versus $7,800 for Pitt Street, according to 1970 US Census data (Labov, 2001:54).

On both blocks, high percentages of clerical workers and skilled craft workers were to be found. Labov (ibid:55) indicates that one could label them broadly as “upper working class”, although he cautions that “the range within neighborhoods is considerable”. In his description of these South Philadelphia blocks as they appeared in the 1970s, Pitt Street was characterized by male blue-collar jobs: truck-drivers, cab-drivers, manual machine operators, but there were also mechanics and other skilled workers (Labov ibid:57). Women worked in clerical or service jobs, but most stayed at home. On Clark Street, the residents were generally older and often retired, but had held skilled jobs of both blue- and white-collar types: “foremen, draftsmen, contractors, independent tailors, painters and paper hangers, insurance salesmen, car salesmen” (Labov ibid:57-8).

The neighborhoods in which Clark and Pitt Streets were located (central South Philadelphia, and Pennsport, respectively) are still broadly upper-working class to lower-middle class in character. According to 2000 US Census data, presented in Table 2.1, median house prices in these neighborhoods are close to the city-wide median of
$48,000. Pennsport median house prices are $47,900. In central South Philadelphia, prices are lower, at $34,500, but if we combine this district with the two other majority-white, Italian dominated districts in South Philadelphia, Wharton/Bella Vista and Marconi Plaza/Packer Park, the average median price is $53,450, only slightly higher than the city-wide median, and $5,450 more than the price in Irish Pennsport. The economic disparity between Irish and Italian neighborhoods of the 1970s, then, persists into the present, and will prove to be important in later chapters.

<table>
<thead>
<tr>
<th></th>
<th>Median residential house price $</th>
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<tbody>
<tr>
<td>Mean for Italian districts (*below)</td>
<td>53,450</td>
</tr>
<tr>
<td>Pennsport (Irish)</td>
<td>47,900</td>
</tr>
<tr>
<td>City wide</td>
<td>48,000</td>
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<tr>
<td>*Wharton/Bella Vista</td>
<td>54,900</td>
</tr>
<tr>
<td>*[Central] South Philadelphia</td>
<td>34,500</td>
</tr>
<tr>
<td>*Marconi Plaza/Packer Park</td>
<td>70,950</td>
</tr>
</tbody>
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Table 2.1 Median residential house price for South Philadelphia neighborhoods.

In short, speakers in the present study come from social backgrounds representative of the middle of the Philadelphia socioeconomic spectrum. Importantly, it is these interior social classes that can be expected to produce adolescents with a wide range of differing life ambitions and opportunities. In contrast, members of the peripheral social classes are more constrained: the lower working class are much less likely to go to college, whereas the upper middle and upper classes are more likely to go to college than not. I focus on the classes in between because for these adolescents, placed as they are on the border
between blue collar and white collar careers, the post-high school options are more numerous.

In the next section (2.2) I describe Sacred Heart school, and give a detailed account of the methods I used to locate and interview students. In section 2.3 I provide a sketch of the total number of speakers interviewed, and the number and social distribution of the speakers who were retained for analysis. Social factors such as social class, age and ethnicity are described and operationalized.

2.2 Fieldwork methods in the high school

2.2.1 Characteristics of the school

Sacred Heart is a private, co-educational Catholic high school for grades 9-12 (ages 14-18). Previously a school for girls, it underwent a merger with a boys’ Catholic school in 2004. In the graduating class of 2005, there were 315 students, 79% of students in this class were white, 12% African American and 7% Asian.

The school was built a half-century ago in the heart of South Philadelphia’s Italian district. Four stories high including its basement, it is an L-shaped building with a parking lot nestled in the crook. There are no school grounds to speak of, except for a narrow strip of grass on two sides, one of which separates the school from a block of residences for nuns. It is surrounded by a high mesh fence topped with barbed wire.
There is no yard, and there are no basketball courts, no fields, no outdoor space; in short, nowhere to go and socialize freely during the school day. Students’ casual interactions are confined to the school building itself, and at the beginning and end of the school day, to the steps, or to the street corners outside. Across the narrow streets from the school, on three sides, are well-kept three-storey rowhouses and a few corner stores selling basic groceries and Italian foods. On the fourth side is a community center with its own small concrete yard area, but I never saw students spend any time there.

Most of the school’s first floor is taken up with offices of various kinds, the hall, the gym and the chapel. Classrooms are located on the second and third floors, and in the basement, which also houses the cafeteria, and a room which used to be the school’s TV studio. Lockers line the halls on every floor, and the remaining wall space is given over to messages of spiritual significance, religious statues or images, and at various times of the year, home-made posters advertising a concert or other event, or promoting candidates for the student government elections.
2.2.2 How I met people

I spent two periods of about three months in Sacred Heart, each one a year apart. I generally showed up at the school before the start of the first class, so that I could observe the groups hanging on the street corners and steps. I spent the three middle periods of the school day, which are the lunch periods, in the cafeteria. The rest of the day, I divided my time between a number of locations in the school. I sat in the offices on the first floor, where students collected late notes, were disciplined, saw the nurse, disputed their grades, sought career guidance, or saw a counselor. In the auditorium, students might be rehearsing for a concert or dance show, or attending a school assembly. The auditorium also served as a holding pen for students whose teacher was absent, and I could usually find a seat amongst them and get talking to people. Sometimes I sat on the stairs or in the halls at different times of day and watched students run errands or go to class. From these vantage points, I observed students and wrote field notes.

Mostly I approached students whom I met in the cafeteria, or at school events like the junior prom and a blood drive, and these students in turn introduced me to their friends. To avoid a sample composed of just one or two large friendship networks, I continued to take a random approach during the whole of each fieldwork period. I introduced myself to a new table every now and then at lunch, or I would get talking to people in the school offices or in the auditorium. I hung around after school most days and talked to students who were participating in after school clubs or events, although even here, the constant presence of a teacher made casual conversation difficult. I had more success attending after-school events like the concert, the art show and a softball game.
There were occasional instances of ‘top-down’ networking. At the blood drive, for example, student government members were overseeing proceedings. We chatted, and when I explained that I was interested in language, they suggested I talk to Hayley, an editor of the school newspaper who had recently written about South Philadelphia speech. “You know,” they said. “Like how we say wooder [‘water’] and youse.” One of them introduced me to Hayley, and then I met her colleagues on the newspaper and her friends in the cafeteria.

A rather less successful example of this kind of networking occurred when a member of the school administration, trying to be helpful, set up some interviews with students who had poor disciplinary records. He knew that I was trying to reach a cross section of students, and reasoned that these were students whom I might otherwise not meet. Inevitably, some of the students didn’t show up at the designated time, but a few of those who did became some of my most regular lunch companions. However, not a single one of them allowed me to tape-record them. This conflicting behavior highlighted the ambiguity of my role. It seemed clear that these girls didn’t completely trust me not to share their stories with the school staff. I had to think carefully about how I presented myself, and how I might appear to the girls I was getting to know.

2.2.3 The role of the researcher in the school

2.2.3.1 Reflexivity

In ethnographic research, reflexivity refers to the role of “researchers as agents” (Alim, 2007). Ethnographers have always been conscious of their effect on the populations they
observe, and have problematized this effect as a source of bias or error. Lately, however, 
there has been an understanding that the role of the researcher can itself be the object of 
study (Alim, 2007). Sociolinguists, like any other field researchers, bring their own 
personal histories, power roles, beliefs and identities to their encounters with informants. 
It is crucial that we pay attention not only to how we perceive our informants, but also to 
how they perceive us.

In many ways, my personal characteristics minimized my otherness. I am white, 
female, and was educated from the ages of 5 to 18 in Catholic schools. However, these 
schools were in England, and I am a native speaker of British English. Langacker 
(1973:55; cited in Preston, 1997:312) comments that “British English enjoys special 
favor in the eyes of many Americans”, and this has certainly been confirmed by my 
personal experiences in the US. I was aware that British English is still associated with an 
external standard norm, and anticipated that students would evaluate me as speaking a 
more “correct” variety of English than theirs. Furthermore, Labov (2001:49) observes 
that “‘South Philadelphia’ has become the accepted label for a stereotype of working 
class Philadelphia speech, as ‘Brooklynese’ has for New York City”. Students were likely 
to perceive a particularly wide gulf between the social status of their own speech and that 
of mine. It was possible that they would accommodate to my speech by using their most 
formal styles, making access to their vernacular much more difficult.

I lessened this possibility by conducting group interviews (described in section 
2.2.4), wherever possible and I believe that instances at least of conscious British-
American accommodation were rare. One speaker’s use of the British slang word dodgy 
in an interview is such an example, and constitutes an equally rare instance of a student
identifying my country of origin. My impression was that many students’ knowledge of
and interest in the world beyond Philadelphia, New York and the Jersey Shore was
limited. It was apparent to them that I wasn’t from South Philadelphia, and that in itself
was interesting enough; they didn’t often ask any further questions. Many students
couldn’t believe that I didn’t know much about the neighborhood, and were eager to
share with me their local knowledge of parks, streets, stores, stereotypically South
Philadelphia foods (such as cheesesteaks and Italian water ice) and slang words like
*skeeve* (“to find something repulsive”, as in *I skeeve dandruff*).

Another benefit of being an obvious foreigner, was that I had a license to ask all
sorts of (to the students’ ears) dumb-sounding leading questions, like, “What’s a prom?”. This gained me access to information that an American would be assumed to possess as
part of shared cultural knowledge, and which he or she would have to uncover by
observation alone.

Another problem that I expected to encounter at Sacred Heart was the
misconception that I was aligned with the teachers, and not to be trusted. As a result, it
took me a little time to realize that some people in the Sacred Heart community were
forming quite the opposite impression of me. My age (26-28 at the time) and my youthful
appearance led both students and staff to believe I was a new pupil. This mostly worked
to my advantage, as I didn’t particularly stand out in the crowd. At other times, it created
problems because every now and then a boy would think I was a suitable target for his
advances; this was awkward for everyone. A bigger problem lay in creating the right kind
of rapport with the girls. I was often delighted, in interviews, when they would appear to
be comfortable enough with me to talk about dating, or the best places for underage
drinking at the Jersey Shore. Only later would it turn out that I, and they, had been under a misapprehension. Even though I always made it clear that I was at graduate school, the girls often assumed that I was still in college, and were surprised to learn my age, and that I was married. Indeed, my marital status seemed to be a clearer indicator of adulthood for these South Philadelphia teenagers rather than my calendar age.

Some accepted my seniority equably. One girl, Emma, joked, “How do you look so young? Do you drink a lot of water?”. Others behaved as if I’d somehow deceived them, and became noticeably less relaxed around me. In the second school fieldwork period, a year later, I got better at explaining these things upfront, and I also dressed in smarter clothes with higher-heeled shoes.

2.2.3.2 Status asymmetries

I was very cautious about not being identified by students as a surrogate counselor. Spending a great deal of relatively relaxed time with an older person, in which you are the center of interest and attention, is not a situation many adolescents encounter in their day-to-day lives, as Eckert (1989:34) points out. The sociolinguistic interview, furthermore, is designed to elicit maximally unmonitored speech and as such may create moments in which the interviewee describes exceptionally emotional and dramatic experiences in their lives. Interviews are also almost always confidential. This combination does sometimes cause the interviewee to produce highly personal confidences, which they may afterwards regret having shared.

There were a handful of occasions where girls told me their current or past troubles, and these usually occurred at the end of the interview, when they had long
forgotten that they were being recorded. I did my best to find out if they knew how to get support from counselors, family, friends or even the police. The most commonly reported problem, to my horror, was physical abuse by boyfriends. Besides recommending outside help, I felt it more important than ever to ask these particular girls about their future plans and ambitions, and to praise them and support them. This may be stepping outside the researcher’s role as mere observer, but the principal had told me part way through my fieldwork that she was happy to have me in the school as a ‘role model’. “Girls at this school don’t have many opportunities to meet women your age who are well educated and ambitious,” she said. “I’m glad that they’re getting the chance to meet you.” Although being seen as a role model wasn’t my intention at all, this comment made it clear that I couldn’t escape the fact that I was already more than just an observer in the school. In this case, no reflexive introspection was required.

I made efforts, however, to remain a neutral and unobtrusive figure in the school. In particular, I did my best not to be seen talking to teachers—particularly the school management—and I only entered the faculty room to visit the bathroom or make occasional photocopies. My intent was to position myself as an adult who is outside the day-to-day structure and power hierarchy of the school. I anticipated that students would quickly feel more comfortable talking to someone who was clearly a visitor and not an authority figure.

In fact, as I learned in the course of my first round of fieldwork in 2005, presenting myself to students as outside of the school structure was counterproductive. Students inhabit the lowest rung of a highly ordered school society, in which knowing the rules (whether in order to keep them or break them) is essential to daily survival. Students
need to know exactly where you stand in relation to them in the school hierarchy, so that
they can gauge whether interacting with you is going to be helpful to them or merely get
them into trouble. They need reassurances that you know how the school works. An
adult, like me, who asks them to leave the cafeteria during lunchtime, or to miss a few
minutes of class, must automatically be obeyed out of respect for their age, but is
potentially going to get them in trouble for being late or out of bounds. I discovered that
even students who hated Sacred Heart and showed general disregard for its rules would
worry about the consequences of co-operating with me. It wasn’t clear to them that if
they were asked why they were late for class or why they were not in the cafeteria, it
would be sufficient to say “I was with Suzanne Wagner”. They knew I wasn’t a teacher
but they didn’t know if the teachers knew me. I had been avoiding public interactions
with teachers, after all. Students didn’t want to get into trouble for something over which
they’d had no control. In addition, it was precisely those students who had a record of
lateness or boundary transgressions who had the most to lose by being caught in the
wrong place at the wrong time.

Gradually I changed my methods, and when I returned to Sacred Heart in 2006
my approach was quite different. I found out which school rules it would be in my
interest to know. Without seeming too chummy, and still without spending too much time
in the faculty room, I let myself be seen publicly interacting with teachers. A few times, I
helped out in the special needs classroom. I wore smart pants and heels, so I wouldn’t be
mistaken for a student and would look more reassuringly authoritative to my informants.
I learned that if I made students late for class, I had to write a special “late note” for them
to give to their teacher. This came about when I was conducting a group interview in a
basement room that students usually did not have access to. One of the sophomore
interviewees, Bridget, noticed a pile of paper sheets on the table and fell upon them
gleefully. They were blank late notes. She pocketed quite a few of them before I noticed
and asked her what they were. As a result, I learned the term “late note” and was soon
able to reassure girls up front that I would give them the necessary passes to prove their
whereabouts, rather than wait for them to timidly ask me.

One day I wrote a late note for a girl named Melanie. She left the room where
we’d been talking, then returned and knocked on the door a few seconds later. She’d
started down the hall to the bathroom, and then she had decided it would be prudent to
tell me that she was going there on her way back to class. At first I was surprised that she
thought I’d tell on her; then I realized that she was covering herself, in case a teacher
caught her in the hall and I had to be brought to her defense. After that, whenever I could,
I walked the girls back to their classrooms, so that teachers could see the girls had been
with me.

When I started fieldwork at Sacred Heart, I had assumed it would help my cause
to seem as if I were outside the system, yet crucially somehow on the same level as the
students themselves. It quickly became obvious that despite my deceptively student-like
appearance, none of the students thought of me as a peer, and that behavior I thought of
as casual and friendly was confusingly chummy to them, as well as an indicator that I
didn’t understand my adult place in the school. At first, for example, I was anxious to let
students decide for themselves when they’d like to talk to me, as one would when
arranging, say, to go to the movies with a peer. But most of the students I encountered
seemed more comfortable if I was brisker and more obviously in control, saying, “I’d like
to get together with you tomorrow in third period. Will you be in the cafeteria? I’ll wait for you by the door, okay?”

2.2.4 Group interviews

To minimize the age, power, culture and dialect asymmetries outlined in the previous sections, I convened group interviews whenever I could. Most of the interviews I conducted were with small groups of two or three girls, in which they usually talked as much to each other as to me. Interviews usually terminated with the bell that signaled the end of a period, so the window for interviewing was 30-45 minutes long depending on the current week’s schedule. Given the time needed to gather the group together, ensure that the girls had collected their lunch if necessary, and walk them to the interview room, there were sometimes only 20 minutes available for an interview. On average, however, interviews lasted about 40 minutes.

As Labov, Cohen, Robins and Lewis (1968) found in their seminal study of non-standard (African-American and Puerto-Rican) speakers in Harlem:

> From the group sessions we obtain our best records of the vernacular grammar, as well as a wealth of information on the use of language.

Labov (1972:xxiii)

The Harlem study combined long-term participant observation of youths with formal tests, individual interviews and group sessions. The group setting “was essentially that of a party rather than an interview” (ibid1972:xviii) in which the boys sang, laughed, drank soda, ate and played cards. Re-creating this kind of informality on school grounds was
never going to be possible, but the group interviews I conducted with the girls were nonetheless full of laughter, overlapping talk, gossip and joint story-telling.

2.2.4.1 Advantages of group interviews

An especially significant advantage of group interviews is that they create an environment in which stories can be told collectively. Not everyone, even among mature adults, is a natural story-teller. I found it extremely hard to elicit narratives of personal experience from some of the girls in this study, who were shy about holding the floor for so long. Sometimes they would build momentum, but then get self-conscious and bring the story to an abrupt conclusion:

SW: Has there ever been a time when you’ve really felt afraid?
Jacqueline: Yes.
SW: When was that? What happened?
Jacqueline: When somebody got shot in front of my house. If I wasn’t at work, I would’ve been on the step.
SW: Tell me about it.
Jacqueline: I was working at the [diner] at the time.
And it was eleven o’clock.
And I wasn’t gonna work.
They called me in and I went in.
Eleven o’clock I’m walking home.
And it’s a block from my house.
I’m walking home and the cops are everywhere.
And I’m like, “What the hell’s going on?”
So I go to the house.
They wouldn’t let me in the house.
I’m like, “I live here.”
So…
And then the guy got shot.

Yet in a group interview, even the more reticent girls can contribute to the joint telling of a narrative, as here, in a story about being camp counselors:
Kaitlyn: I had a little Spanish kid. He was so funny. Pedro.
[laughter]
Stacey: Kaitlyn had to speak Spanish to a kid.
Kaitlyn: Pedro was like my little brother. We would go at it.
SW: [laughs] You were fighting the kids?
Kaitlyn: I really was! Well like, he would come in and like, I guess
his mom didn’t teach him, like, right from wrong, really.
Cause he came in and we were over [?] and he comes over
and he said to one kid, he said, “You know what, fuck
you”, like that. And I go, “What did you just say?” And he
kept saying it and kept saying it. And I’m like, “Pedro, stop
saying it.” “What, I only said, fuck you!” I’m like, “Stop!”
Abby: Yeah, me and her had to carry him from his feet and his
hands. “But I only said, fuck you!” That’s what he was
saying, across the street, crying.

Typically, groups had one member who was a superior story-teller, like Kaitlyn in this
group. The more reticent members, Abby and Stacey, were much less likely to initiate
narratives of their own, but were quick to contribute to and build on Kaitlyn’s.

Often I was silent for very long stretches in which the girls would ask each other
questions, or bring each other up to date on news. Topics came up that were new to me,
and which I would not have thought to ask about, such as who planned to ride with whom
in the prom limos. Others, such as group sex, illegal betting and underage drinking,
received more thorough discussion than would have been likely in an individual
interview. Crucially, while a group interview is as much a performance of self-identity as
an individual interview (for in adolescence, judgment by peers is a paramount concern),
the performance cannot extend to falsely presenting oneself in a favorable light, for other
group members will see through the tactic immediately. You cannot claim to be aiming
for a college degree, or claim to be tee-total if your friends know that you plan to drop
out of high school and see you in the local bars on school nights. Similarly, you cannot
claim to be a street-savvy girl who gets into fights and takes drugs at parties, if your friends know you do your homework on the weekends and hardly ever step off your block. The importance of group interviews to this project, then, is that they are evidence of something approximating a speaker’s “baseline” vernacular. As Guy (2004) has pointed out, speakers’ understanding of what is appropriate interview behavior changes as they mature, so that we cannot be entirely sure whether they are, for example, becoming generally more linguistically conservative over time, or simply better at producing formal “interview style”. The presence of peers is a brake on this style-shifting, and thus makes the speech data from the interviews in 2005 and 2006 more directly comparable.

2.2.4.2 Some problems with group interviews

Not all group interviews, of course, conform to the ideal of a casual, highly interactive session. The groups I talked to varied widely. Some were comfortable and relaxed, while others were nervous and hard to draw out. Even in the better sessions, I often found that I had recorded very little speech from some students. With some interviews lasting less than half an hour, and with background information to collect too, there was little time for gossip and stories. And one obvious disadvantage of the better sessions was that there was a great deal of laughter and overlapping talk that made it hard to code the speech data afterwards.

While the presence of peers, as I outlined above, is an excellent brake on speaker pretension, it can also make speakers shy. Certain topics, such as boyfriends, college plans, even family life were clearly difficult for some girls to discuss in front of their
friends. Sometimes girls were awkward because they weren’t especially good friends with the girls in their group. Although I did my best to convene groups of best friends, the logistics of interviewing in the school setting occasionally made this difficult. Some groups did not represent real friends, but girls who were somewhat friendly with each other and who happened to eat lunch together in the same lunch period. Setting up interviews with girls who were best friends involved coordinating their time-tables and negotiating over meeting after school or during rare free periods.

Group interviews are also harder than individual interviews to compare across time and across groups, since they are harder to structure in a consistent fashion. Sometimes, especially if the girls were nervous, I began the interview with the word list, telling the girls that we would “get it out of the way” and making it clear that we would then chat informally. Sometimes, especially if I had talked with the girls on the way to the interview location and we were still chatting, I would give the word list at the end of the interview, so as not to interrupt the flow. Similarly, I sometimes posed demographic questions at the beginning, and sometimes scattered them throughout the interview at relevant times, depending again on the atmosphere prevailing when we entered the room and sat down. In doing so, however, I ran the risk of not collecting every necessary data point for every speaker. Finally, and perhaps most commonly, I met an informant twice: once to record the word list, and once for the interview.

In 2005, the first fieldwork period, five girls met me only in one-to-one interviews, either because they were social marginals with no friends they could bring along, or conversely, because they wanted to demonstrate their independence from their friendship group. A few girls met me both individually and in group interviews. The
individual sessions were more reflective and personal, and provided me with an opportunity to ask lots of demographic background questions too. Casual speech could then be captured in the group session, unhindered by the elicitation of background information.

2.2.5 Relocating and reinterviewing

I returned to Sacred Heart in the spring of 2006 and re-interviewed 20 of the previous year’s 22 Juniors and Sophomores (now seniors and juniors). In 2006, I had less time to spend in the school, but I already knew this time who I needed to interview, so I could afford to use a more targeted approach. Few girls responded to e-mail and telephone requests for a second interview, however, and of these, even fewer showed up at the arranged time and place in school. I learned that the girls’ preferred mode of non co-present interaction was instant messaging (IM). I took to using IM myself to set up interviews and issue gentle reminders, as well as for general chat, and this proved to be an excellent means of setting up second interviews.

I also used IM to contact the Seniors of the previous year (now mostly college freshmen), and re-interviewed 18 of the original 25, this time in my own apartment in downtown Philadelphia. In some cases, co-ordinating college-goers’ winter and spring breaks was difficult, but the girls were generally keen to meet up again. A few new girls were introduced. I conducted only one interview per person (usually a group interview), since almost all the interviews involved weeks of negotiating for a time and day that suited everyone. In Figure 2.4, each circle represents a Senior group interview, with dashed circles representing the second interviews in my apartment. Bolded names were
Juniors at the time of first interview, and italicized names are those of people whom I interviewed only once.

![Diagram of connections between names]

_Jenn, Heather, Shaunna, Ashley, Shannon_.

Figure 2.4 Group interviews with Seniors in 2005 and 2006.

(Dashed circles = second interviews in 2006. Bold = non-Senior. Italics = speaker who was interviewed only once.)

There was very little change to the composition of the Senior groups, and the rate of response to the request for a second interview was high, at 75%. Among the Junior/Sophomore group second interviews, the return rate was higher, at 91%, but the composition of the groups changed a good deal, as can be seen in Figure 2.5. Sometimes
the girls’ school and part-time job schedules made reconvening the same groups too difficult, so a few groups were reconfigured. New girls joined some groups in order to compensate for scheduling difficulties, or to better reflect actual friendships. The structure of the groups interviewed in the 2004-5 school year and in the 2005-6 school year are given in below. Further details on informants’ social networks are given in Chapter 3.

Figure 2.5 Group interviews among Juniors and Sophomores in 2005 and 2006.
(Dashed circles = second interviews in 2006. Bold = Senior. Italics = a speaker who was interviewed only once.)
In the second round school interviews, I also tried whenever practical to interview girls individually, as well as in groups. Generally, I would arrange to meet a girl so that she could record the word list, and then suggest she stay until the end of the class period for a chat. These interviews were usually where I explored their thoughts about what had changed for them in the past year, and what they were planning to do when they graduated. This latter topic particularly tended to be a bit awkward if it came up in the group sessions, for all sorts of reasons. It’s an inherently rather formal topic, and in addition, most girls were embarrassed to talk about their post-graduation plans in front of their friends. In some more ambitious groups, it was shameful to admit that you didn’t have any plans at all, while in others it was the girl who planned to “leave her friends behind” and go off to college who risked humiliation. On the whole, then, I tried to make sure that these topics were covered in the individual interviews, leaving group interviews for much more informal talk.

In the second round non-school interviews with Seniors, girls came to my apartment, where I had drinks and snacks for them. These second interviews tended to be long, lasting from one to three and a half hours. They necessarily incorporated the word list reading and the “formal” questions about life transitions that in school I preferred to restrict to individual interviews. But these interviews were generally relaxed and informal in nature: a consequence of both the non-school setting and the girls’ inevitable increased familiarity with me and with the interview situation. Differences in topic, setting, interlocutor and other factors between the first and second round interviews are summarized in Table 2.2.
Table 2.2 Summary of differences and similarities between 2005 and 2006 interviews, for Seniors and for Juniors/Sophomores.

Panel studies, like this one, should strive to achieve the highest possible level of comparability between interviews across time periods. However, the researcher is necessarily somewhat at the mercy of his or her informants, who in the worst case might be lost from the study, for their own or for external reasons (e.g., later attempts to relocate all 120 informants from the Montreal Cedergren-Sankoff 1971 study were hampered by the obliteration of a working class neighborhood to make way for a highway\(^8\)). The return rate for second interviews in this study was fortunately high, but the locations, topics and co-interviewees did not remain constant in all cases. However, there was a general balance among these external factors. The composition of Junior/Sophomore groups changed, but the location and topics were roughly the same across both rounds of interviews. The composition of the Senior groups did not change, but the location and topics did. An increase in the formality of the topic (college schedules, future career plans) was off-set by an increase in the informality of the setting (sofas and armchairs in a comfortable apartment). Furthermore, since the Senior interviews often involved reunions of friends separated in college, some of the interviews featured gossip between the girls themselves, rather than responses to my questions.
2.2.6 Style and style-shifting

One way to quantify the concepts of formality and familiarity for the purpose of comparing 2005 and 2006 interviews would be to analyze the amount of casual versus careful speech in each set. However, I did not code interviews for style, and I was able to control only very loosely for topic. Controlling for the formality of topics discussed\(^9\) is a well-known method for eliciting an informant’s stylistic repertoire. In the LCV survey of Philadelphia, fieldworkers created and memorized a set of interview "modules", each based on a topic such as Family, Religion, Work, Children's Games and City Services. The use and sometimes the ordering of certain modules, such as the Demography module, were obligatory, ensuring uniformity across all the interviews collected. Others were considered optional. Although fieldworkers adhered to the "Principle of Tangential Shifting" (Labov, 1984:37), allowing informants to choose and elaborate upon topics, they aimed to collect both "careful" and "casual" speech within the interview and so from time to time they directed the conversation.

The distinction between "careful" and "casual" speech has been debated (see eg. Eckert & Rickford, 2001), but was defined in the LCV as follows. "Casual" speech was the least monitored spontaneous speech: comments to third parties either present or on the telephone, speech outside of the interview proper, and excited, animated speech in narratives. Informants were prompted to tell stories by fieldworker questions such as the "danger of death" question (Labov, 1984), which were designed to elicit maximally unmonitored speech. All other speech within the interview was labelled "careful". This distinction, or distinctions like it, have proven to be crucial in analyses of stable variables.
such as (ing), (dh) and (neg), whose non-standard variants have consistently been shown to be positively correlated with casual styles (see Chapter 4).

In the school especially, interviews were often simply continuations of informal conversations begun in the hallway between the cafeteria and the interview site, and were too short to allow much control of topic or variation in style. Loud, boisterous group interviews tended to be loud and boisterous whatever the topic, and quiet, halting interviews were similarly consistent. In groups, furthermore, the interviewer often has little opportunity to change the course of the conversation; in some interviews I was silent for ten or fifteen minutes at a time. Coding for style on the basis of topic could not be done consistently, although in the longer 2006 interviews with the Seniors, stylistic coding would be a more realistic prospect, and could be pursued in further research.

Instead, I assume that the 2006 interviews are generally more informal than the 2005 interviews, due to familiarity of interviewer and (usually) co-interviewees and familiarity with the interview procedure. In the next chapter we will see that some speakers’ use of non-standard (ing) and (dh) decreased in the second interview, despite the expected increase in informality as a result of the familiarity effect.

### 2.3 Speakers and social factors

#### 2.3.1 Pool of informants

I conducted sociolinguistic interviews with girls and women who were attending or had graduated from Sacred Heart during two fieldwork periods: April-August 2005 and
January-June 2006. A total of 67 informants aged 16-26 were interviewed, of whom 66 were female and 1 male.\(^{10}\)

Speakers who were high school students in either or both of 2005 and 2006 constitute roughly two thirds of the total interviewed, while the remaining third were already graduates of the school when first interviewed. In what follows, I refer to the girls according to their status in the first fieldwork period as Sophomores, Seniors, Juniors and Graduates. Thus, those girls who were in the senior class (aged 17-18) in 2005 are referred to as Seniors, those in the junior class (aged 16-17) as Juniors, and those in the sophomore class (aged 15-16) as Sophomores. Women who had already graduated from Sacred Heart in 2004 or earlier are referred to as Graduates. Table 2.3 shows the distribution of interviews across class groups.

<table>
<thead>
<tr>
<th></th>
<th>2004-5 only</th>
<th>2004-5 and 2005-6</th>
<th>2005-6 only</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seniors</td>
<td>7</td>
<td>18</td>
<td>1</td>
<td>26</td>
</tr>
<tr>
<td>Juniors</td>
<td>2</td>
<td>17</td>
<td>6</td>
<td>25</td>
</tr>
<tr>
<td>Sophomores</td>
<td>--</td>
<td>3</td>
<td>--</td>
<td>03</td>
</tr>
<tr>
<td>Graduates</td>
<td>10</td>
<td>2</td>
<td>--</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
<td>40</td>
<td>7</td>
<td>66</td>
</tr>
</tbody>
</table>

Table 2.3 Distribution of all interviews across time and school status

For the purposes of longitudinal analysis, only speakers who were recorded twice were of interest. This straightforwardly removed from further consideration the 26 speakers who were not recorded twice. In addition, only Juniors and Seniors are included in the linguistic analysis, thus excluding the the 3 Sophomores and the re-interviewed Graduates. For the linguistic analysis, I further removed from the pool 2 speakers whose
first language was not English\textsuperscript{11}. In addition, technical problems\textsuperscript{12} led to some blank or poor-quality recordings of certain speakers, so these necessarily could not be analyzed.

The resulting pool of informants available for longitudinal data analysis was composed of 17 Seniors and 15 Juniors, all of whom were interviewed and recorded in both 2004-5 and 2005-6 (Table 2.4):

<table>
<thead>
<tr>
<th></th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seniors</td>
<td>17</td>
</tr>
<tr>
<td>Juniors</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
</tr>
</tbody>
</table>

Table 2.4 Distribution of speakers for longitudinal analysis by school status.

In the analysis of both the stable and the vocalic variables, different but overlapping subsamples will be drawn from this pool. Their composition, and the reasoning behind their selection, will be outlined in Chapter 4 (stable variables) and Chapter 5 (vocalic variables).

2.3.2 Social class

Coding for social class is a notoriously difficult undertaking, and sociolinguists have used a variety of categorization methods (Ash, 2002; Mallinson, 2006; Rickford, 1986). Categorizing minors by social class is even more difficult, and it is a well-known problem in both sociology (see eg. Hughes & Perry-Jenkins, 1996 for a review) and sociolinguistics (Cameron, 2005; Eckert, 2000). Since minors are not yet fully engaged in the socioeconomic activity of their community, it is usual to classify them according to their parents' status.
Eliciting information about parents' education and/or occupation (the most commonly used indicators of social class in Western industrial societies) from minors can be problematic. Even the older teenagers in this study frequently knew little about their parents' educational backgrounds, and even less about what their parents did for a living. Richard Cameron (p.c.) recommends providing informants with a survey sheet that minors can take home and fill out with their parents' aid. Entwistle and Astone (1994) suggest asking for details about the activities associated with the job, since job titles alone can be ambiguous. For example, "secretary" covers a range of jobs with differing statuses, from a data-entry clerk to a company administrator. Asking whether the parent supervises others can be helpful in distinguishing occupational status.

For the present study, I asked participants to fill out a demographic survey sheet, and/or asked them questions in the interview itself about their parents' occupation and education. The survey responses did occasionally clarify descriptions given by the girls in their interviews, but unfortunately, they were more frequently as opaque as the descriptions. Table 2.5 gives some examples of caregivers' occupations (informants were asked to list two caregivers) and their activities. Part A of the table lists inadequate descriptions of caregivers' job activities, and part B lists good descriptions.
Careful study both of the girls' written survey responses and their interview comments generally provided enough data to categorize their parents' occupations, or to make a best guess at such a categorization. Following Conn (2005), I coded parents' occupations using ratings for occupational prestige as presented in Nakao and Treas (1994). The Nakao and Treas scores for each parent's job were then converted to Conn's 6-point scale, given in Table 2.6 below.
<table>
<thead>
<tr>
<th>Occupation index score</th>
<th>Nakao &amp; Treas SEI score</th>
<th>Example occupations (from Sacred Heart parents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>28 to 30</td>
<td>glazier, mailroom clerk, waitress, toll booth attendant</td>
</tr>
<tr>
<td>2</td>
<td>31 to 35</td>
<td>babysitter, cashier, office clerk, bus driver, cook</td>
</tr>
<tr>
<td>3</td>
<td>36 to 41</td>
<td>longshoreman, typesetter, sales clerk, dental assistant, teacher’s aide</td>
</tr>
<tr>
<td>4</td>
<td>42 to 53</td>
<td>secretary, real estate agent, bookkeeper, loan processor</td>
</tr>
<tr>
<td>5</td>
<td>54 to 67</td>
<td>police officer, legal assistant, teacher, convenience store owner, accountant, building contractor</td>
</tr>
<tr>
<td>6</td>
<td>68 to 92</td>
<td>architect</td>
</tr>
</tbody>
</table>

Table 2.6 Index of caregiver occupation.

In his update of the social factors used by the LCV survey of Philadelphia in the 1970s, Conn also developed new scales for education and residence value, given in Table 2.7 and Table 2.8. Scores for categories not found in the LCS panel data are in italics.

<table>
<thead>
<tr>
<th>Education index score</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>grammar/middle school</td>
</tr>
<tr>
<td>2</td>
<td>some high school</td>
</tr>
<tr>
<td>3</td>
<td>high school graduate</td>
</tr>
<tr>
<td>4</td>
<td>some college</td>
</tr>
<tr>
<td>5</td>
<td>college graduate</td>
</tr>
<tr>
<td>6</td>
<td>professional school</td>
</tr>
</tbody>
</table>

Table 2.7 Index of caregiver education.

<table>
<thead>
<tr>
<th>Residence index score</th>
<th>Residence value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$0 - 27,900</td>
</tr>
<tr>
<td>2</td>
<td>$28,000 - $55,900</td>
</tr>
<tr>
<td>3</td>
<td>$56,000 – $82,900</td>
</tr>
<tr>
<td>4</td>
<td>$83,000 – $111,900</td>
</tr>
<tr>
<td>5</td>
<td>$112,000 - $139,000</td>
</tr>
<tr>
<td>6</td>
<td>$140,000 +</td>
</tr>
</tbody>
</table>

Table 2.8 Index of speaker’s residence value.
Residence value refers to the median sale value of the house within its census tract, based on the 2000 US census. Speakers provided their addresses as part of the written survey sheet, or wrote it down for me when we first made contact, so I was able to pinpoint the relevant census tracts easily. Conn's updated scales were based on Philadelphia data available from the 2000 US census. Since no more recent census data was available for the present study, Conn's scales are not only valuable due to the local nature of their categories (especially for residence value) but also their timeliness. I therefore employed all three of Conn's social scales with no changes.

Given the uncertain nature of some of the coding, the three scales of socioeconomic status (SES) were combined to form a composite index. The SES index score assigned to each speaker is the sum of her parents' mean scores for occupation, education and residence value.

Conn’s (2005:41) SEI (socioeconomic index) scale, shown in Table 2.9 was designed, like the LCV scale on which it is based, to differentiate broadly between working, middle and upper classes.

<table>
<thead>
<tr>
<th>OMM Class Category (SEC)</th>
<th>SEI Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>LWC</td>
<td>3-7</td>
</tr>
<tr>
<td>UWC</td>
<td>8-10</td>
</tr>
<tr>
<td>LMC</td>
<td>11-13</td>
</tr>
<tr>
<td>UMC</td>
<td>15-18</td>
</tr>
</tbody>
</table>

Table 2.9 SEI score (adapted from Conn 2005:41 Table 3.4).

However, the Sacred Heart students come overwhelmingly from a lower middle class background (as defined by Conn’s SEI) so a more fine-grained scale was needed to distinguish this otherwise socially homogenous group. Table 2.10 shows Conn’s SEI
scores from 10-15+ in the leftmost column. These were simply numbered, for the purposes of the LCS study, as a 6-point scale of socioeconomic status (SES). To ensure adequate cell sizes, speakers were then recoded from 6 to 3 levels of socioeconomic status, as shown in the right-most column of Table 2.10.

<table>
<thead>
<tr>
<th>Conn (2005) composite index score (SEI)</th>
<th>LCS SES</th>
<th>Recoded SES</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>13</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>14</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>15+</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 2.10 Recoded socioeconomic status (SES).

2.3.3 Age

The age range for the pool is of course extremely narrow, since all the panelists were 17 or 18 years old at the time of first interview. Ideally, we would want to explore the relationship of calendar age to sociolinguistic variation, by comparing, say the 18 year-olds recorded in 2005 with the 18-year-olds recorded in 2006. The friend-of-a-friend methodology that I employed in Sacred Heart, however, does not produce the kind of socially stratified sample in each cohort that would be required for such a comparison. Any generalizations about age that we might draw from the data would be invalidated by the uneven social distribution of the two cohorts. In the linguistic analyses, I refer to the girls who were Seniors in 2005 as Cohort 1, and the girls who were Juniors in 2005 as Cohort 2.
2.3.4 Ethnicity

The panelists in the present study are all white. However, almost every white student in the school that I encountered mentioned their ethnic heritage, and so I explored this social category further in many of the interviews, and asked questions about ethnicity in the written survey. Ethnicity among the whites at Sacred Heart is of such local importance (see Chapter 3) that I included it in my coding scheme.

In the written survey, participants were asked their ethnicity and how they would usually describe themselves. Ethnicities mentioned in the survey included Irish, Italian, German, Polish, English, Armenian and Chinese. In practice, however, Sacred Heart girls tend to align themselves with one of the two dominant ethnic groups, Irish or Italian. Those of mixed heritage rarely described themselves as eg. ‘Irish-Polish’ but as simply Irish, or simply Italian. In cases of speakers who described themselves using hyphenated ethnic terms, I coded them as Irish or Italian using personal judgement. In making these judgements, I referred to the dominant ethnicity of their neighborhood, information from their interviews, and my own observations of their friendship groups.

2.3.5 Summary

We will see in Chapter 3 that ethnicity at Sacred Heart turned out to be the primary local social categorization used by the students themselves, and that it necessitated a good deal of further investigation with respect to its effect on speech and its interaction with social class, local neighborhood and students’ own changing orientations to South Philadelphia. In the current chapter, however, the basic outlines of the school speech community and
the demographics of the speakers have been described. The school environment and the
data collection methods I used there have also been described in detail. The social
categories established in the latter part of the chapter provide the foundation for the
analysis of stable variables (ing) and (dh) presented in Chapter 4.

NOTES

1 At the time of first interview. By the second interview, some girls were 19 years old.
2 http://www.philsch.k12.pa.us/aboutus/, retrieved 11.08.07. Statistics are for the 2005-6
   school year.
3 https://sdp-webprod.phila.k12.pa.us/Onlinedirectory/schools.jsp, retrieved 02.11.05.
4 Sacred Heart is a pseudonym.
5 The neighborhood names I have used in this dissertation are mostly in general
   circulation in Philadelphia, but are used here specifically to describe the
   neighborhood units defined in the NIS Neighborhood Survey
   (http://cml.upenn.edu/nbase) produced by the University of Pennsylvania
   Cartographic Modeling Lab. According to documentation available from the NIS
   neighborhoodBase website: “The 69 neighborhoods used in neighborhoodBase
   divide the City [sic] into small spatially-coherent geographic units that make data
   collection, comparison and analysis statistically meaningful in the context of the
   entire city. These boundaries were developed by the Temple University Social
   Science Data Library based on information gathered from the Philadelphia Police
   Department, the Philadelphia Inquirer and historical research. Neighborhood
   boundaries are co-terminus with 1990 census tract boundaries. The CML
   acknowledges that there are other valid neighborhood names and definitions.
   There is no one accepted neighborhood geography for Philadelphia (or any other
   city). Neighborhood names and boundaries vary greatly depending on when they
   are determined, who is determining them, and the reason for which they are
   determined.”
6 These are private statistics collected for the Archdiocese of Philadelphia, and were
   made available to me by the school principal.
7 One of my teenage nicknames was “Babyface”. I am still regularly asked for ID in bars
   and liquor stores.
8 Thirteen years later, in 1984, 60 speakers from the original study were successfully re-
   interviewed. (Gillian Sankoff, p.c.).
Here I discuss only within-interview methods for controlling style. Obviously style can also be controlled using a variety of other devices, such as reading passages, word lists etc on a continuum of attention paid to speech (see eg. Labov, 1966 for an early discussion).

Data from the male speaker are not included in the linguistic analysis.

Speakers 11 and 12, both Juniors, both recorded twice, for whom the L1 is Chinese and Spanish respectively.

Recordings for each speaker were made using a Sony ECM-717 lavalier microphone connected to a Sony MZ-R700 minidisc recorder. On a few occasions this equipment malfunctioned, and the speaker was not recorded. A more common problem was caused by the relatively loose connection of microphone to unit, and it was easy for a nervous or an animated speaker to tug at the cord and slightly dislocate the microphone, breaking the connection. It was not easy to remedy this problem. I usually asked informants to place the minidisc recorder beneath their chair, where it was out of sight and where nervous hands could not fiddle with it. However, the microphone cord was rather short, and if the speaker moved animatedly in her chair, the microphone cord would be tugged a little way out of its socket. If I asked the speaker to place the minidisc recorder in her lap or on the table in front of her, it was vulnerable to nervous, fiddling hands. Finally, there were occasions when I had only two minidisc recorders to hand, and three interviewees, one of whom was not recorded on an individual microphone, but whose speech was picked up sufficiently clearly on her neighbor's microphone for some linguistic analysis.
Chapter 3   Ethnicity and peer groups

Courtney:    You’re in the Irish part. I’m in the Italian part...
Danielle:   Yeah, we- In school you go by where you’re from.

3.0   Introduction

In this chapter I examine the importance of ethnicity to the white female students of Sacred Heart high school. Ethnicity, or “where you’re from”, emerged as a popular topic of conversation both in the sociolinguistic interviews I conducted, and in my casual encounters with students. In particular, the dominant white ethnic groups, the Italians and the Irish, were described and discussed with some considerable passion. The girls’ persistent emphasis during interviews on ethnic division was hard to ignore, and so in this chapter I examine speaker ethnicity before turning, in chapters 4 and 5, to the real time and synchronic analyses of linguistic variables. Ethnicity will be incorporated into the analysis of vowel variables. Further, since Irish and Italian ethnicity in South Philadelphia is partially defined by residence in a particular neighborhood (“where you’re from”), a detailed description of this social opposition in the high school paves the way for an assessment in chapter 5 of its importance beyond the high school, when some students are living away from South Philadelphia.
In the present chapter, section 3.1 provides a general definition of ethnicity, and discusses the history, territory and ideology of ethnic groups in South Philadelphia. In section 3.2, I relate how teenagers at Sacred Heart locate ethnicity in their discussion of peer groups, and then map and describe those groups in section 3.3.

### 3.1 Ethnicity

#### 3.1.1 What is ethnicity?

Alba (1990:1) refers to ethnicity as “a central theme of the American experience”, yet the meaning of ‘ethnicity’ itself has been contested in the history of the social sciences. Its use in the sense that I am going to outline here did not come about until after the Second World War, and did so in part to avoid the fascist associations that ‘race’ had accumulated (Sollors, 2001:4814). In addition, ‘ethnicity’—unlike ‘race’—allowed ambiguity: it could refer to a characteristic of personal identity that was neither biologically inherent and primordial, nor even linked to place of birth.

Jenkins (2001:4827) has traced the history of the model of ethnicity most widely held by anthropologists today as deriving principally from the post-war, social constructivist approach of Barth (1969). Early anthropological work tended to reinforce the idea of culturally distinct, pre-existing groups and tribes that could be discovered and described. The boundaries between these groups were externally imposed—often defined by researchers on geographic or linguistic grounds—even if these boundaries were not locally meaningful (see Irvine & Gal, 2000). Barth argued that the atomistic nature of these groups should not be taken for granted; that ethnic groups and their relationships to
other ethnic groups are not fixed, but fluid. They are internally complex and can be
dynamically manipulated: invented and reinvented through social interaction.

In Barth’s schema, objective cultural, linguistic or other differences between
groups are not in themselves important: what matters is the actors’ perceptions of these
differences. The focus of anthropologists’ attention should be turned to the social
practices and processes of maintaining and changing ethnic boundaries, since ethnicity is
defined situationally, and can change over time. Boundaries, and ideologies about those
boundaries, are the product of both in-group identification (people in the group are like
‘us’) and out-group categorization (people in a group are seen as ‘them’, as ‘other’). Thus, ethnicity is a complex repertoire of local beliefs at a given point in time about
similarities and differences between groups: bearing in mind that the groups themselves
are the product of these beliefs².

The shift, in anthropology, from a view of ethnicity as pre-determined to a view
of it as socially constructed, finds a parallel in the sociological study of ethnicity in
America. Broadly speaking, sociology has shifted from a view of ethnicity defined by
homeland and ancestry to a view of ethnicity as complex, shifting and sociopsychological
(Sollors, 2001:4813). In the United States, this shift has occurred in part as a response to
changes in the self-perceptions of European ethnic groups³, such as Jews, Italians,
Germans, Poles and the Irish, in America. Thanks to generational distance from the
homeland, home culture and home language, as well as extensive intermarriage, members
of these groups can no longer be neatly defined, whether by social scientists or by the
claimants of these ethnicities, on the basis of ancestry alone.
That sociologists still discuss ethnic categories at all for the Irish, the Germans et al demonstrates that one of their early assumptions about ethnicity has not been borne out. Until the 1960s and 1970s, sociologists tended to assume that by the third generation, immigrant ethnics would have fully integrated into the dominant Anglo-Protestant society: that is, that ethnic differences would disappear in the melting pot. And to some extent, differences have indeed disappeared. Veltman (1983) shows that although second generations in the US have usually been bilingual, by the third generation active use of the ethnic language has been reduced to a few words and phrases. Social stratification of ethnic groups by occupation and education has been reduced, so that for these relatively long-established European ethnicities, there is little or no difference in terms of what sociologists call ‘life chances’, either across ethnic groups, or in comparison with the originally dominant Anglo group (Alba, 1990:7-8). A good deal of ethnic mixing has occurred via marriage, too, which has further contributed to a decline of ethnic differences. Alba (1985) found that in the 1980 US census, of the 99% of non-Hispanic whites who married other non-Hispanic whites, only a quarter married partners from exactly the same ethnic background.

Despite the levelling out of linguistic and economic differences between European ethnic groups in the US, however, individuals in the third, fourth and later generations still use ethnic labels to refer to themselves. One regularly hears them say, for example, “I’m Polish-American” or more usually “I’m Polish”. Why? Alba (1990:4) argues that for these generations, ethnicity is a part of their identity, rather than simply a ‘structural’ consequence of their family history:
In an era when ethnicity is increasingly voluntary among whites, it can continue to play an important social role only insofar as people choose to act in ethnic ways. Such choices hinge on personally meaningful identities.

Researchers carrying out studies in which ethnicity is a relevant local social variable, then, must tread with caution. Firstly, national perspectives on ethnic groups might not make sense at the local level, or at the local level at that particular point in time. Irish ethnicity is probably more important to Irish-Americans in Boston than in Boulder; on the other hand, being Irish-American in Boston today is probably less important than it was a hundred years ago. In the case of locally defined (but non-ethnic) adolescent peer groups, when Eckert (2000) widened her study of Belten High to include other Detroit area schools, she found that the distinction between Jocks and Burnouts was sometimes more and sometimes less meaningful depending on the socioeconomic diversity of the student body.

Secondly, ethnicity, like the adolescent social order, is defined not only by the individual but imposed and/or ratified externally by the community. As Labov (1972b) found on Martha's Vineyard, the macro-level ethnic group term "Indian" (Native American) was claimed by the indigenous-descended people who lived at Gay Head, but as one Anglo-identifying Vineyder told him with scepticism, "Show me a Gay Head Indian and I'd like to see one" (Labov, 1972b:35). More generally, a mixed-race individual can choose to describe herself as "white", but this could conflict with the community's view of her as black. At the time of writing, there is an ongoing national debate over whether the mixed-race and self-identified black US presidential candidate Barack Obama "counts" as a black American. An African-American acquaintance of
mine argued that Obama and his family had not experienced the "struggle" of being slave-descended, and so could not truly be African-American. While this sort of case-by-case disagreement might not be important in a large-scale study, for example, it could have enormous implications in a small-scale sociolinguistic study.

In the rest of this section, I describe how my own perceptions of ethnicity at Sacred Heart changed from the ‘structural’ to the sociopsychological, and how I had to overturn my own expectation that ethnic differences in the third and fourth generation would be minimal or non-existent.

3.1.2 The relevance of immigrant heritage for young people

Given that South Philadelphia's Irish and Italian communities currently co-exist in a prospering part of the city, without the fierce competition for jobs, territory and even parishioners that once maintained ethnic boundaries, I asked myself why anyone would need to self-identify as Irish or Italian in South Philadelphia today.

For a teenager in search of a viable local identity, there would seem to be little incentive to look beyond the city, or indeed the neighborhood. South Philadelphians are notoriously proud of their "South Philly" identity, which happens to encompass a mish-mash of specifically Italian cultural components, such as mom-and-pop pizza shops and home-style Italian restaurants; Irish components such as the Mummers' parades; and universal blue-collar symbols such as diners, rowhouses and even the (Italian) movie hero, Rocky Balboa, all of which are claimed to some extent by Irish and Italian residents alike. The district has retained its strong sense of uniqueness despite (or perhaps because of) the migrations to the suburbs. The local newspaper, The South Philly Review,
regularly publishes the reminiscences of older residents, highlights local traditions and foods, and even writes the occasional celebration of South Philadelphia speech (such as “Tawk a da Town”, March 2004). While some of these articles are overtly targeted at new residents, my impression was that they are also intended to reinforce local pride in South Philadelphia’s otherness. With such a strongly defined local identity, why should students at Sacred Heart want to invest in their ethnic identities, too?

Yet it soon became clear to me that the South Philadelphia identity is not monolithic, and that by asking Sacred Heart students questions about "typical South Philly" people, places and practices, I was erasing more specifically local differences. Students regularly volunteered information about their ethnic background, and initially I assumed they were doing this because they knew I was interested in South Philadelphia's history and culture. I responded by asking students if they had grown up speaking Italian, eating Italian food or participating in the Irish tradition of Mummers’ clubs. I anticipated that for many of my teenaged informants, this would be merely an opportunity to talk about their cultural heritage and the practices of their parents or grandparents, and for me, a straightforward part of gathering demographic information. Students also quite often told me about their parents' and grandparents' experiences of growing up Irish or Italian, and about the sometimes violent conflicts that ensued between the two groups.

In my first week at Sacred Heart, Adriana, a teacher, told me about a fight that had taken place outside the school the day before. She supposed that it involved students from an Irish neighborhood (Second Street) and an Italian neighborhood (Sixteenth Street):
It was kids from another school. [...] A trade school. [...] And they came after our kids but we believe probably it has to do with neighborhood rivals. Like from kids that stay on Second Street and kids that stay in Sixteenth Street.

She went on:

It’s like a- you know- That rivalry of that neighborhood versus- those two neighborhoods has been going on for- My mom was like, “That went on from when I was younger”. My dad was like- My dad was a police officer and now he does nothing, and he was like, “Yeah, I used to help them go beat up the kids from Second Street”.

For a while I put away this information, since I understood it as having more to do with the past than the present. No ethnic labels were used, and the dispute was about urban territories, not (at least not explicitly) about ethnic groups. But the street names - Second Street, Thirtieth Street, Sixteenth Street, Eighteenth Street - came up frequently in conjunction with references to Irish and Italian peer groups in the school. (The first two, Second and Thirtieth Streets, are Irish neighborhoods; the latter two are Italian.) While street names, or more frequently “corners”, were invoked when talking about gangs such as “1J8” (18th and Johnson) or “1W2” (12th and Wharton), they were also used as short hand for networks of friends of the same ethnicity. Indeed, they were the only explicitly non-ethnic peer labels I ever heard, with the exception of “smart girls” for a group of seniors who were taking AP classes together. Far more frequently heard were “Second Streeters”\(^4\), “Eighteenth Streeters” or “Thirtieth Streeters”, or the more explicitly ethnic “Irish girls” and “Italian girls”.

I wasn't prepared\(^5\) for the extent to which ethnicity shaped the students' perceptions of themselves and others. Almost all the students I interacted with were three or four generations removed from their immigrant ancestors, and only one (Lucia) spoke
Italian fluently. Yet their behavior should not have been totally surprising, since they continue to live their lives in close-knit family- and neighborhood-based networks in which people of the same ethnic background continually interact: on the street, in the stores, at church and school. This lifestyle is typical of urban working-class populations in America’s large Midwestern and Eastern cities. Gans (1979:3) remarks that:

…much of the contemporary behavior described as ethnic strikes me as working class behavior, which differs only slightly among various ethnic groups, and then largely because of variations in the structure of opportunities open to people in America…In other words, ethnicity is largely a working-class style.

It follows that if ethnicity is a class-linked phenomenon, people from working-class backgrounds⁶ ought to have strong ethnic identities, as seems to be the case here.

All the same, invoking ethnic differences would seem to provide little immediate benefit to female students within the school environment. As I said earlier, these girls are not competing for jobs, housing or religious advantage with the opposing ethnic group, and they do not need to rely on members of their ethnic group for support in a new and unfamiliar world, as their grandparents and great-grandparents did. The incentives for maintaining the Irish-Italian boundary in school are not obvious, unless we consider the role of ethnicity in the development of what Alba (1990:4), called “personally meaningful identities”.

Phinney (2001:4821) remarks that adolescence, being a ‘critical period’ for identity development⁷, may involve a search for an individual’s ethnic identity. The process can lead to “exaggerated claims about their group” and to “constructive and creative actions aimed at confirming the value and legitimacy of one’s group”. This
happens to be a description of the search for ethnic identity, but it could apply equally well to an adolescent’s alignment with peer social categories in high school. Adolescents may identify passionately and partisanly with others who share their taste in music or in extracurricular activities. In other words, if adolescents in general make use of symbolic resources (apparel, music, practices, language, use of social space) to construct identities and signal affiliations, then ethnicity provides another set of symbols available for them to use.

It was Gans (1979) who introduced the term ‘symbolic ethnicity’ to refer to third-plus generation ethnics’ expression of their ethnic identity:

Symbolic ethnicity…does not require functioning groups or networks; feelings of identity can be developed by allegiances to symbolic groups that never meet, or to collectivities that meet only occasionally… [S]ymbolic ethnicity does not need to be a practiced culture, but the latter persists only to supply symbols to the former.

Gans (1979:12)

Gans argues in the excerpt above that it is sufficient to feel ethnic, even if one is isolated in time and space from other members of one’s ethnic community. Individuals can choose when and how to express their ethnicity symbolically: through occasional attendance at an Irish Catholic church or a Jewish synagogue, through consumption of pierogies or pasta, or through travel to an ancestral country. For the increasing number of people of mixed ethnic heritage in the USA, symbolic ethnicity is also a way of expressing allegiance to multiple ethnic groups. This classical definition of symbolic ethnicity applies to the Sacred Heart students, who may exercise their symbolic allegiance to their ethnic heritage through their participation in Irish traditions such as the
Mummers’ Parades mentioned earlier, or Italian traditions such as street serenades (of young women by their fiancés) or the Seven Fishes dinner at Christmastime. At the same time, however, it is clear that identification with Italian and Irish ethnicity is not (as in Gans’s definition) an occasional practice involving traditional cultural symbols. Rather, it is a persistent feature of the social landscape of the school, and it is the concept of ethnicity itself that provides a symbolic resource for talking about differences that are really expressions of class and gender.

In the next section, I describe the division of the Sacred Heart landscape into groups based on “where you’re from”: that is, groups based on neighborhood territories that are perceived to be coterminous with Irish and Italian ethnicities. I then describe two iconic ethnic subgroups, before turning to a more general discussion of the intersection of ethnicity with other social factors.

3.2 Ethnicity in the high school setting

3.2.1 “Where you’re from”

The concept of “where you’re from”, frequently invoked in discussions of ethnicity, concerns not ancestral countries (none of the girls were “from” Ireland or Italy) but sections of South Philadelphia, as well as some other factors relating to origin, such as the grade school a girl had attended. “Where you’re from” could be used to exclude individuals and groups from the dominant white division of Irish and Italian ethnicities. African-Americans and Asians hailed from unfamiliar neighborhoods and had not attended the same grade schools as the white students, so could not be fit into the scheme of “where
you’re from”. “Where do they come from?”, a girl named Melissa asked in an interview, addressing no-one in particular. “It’s as if they’re just passing through.” Since African-Americans and Asians were not members of the dominant Irish and Italian neighborhood networks, Melissa concluded that they were transitory and thus not placeable in the local social order.

The extent to which non-white students were ignored by the white students in the construction of Irish-Italian contrastiveness was most clearly demonstrated during a controlled discussion of Sacred Heart peer groups during a group session in the second round of fieldwork. A group of five girls who had been seniors in the first round of fieldwork and were still close friends, completed a collaborative “pile sort task” (Matthews, 2006). Photographs of every member of their senior class, copied from their senior yearbook, were placed in a pile on the table. I asked the girls to sort the photographs into groups using any criteria they chose – an exercise that they undertook with loud enthusiasm. Non-white students were immediately sorted into two groups (“Blacks” and “Asians”) and thus removed from further consideration. The invisibility of non-white students to these girls was striking:

[Unidentified]: Where are all the athletes?
Angela: I have no idea who they are! They’re black and I don’t know them.

There was no apparent animosity involved in the sidelining of non-white minorities. The white girls simply paid them no attention, and said they had very little interaction with
them. When I asked, in interviews or in the cafeteria, if white girls ever hung out with black or Asian girls, I would be told that “all the black [or Asian] girls hang out together”. Certainly in the cafeteria, African American students tended to cluster in groups on their own tables, and the same was true for the Asian girls, with only one or two exceptions.

Indeed, what happened in the first few minutes of the pile sort task illustrates not only the side-lining of non-whites, but the immediate construction of Irish- and Italian-based groups.

Suzanne: It would really help me if you, like, sorted them. Into groups. Big groups, small groups.
Julia: Oh, we can do that. Shall we work in teams?
Hayley: All the Asians go together! [laughter]
Julia: All right, I need the Two Streeters!

The next overtly named group was non-ethnic: “smart kids”, and then a group defined by a central figure: “Here, here, we put Georgia here! Here’s Georgia’s group.” Yet by the end of the task, 9 of the 20 groups were defined by race, neighborhood or grade school: all instantiations of ethnicity, or “where you’re from”. While a student may of course claim an Irish or Italian identity on the basis of family history, cuisine and culture, these are rarely relevant in the school-based carving-up of social space. Rather, membership in one of the two opposed ethnic categories is legitimized by a combination of biological heritage, residence in an ethnic neighborhood, attendance at an Irish- or Italian-dominant grade school, past affiliation with a local street corner or park, and present social network. That ethnic group membership at Sacred Heart can be defined on several
parameters means that although white ethnicity is binary (Irish or Italian), within those categories one can be more or less Irish, or more or less Italian.

Danielle, for example, was from an Irish family and grew up on Second Street, but she attended an Italian grade school outside her neighborhood and so had many Italian friends. She claimed, however, that neighborhood residence is the primary determinant of category membership, and thus “if Second Street ever gets into a fight, even though… I don’t even stay there, I’d have to be part of Second Street side”. Certainly it is generally understood at Sacred Heart that at such defining moments -- which include not only participating in fights, but choosing co-riders in one’s prom limo and sharing hotel rooms at the Jersey shore – neighborhood people have to stick together. But at all other times, Danielle’s claim to Irish membership is suspect. In the pile sort task, she was described as “someone who’s popular” but tellingly also as “someone who doesn’t really belong”. The sorters argued about whether to place her in a Second Street group, or whether to create a special group for Second Streeters who don’t actually hang out there.

In a further insight into the workings of the social order, participants in the sorting task made clear distinctions between people who were popular in Irish networks and people who were popular in Italian networks. The dramatic reshuffling of the peer social order, as experienced by the incoming students at a typical suburban high school such as Belten High (Eckert, 1989), is constrained at Sacred Heart by the continuing strength of neighborhood-based ties and the relative social segregation of neighborhood groups. There is no single set of “populars” (Moore, 2003). Nor is there, for that matter, a meaningful
continuum of most school-oriented to least school-oriented students: no Jock-Burnout scale. Instead, the continuum ranges from the most iconically Irish to the most iconically Italian, with everyone else in between.

3.2.2 Social stereotypes

In this section, I focus on the most iconically Irish and Italian students, and describe them using a combination of my own observations, and comments made to me on and off tape.

Irish subgroups comprise the Second Streeters and Thirtieth Streeters. The latter reside in what was once a principally Irish territory, but is now a majority black section of South Philadelphia. They are thus a smaller group than the Second Streeters, with whom they have historically often come into conflict, and who (at least within the school) still regard Thirtieth Streeters with some suspicion. That Thirtieth Streeters are considered a distinct subgroup was made clear by Courtney, an Italian, who said:

Like see, that’s where problems come in too, cause I had a um, Thirtieth Street boyfriend. [...] And after a year, you could just tell the personalities were so different. The whole vibe of different corners are so different. You can get along, but I think you stay together too long, any corner is gonna argue. Like I can’t- I couldn’t- I was with him for too long, and I could not take his personality, his Thirtieth Street personality—

Italian subgroups seemed to be principally internally defined by grade school attendance and/or residence: the pile sort participants identified a St Mary’s crowd and a Resurrection crowd, for instance. However, the social characteristics associated with “being Irish” or “being Italian” were crystallized in popular conceptions of the
oppositional subgroups that seemed most salient to each side: a certain kind of Italian female to the Irish, and “Second Streeters” to the Italians.

3.2.2.1 Italians

Suzanne: Who do you think that like- let’s see- I mean, you- you probably have Italian friends, right?
Alison: No, I have Italian friends, not dago friends. There’s a difference.
Mona: There’s a difference.
Suzanne: What’s the difference?
Alison: Like dagos are just straight up aaghh… and Italians are like just normal, like us…

In calling this group simply “Italians”, I am avoiding the most pervasive label used by Irish girls: “dago”. This racial epithet came up frequently in interviews and in casual conversations. Derived from the name Diego as a derogatory racial term for Hispanics, it is applied in the school by the Irish (and occasionally by Italians themselves) to a subgroup of Italian girls best described, as here, as “Italian princesses”. Although I found the use of “dago” shocking, neither Irish nor Italian girls seemed particularly aware of how offensive this word was to outsiders. That the Irish girls do understand it to be at best impolite was made clear when I asked Abby and Kaitlyn in their second interview if they’d had Italian friends in high school:
Abby: Like I made friends with a lot of them. But you still get that like [makes disgusted sound].
Kaitlyn: “You dago.”
Abby: Yeah, dago. I call them all the time.
Kaitlyn: Yeah. Like I have a really bad habit of like doing it up at school.
Abby: So do I.
Kaitlyn: But like I would do it with like girls I know. And like I know one of these days someone’s gonna be like, “Wow, I’m a dago.”
Abby: Oh, well I have- The lady I work with at the- The younger lady I work with is like real Italian. Like she’s from-like she’s like one of them like I’m not gonna say rich, but she’s like got- her like her-family’s-got-money kind of Italian. And they call her ‘dago’ all the time and she gets so mad. So I’m just like waiting for me to like slip ‘dago’ [laughs].

In this excerpt, Kaitlyn defends the term as something she “would use with girls I know”.

In particular social contexts then, ‘dago’ can be used by the girls teasingly rather than offensively. In fact, Italians generally responded with shrugs if I asked them how they felt about Irish girls using this word, and when asked how they might respond, they were at a loss:

Mia: Well, if they try to act Italian we call them ‘medagons’9 …What do we normally call them? There's a word that we call them.
Chelsea: Tommy said-
Mia: Harps!
Chelsea: Oh yeah. Harps.
Suzanne: Harps?
Chelsea: Yeah. Um. I forget. Tommy said something like 'mick'. I don't know. Is that-?
Suzanne: A mick?
Mia: A mick? Yeah, I've heard that.
Chelsea: Oh yeah, maybe. A mick.
Mia: A mick. I think I’ve heard of that.
Chelsea: Mi- I don't know what it means, though.

In general, it seemed that ethnic slurs like these had been bleached of their original force, or even, with the exception of “dago”, faded from use among these young people. Even the less offensive expected terms were missing from the discussions of ethnicity. Some South Philadelphia Italian women, for example, use the term ‘South Philly Lily’—often with affectionate bemusement—to refer to girls and women of what seems to be the same subset of the Italian community as the ‘princesses’ (Gillian Sankoff, p.c.), but I never heard this term used by the teenaged Sacred Heart girls. The stereotype of the kind of Italian girl who was particularly ridiculed by the Irish was someone who is excessively feminine, excessively made-up, excessively showy with her money (recall Abby’s comment: “her-family’s-got-money kind of Italian”):

Sarah: Well, sometimes like, you have the Italian princesses. They are dagos.
Melanie: The stuck-up ones who wear the too much lip liner, and put their--
Sarah: And all the gold jewelry and all the perfect bags and everything perfect.
Melanie: And their mothers go tanning and they look like they were in a toaster.10

Because of the appearance and behavior of these girls, for the Irish the label “Italian” has come to index prissiness, competition for male attention, and an exaggerated preoccupation with one’s appearance. Mona said the Italians “think their poop don’t
“stink”, while her friend Alison claimed that “they get each others’ boyfriends”. Melanie said that they always have to have the latest outfit, while Abby, Kaitlyn and Stacey rolled around laughing as they demonstrated for me how Italians self-consciously pose for photographs, with puffed out breasts and pouting lips. In my own observations at the school, and in the surrounding streets, it was certainly hard to miss the classic Italian walk: chest out, rear out, one forearm raised to accommodate a purse over the wrist, and small, dainty steps. Of course, I observed girls in both ethnic groups wearing lipstick or lip gloss (though not necessarily in school: this was certainly more characteristic of Italian students); I saw girls from both Irish and Italian backgrounds who sported expensive Coach-style handbags and who went to the tanning salon and nail parlor. The concept of excess is key, however, and Italian girls were more consistently made-up and styled than their Irish counterparts. The Italian girls themselves rarely made observations about the Irish girls, noting merely that the Irish are “so into that they’re Irish”: something we will see confirmed in a later section.

3.2.2.2 Second Streeters

Second Street was more frequently mentioned than any other South Philadelphia neighborhood. Unlike ‘dago’, however, it was a label used with pride by Second Streeters themselves. To call yourself a Second Streeter is to identify oneself with a peer group tradition of informality, lack of interest in one’s appearance, and a straightforward approach to the world. In the exchange below, Abby and Kaitlyn explicitly contrast their frankness and independence with the prissiness and helplessness of the Italians. Boys
admire them, they argue, for they are all that Italians are not.

Kaitlyn: Even like the boys that like came are like, “Irish girls are so much easier than like--”
Abby: Yeah. They know it’s a lot easier. Cause we’re so much more laid-back. Like, we don’t care.
Kaitlyn: Yeah. Like, they’re like, “Youse are all easy-going.” He’s like, “The dogos, we have to be like, Oh my god, like you wanna do this, go here, you can’t do this for yourself.” He’s like, “Youse, like, girls like sports and everything!”
Abby: Yeah! Or when we like- burp and stuff…

Second Streeters in the school did pay less attention to their looks. Tubes of lipgloss made fewer appearances at their cafeteria tables than at those of the Italians, and their hair was more likely to look unbrushed. Second Street girls often just looked more ungainly: they sat with arms and legs akimbo, and lumbered down the hallways. Their demeanour revealed a surprising lack of self-consciousness, and contrasted starkly with the tripping demeanour of the Italians.

Many Second Street girls play competitive sports, although relatively few of them play for the school. The center of adolescent life on Second Street is an indoor basketball court that also serves as a community hall. Abby played for a neighborhood basketball team there, but even those who do not play can be found hanging around inside on the benches, or sitting on the steps outside. I went one evening to watch her team play, as it included three or four of the girls I had interviewed. Adults spend time at the hall too, watching the games or socializing with each other. Second Street social life, as in much of Philadelphia’s older neighborhoods, is multigenerational, densely networked and public. Unlike Italian neighborhoods, however, it provides many additional opportunities for socializing through its clusters of neighborhood bars and its Mummers clubs. Over
and over again, Second Streeters told me, “The good thing about Second Street is there’s a bar on every corner.” Since everyone knows everyone, an underage Second Street drinker can regularly frequent these bars, often with the knowledge and blessing of their parents, particularly if the barman is a friend or relative, or better yet, a teacher.

Danielle: It’s a sin. Like, we really are. We do. We all drink and I know the teachers think we don’t, but we do.
Courtney: Yes they do! What, are you nuts? Go talk to Mr. Conerney.
Danielle: Mr. Conerney works at a bar. He don’t care. He’s Irish.

In many ways, Second Streeters resemble Burnouts (Eckert, 1989). They mostly come from blue collar families, they have friendships that cross age-groups and that are rooted in local network ties, and they spend more time hanging out in their neighborhood than at the mall or the movie theater. Yet unlike the suburban Burnouts, this urban peer group does not reject the school’s authority, but embraces it in order to replicate Second Street within the school environment. During my two years at Sacred Heart, the presidents of the sophomore, junior and senior classes were all Second Street girls. The networking skills they develop on Second Street are effectively employed to win power.

They tend to be popular with both boys and girls. They are also popular with teachers, not least because they are used to cultivating adult contacts (such as the local barman, or their basketball coach) and to interacting with adults respectfully yet confidently. In their opinion, the Italians are either overly deferential or childishly rebellious. One Italian I got to know had to go to correctional summer school every year: not for any serious infraction, but because she’d run up dozens of demerits for answering back, being late or violating the dress code. Second Streeters, meanwhile, gain some
control over the system by working with it. Kerry, a class president, explained how she made herself known to everyone before using her high profile to exert some influence on the administration:

My sister was a senior when I came here, um, when I was a freshman. So, like, I don’t want to say it like, paved the way but it made me like, like um get more involved. Like, knowing teachers more, they’re like, “Oh you’re little Deborah O’Shea.” That’s my sister’s name. “You’re little Deborah O’Shea” and stuff like that. And that got me to know the staff more. And like, girls help their little sister, like “This is my sister”. That’s pretty much how I started out. But then I evolved into so much more, I guess. [laughs] […] But like I- I just, like, think Student Government is a good way to get your point across. Or maybe the best.

Yet Second Streeters expend little energy on other school-based activities. School yearbook, school newspaper, cheerleading, sports, language clubs --- none of these pay the dividends of involvement with school government, such as access to popular teachers, and power over school-internal processes, rather than the school’s external reputation. None of them plan to live away from Second Street for longer than is necessary, so they spend their time in the high school honing the skills that will increase their standing in the neighborhood. Second Streeters anticipate that their ties to Second Street will always be stronger than their ties to any institution.

3.2.3 Ethnicity, social class and gender

Ethnicity is relevant in a community only insofar as community members are engaged in the construction and reproduction of ideologies of difference. In their discussion of linguistic and disciplinary boundaries Susan Gal and Judith Irvine (Gal & Irvine, 1995;
Irvine & Gal, 2000) propose three semiotic processes for boundary-making: *erasure, recursivity* and *iconicity*. These processes describe how ideologies about linguistic differences are a part of beliefs about social differences between groups, but we will turn to the relationship between linguistic and ethnic boundaries later in this chapter. For the moment, I will use them to outline a general scheme for Sacred Heart students’ construction of ethnic difference, and turn to a discussion of linguistic correlates of ethnicity later in this section.

### 3.2.3.1 Erasure

*Erasure* is the process by which certain people, groups or linguistic features are made invisible, because they do not fit the ideological scheme (Gal & Irvine, 1995:974). In the case of white Sacred Heart students, the local social world is divided into two contrastive ethnic categories labeled “Irish” and “Italian”. In order for this binary opposition to work at all, white students must effectively erase from their conception of the peer social order any non-white peer groups, as well as minority white ethnic labels such as German, Armenian and Polish. Gal and Irvine (1995:974) note that:

> Facts that are inconsistent with the ideological scheme may go unnoticed or get explained away. So, for example, a social group, or a language, may be imagined as homogenous, its internal variation disregarded.

The homogenization of variation within the white population was frequently demonstrated in interviews, when girls would describe themselves as eg. “Half-Irish, half-Polish” but stress that they lived in the Irish part of town and had Irish friends. Similarly,
on the demographic questionnaires, the girls were asked to describe their ethnic background in detail, but then state the label they would be most likely to use when talking to others. No-one picked “Polish”. As for non-white students, they were, as we have seen, completely excluded from the white ethnic schema.

3.2.3.2 Recursivity

*Recursivity* “involves the projection of an opposition, salient at some level of relationship, onto some other level” (Gal & Irvine, 1995:974). One of the most striking aspects of Sacred Heart students’ construction of ethnicity is the projection of a male-female opposition onto a female population. Bucholtz (1995:364) notes that "any performance of ethnicity is always linked to gender", and this may well be true at Sacred Heart. Irish girls, in the local ideological scheme, display stereotypically masculine characteristics such as toughness and non-conformity. In the following excerpt, we see the Irish girls through the critical eyes of two Italian girls:

Natalie: Was [the fight] girls or boys?
Monica: Boys. And the Second Street girls were in it too.
Natalie: See! Like that, like that they wanted to fight. We would like never really like-
Monica: We don’t do that. They’re like-
Natalie: We wouldn’t act like that. Like, I don’t know. […]
Monica: They act like they’re tough, they’re hard.
Natalie: Yeah.
Monica: They think we’re scared of them.

Italian girls display more stereotypically feminine characteristics such as self-consciousness and flirtatiousness. The opposition between male and female is projected
to a further level in the Irish girls’ subdivision of the Italian girls into “regular” Italians and “dagos”, with the latter being scorned as excessively girly and prissy by the Irish girls, who find them ridiculous. For example, Alison told me, in a disparaging tone, that “Italian girls drink wine coolers and stuff like that.”

It was Natalie, an Italian, however, who made the most explicitly gendered contrast between Irish girls and Italian girls:

We just act like girls and we don’t act like men and try to like fight everybody all the time.

In turn, the gendered characteristics that Sacred Heart students attribute to members of their own and the opposing group are proxies for a social class opposition. There is a real, though relatively small, economic disparity between the Irish and the Italians. Property in the Second Street neighborhood is on average cheaper than property in Italian neighborhoods. Italians dominate the new and expensive Packer Park neighborhood, while Irish families still linger in the poor, African-American dominated Thirtieth Street neighborhood. This socioeconomic imbalance may account for the much greater frequency of critical Irish comments about Italians, rather than vice versa. Yet Irish girls were unsure about whether the Italians really were richer than them, or perhaps unwilling to concede that they could be:

Melanie: And they have like that skin all wrinkly from the tanning salon and the lip lining up to here with the-the fake bags –
Sarah: No. They’re real bags – well, they say they’re real but they’re really fake.
All the same, there is clearly an additional projection of cultural class-based differences on to the Irish-Italian dichotomy, with Irish girls associated with working class culture, and the Italians with middle class culture. Irish girls drink beer, for example, while Italian girls drink wine coolers. Irish girls fight; Italian girls maintain a middle-class sense of what is ‘proper’ female behavior. Furthermore, the Irish girls’ sense of socioeconomic inferiority, and by extension, relative powerlessness, may account for their greater preoccupation with ethnicity in the first place. Natalie complained:

We’re all Italian but we don’t show it, like “Oh, we’re Italian.” Like the Irish people are so into that they’re Irish.

The primacy of ethnicity for Irish girls was apparent in their choice of screen names. Screen names (aliases used for instant messaging, blog comments, social networking sites such as MySpace, and other modes of internet communication) provide the individual with an opportunity either to fully disguise their own name (eg. LonelyGirl, or to incorporate their name into another, invented alias (eg. Martin134geek). Screen names are highly individual and customizable, and thus constitute another symbolic resource for Sacred Heart students to use in expressing their alignment with peer groups.

I made a habit of collecting instant messenger screen names, since IM-ing the girls proved to be a more successful method of communicating than phoning or e-mailing when setting up times to meet. Of the 39 screen-names I collected, 14 were from self-identified Italian girls, and 17 from self-identified Irish. As many as 12 of the 17 Irish girls incorporated an ethnic marker, usually a variation on “Two Street”, such as mary2st, or combination of Irish and a name or noun, such as IrishStar. Only 2 of the Italian girls,
however, opted to incorporate ethnic markers like *bella* into their screen-names. There are no equivalents of the Irish screen-names: no *maria18st*, or *ItalianGirl*, although these would have been just as easily created.

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>N IM names</th>
<th>N ethnic names</th>
<th>% ethnic names</th>
</tr>
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<td>12</td>
<td>71</td>
</tr>
<tr>
<td>Italian</td>
<td>14</td>
<td>02</td>
<td>14</td>
</tr>
<tr>
<td>Other</td>
<td>08</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Total</td>
<td>39</td>
<td>14</td>
<td>36</td>
</tr>
</tbody>
</table>

Table 3.1 Instant messenger screen names, by ethnicity

In addition, Irish girls considered themselves to be in a numerical minority in the school:

Lynne: We’re actually strange. We’re like the Irish people in the school. There’s not a lot of us…

Claire: Yeah, it’s a lot of Italians.

The Irish girls’ perception of themselves as minority group was reinforced by the wider local conceptualization of South Philadelphia as ‘Italian’; this is presumably because of the more numerous, visible indicators of Italian culture in the neighborhood, such as the Italian market and the many Italian restaurants, and perhaps because of Rocky, its most famous fictional—and Italian—son. Furthermore, the physical marginalization of the Irish to the edges of South Philadelphia, and the dwindling of their territory in the 30th Street neighborhood, have led to the increased iconic status of Second Street as a rallying point: an Irish island in a perceived sea of Italians. This leads us neatly to Irvine and Gal’s third semiotic process: iconicity.
3.2.3.3 Iconicity

Iconicity, in Gal and Irvine’s scheme, describes the relationship between a linguistic sign and social groups or images with which it is linked. “Linguistic practices that index social groups or activities appear to be iconic representations of them—as if a linguistic feature somehow depicted or displayed a group’s inherent nature or essence” (Gal & Irvine, 1995:973). Irvine and Gal (2000:40) give as an example the click phonemes of Bantu languages. Early European observers compared them to animal and bird sounds, thereby suggesting that clicks were iconic of the subhuman or bestial nature of the Bantu speakers themselves.

At Sacred Heart, there was no overt discussion of any linguistic features associated with Irish or Italian ethnicity, and thus no iconic representations of the two groups in the original sense proposed by Gal and Irvine. Other, non-linguistic practices appeared instead to be iconic representations of the “essence” of Italian-ness or Irish-ness, particularly where these coincided with the recursive projection of gender already mentioned. The Italian girls’ heavy application of lipgloss, for example, was interpreted by the Irish girls as representative of Italians’ essential superficiality and girliness. The Irish girls’ involvement in sports was interpreted by the Italians as representative of their general competitiveness and their aggressive nature. ‘Second Street’, as mentioned above, is an icon of Irishness; to describe oneself as “from Second Street” or as a “Second Streeter” is not simply to make statement about where one lives. It is a statement of allegiance to an ethnic group, and with it to all the cultural practices of the group. The street, too, is considered to embody in its physical properties some of the essential components of Irishness. It was regularly described as having “a bar on every corner”:
something that points directly to the Irish view of the bar as a welcoming and hospitable place for friends and visitors alike, or to Irish dissolution and lax morals, depending on one’s orientation. It was a place where everyone knew everyone else (several times girls explained to me the concept of the “Second Street cousin”, or child of a family friend), which points either to the value the Irish place on strong social networks, or to in-breeding and overfamiliarity, again depending on your orientation. Thus, if a student chose to say she was from Second Street—rather than from, say, ‘Pennsport’ or ‘Third and Mifflin’—she was implying that she was like Second Street in some important way, and the same would be true if the Second Street label had been applied to her by someone else.

All three semiotic processes—erasure, recursivity and iconicity—serve to reinforce in the school the boundary between Italian and Irish ethnic groups, as well as local ideologies about the contrasts between these groups. Long-held local ideologies of ethnic difference, that a generation or two ago were rooted in much more clearly defined occupational, linguistic and territorial differences, have been re-fashioned in the adolescent setting of the high school to account for subtler differences between peer groups.

3.2.4 Ethnicity and linguistic difference

The processes of ethnic differentiation described by Irvine and Gal were, as I explained earlier, intended to account for the role of linguistic differences in creating and perpetuating ethnic boundaries. For the third- and fourth-generation (or more) students at Sacred Heart, language is not available for this purpose, since non-English speaking
ancestors are typically four or more generations in the past. Indeed, Irish immigrants to the US would have been bilingual in English from the mid-19th century onwards, due to the imposition of English as the language of instruction in schools (T. Labov, 1998: 370). I did not encounter any overtly expressed beliefs about the way Italian or Irish girls talk, either. The fact that there are no ideologies of linguistic difference between the two groups does not mean that linguistic differences do not exist, however.

The persistence of linguistic differences between formerly segregated groups who live in close proximity to one another is known from studies of dialectology, where long-vanished ancient political boundaries survive as isoglosses (Hall, 2005). Fought (2002:452) underlines the importance of ideological difference in the maintenance of linguistic boundaries:

Even where, on the surface, extensive inter-ethnic contact and integration might seem to be the norm, the study of linguistic variation reveals the underlying preservation and expression of identities divided along the lines of ethnicity.

Where this situation has been studied in sociolinguistics, and where ethnicity has been shown to play an important, continuing role in linguistic differences (such as Dubois & Horvath, 1999; Fought, 2003; Mendoza-Denton, 2007) the speech community has usually been undergoing language shift from an L1 to L2 English. This process, at least for the Sacred Heart generation in South Philadelphia, is largely complete. The girls have at most very limited access to contemporary models of English as L2 that contain interference features from an L1. These models can serve, in e.g. the Chicano English or Cajun English-speaking community, as a pole in the oppositions being constructed by
young people, but not in the community under investigation here. Do Sacred Heart students, therefore, sound alike regardless of ethnicity? Or have ethnic boundaries allowed linguistic differences to persist, long after community language shift has occurred? These questions will be taken up in Chapter 5. In the next section, we turn to a description of the major social networks in the junior and senior class at Sacred Heart: networks that are almost entirely defined by ethnic affiliation.

### 3.3 Social networks in the school

Figure 3.1 shows social network connections for 64 Sacred Heart students who were seniors, juniors and sophomores at the time of first interview\(^\text{13}\). One node, Katy, was a recent graduate of Sacred Heart\(^\text{14}\). Not all of the speakers represented in the diagram were interviewed on tape; they appear because I had regular interactions with them in the cafeteria or during extra-curricular activities, and got to know them and their friends.

The connecting lines between students represent network density, not multiplexity. The line directions, as indicated by arrows, are an outcome of the software settings, and are not meaningful in interpreting the diagram. Lines were drawn between speakers if any one or more of the following applied: a) co-interviewee, b) named as a friend - even if non-reciprocal - verbally or on demographic survey sheet, c) sat together at lunch, d) team-mates on a sports team. I ignored familial relationships, such as cousins, on the grounds that some speakers were explicitly positive about their cousins, while others were explicitly negative and rejected contact with their cousins in school.

Naturally, the picture can only represent a partial view of the Sacred Heart social networks as they were made available to me. Some speakers appear isolated merely
because I never got to know their friends. Others appear in isolation or on the edge of networks because the majority of their friends were not students at Sacred Heart, but neighborhood or grade school friends, or friends of their boyfriend.

Figure 3.1 Known social network connections at Sacred Heart, 2005, for 64 students. (Second Streeters = square nodes; all others = round nodes).

Nonetheless, if we abstract from individuals in the network, a general picture emerges of three distinctly different kinds of friendship group. The first kind is based on "where you're from", and to highlight this, I have given the members of the Second Street (Irish) community nodes that are square. I designated as a “Second Streeter” any girl who lived in the neighborhood and/or spent most of her out-of-school time there, or who self-identified as a Second Streeter. Thus not all Irish girls are represented as Second Streeters, and not all Second Streeters are Irish, although the members of this latter
subcategory include only one or two girls. All other speakers, including Italians, neutrals (to be discussed below) and the Irish Thirtieth Streeters, are represented by round nodes.

The Second Streeters dominate the left side of the diagram, with certain central figures, such as Abby, Kerry and Melanie providing the principal links to the other social groups. The only Second Streeter not directly connected to another Second Streeter is Danielle, who is also the girl referred to in the pile sort task as someone who "doesn't really belong", because she doesn't hang out in her own neighborhood. Abby and Kerry, a senior and junior respectively, are members of the school council and are well-liked beyond Second Street; Melanie is a junior from Southwest Philadelphia who socializes on Second Street because her own neighborhood is crime-ridden and home to few Sacred Heart students.

Figure 3.2 Principal peer groups observed at Sacred Heart.
In Figure 3.2, the node clusters are labeled loosely by peer group. In the upper left-hand corner are the senior Second Streeters (Cohort 1), while the junior Second Streeters (Cohort 2) are in the lower left-hand corner. Girls in these clusters spend time together at school, mostly grew up in the Second Street neighborhood, went to the same grade schools, and hang out in the same community centers and bars (thanks to a permissive neighborhood culture in which everyone seems to be related to a bartender) and in each others' houses. The most iconically Irish network in the school, they are described in more detail in the next section.

On the other side of the ethnic divide, the Italians in this diagram are clustered in two groups. A small group of Italians appears in the lower central region of the diagram, but these are individuals with weak connections to each other. They each mentioned having other friends in their interviews, but these were students whom I never met or got to know. As a result, they look more like social isolates than they actually are. But their in-group ties are less interesting in any case than their outgroup ties to the Irish.

In contrast, the Italian cluster in the lower right is a tightly connected group of junior and senior Italians whom I could not directly connect to any other peer groups, although there must certainly have been some points of contact. In the middle of the diagram, for example, is a group of "smart" juniors who took honors and AP classes together, and since the majority of these are Italian, it's possible that they are linked to the other, more exclusively Italian group. This latter group was usually very open and friendly in the cafeteria, but very unwilling to be interviewed on tape. Members of the group seemed to be perpetually experiencing some kind of personal drama, whether with
boyfriends or with other girls, and I was never sure, whether I'd find them laughing loudly together, or sunk into uncooperative gloom. They were visually quite distinctive with their heavy make-up and darker skin (and fondness for tanning salons), and they seemed to me to best represent the "typical" Italian girls described by Sacred Heart students, as I relate in the next section.

Not quite beyond the ethnic divide, but less engaged in maintaining ethnic boundaries were the "neutral" groups. These included the junior "smart girls", who had formed a close friendship group based on shared classes and, to some extent, college aspirations. In the top right hand corner, the senior "smart" girls were more ethnically mixed than their junior counterparts, and for them, too, ethnicity and neighborhood background were clearly secondary to the ties they'd formed through their time together in the classroom.

At the top of the diagram is a fragment of a cluster based on a shared non-curricular activity. Deirdra and Veronica were volunteer altar servers at the school’s Catholic masses, and were introduced to me by the school priest. Both girls had quite separate, if rather small, groups of friends (whom I did not meet), but knew each other well from years of serving together. The altar server group, which comprised about a half dozen male and female students, particularly struck me as a collection of individuals who would normally not have interacted with each other.

There were undoubtedly many other such activity-based clusters, but they were rarely mentioned by students. The girls who carried out the pile-sort task alluded to only one: "Weird band/music people". I have only represented a few such ties here, where they seemed to go beyond shared participation in a school-based group and be more like
friendship ties. The link between Hayley, Joanna and some of the sports-playing Second Streeters is one of these.

3.4 Summary

Irish and Italian heritage is a major talking point for white students at Sacred Heart, whose friendship groups reflect the shared ethnic background of members. Long-standing neighborhood- and grade school-based friendships are maintained in the high school because of a persistent ideology of difference. Thus graduates of Irish grade schools are more likely to socialize with other Irish students than with Italian students, despite the fact that both sides interact daily with one another at their present school. That it is ethnicity, and not simply grade school history, that motivates this divide, is apparent in the alignment of students from non-South Philadelphia grade schools to one major group or another. Melanie, for example, has gravitated to an Irish friendship network, even though she is only half-Irish, and went to a grade school in South West Philadelphia, where, she told me, “it isn’t like South Philly with the groups”.

In the next two chapters, I will draw samples of students for linguistic analysis, using the broad social categories (Cohort, SES and Ethnicity) that I described in Chapter 2 to create balance. Intersecting influences of social class, ethnicity and peer groups will be considered, and illuminated with selected individual cases from the panel of 22 speakers for stable variable analysis in Chapter 4. In the Chapter 5 vowel analysis, brief sketches of each panelist will given. The sketches will include the panelists’ post-high school transitions, so that any changes in vowel production can be examined with reference to speakers’ social trajectories.
1 In fact, this approach can be traced back further still, to the work of Max Weber ([1922], 1968), who argued that ethnicity is determined by group members’ “subjective belief in their common descent”, rather than any biological relationship. See Alba (1990:16) for a discussion.

2 I have described this model of ethnicity with reference to Barth (1969) because his ideas are essentially congruent with current assumptions in anthropology about ethnicity. But for an outline of some criticisms of Barth, see Jenkins (2001:4825-4826).

3 In this section, I use “European ethnic groups” to refer to those who participated in the major waves of immigration in the 19th to early 20th century: principally those from northern and western Europe (e.g. the Irish, Scandinavians and Germans) and later from southern and eastern Europe (e.g. the Poles, Greeks, Italians, Armenians and Russians), as well as Jews from both eastern and western Europe. I do not include in this definition more recent arrivals such as Bosnians and Albanians, or non-European immigrants such as Asians and Africans.

4 Or much less commonly, “Two Streeters”.

5 As a white European who grew up in white, working-to-middle-class Britain, ethnicity was undoubtedly a concept I found unfamiliar anyway.

6 Here I am somewhat conflating “working class” with “urban”, since many girls are from families of working-class origin that have been upwardly socially mobile for the last generation or two. However, they are still embedded in some of the traditionally working class behaviors of the inner city, and their families have not chosen to move to the more affluent suburbs of New Jersey.

7 Eckert (2004:362) argues that ‘identity work’ is not limited to the adolescent life stage; the processes of identity formation and identity shift are simply more intense.

8 The names of these schools are pseudonymous.

9 ‘Medagon’ has its source in the phonetic approximation of American by Italian L1 speakers of English in the first immigrant generation, and has been passed on with this pronunciation to subsequent generations.

10 Jacqueline, an Italian girl who styled herself as a cynical observer, commented that “a skirt hiked up to the rear end”, regularly applied make-up, styled hair and a tan were characteristic of Sacred Heart girls in general. Among Italians, however, the coolest girls were “the most tan ones. I’m serious.”

11 Drinking wine, rather than beer, carries the implication of pretentiousness and a claim to non-working class identity.

12 Two students (one Italian, one Irish), on two separate occasions, gave an impersonation of an Italian woman. Both used rapid intonational rises and falls, and affrication and devoicing of alveolar stops. The effect was one of prissiness, not dissimilar to the stereotype of the speech of gay men. However, these linguistic features fall out of the scope of this dissertation.
The social network diagrams in this section were created using Agna v.2.1 (www.geocities.com/imbenta/agna), a free downloadable application for social network analysis and sociometry.

Other alumnae whom I talked to or interviewed are not represented here.
Chapter 4  Stable variables (ing) and (dh)

Kaitlyn: Yeah, right, [my accent]’s probably got worse. Stacy’s probably got better cause she talks different now.
Stacy: I talk different?
Abby: Yeah, Stacy’s much- Stacy’s definitely changed.

4.0  Introduction

This chapter explores the external constraints on the use of variants of stable sociolinguistic variables (ing) and (dh) in the speech of 22 Sacred Heart students over real time. While (ing) and (dh) are two of the best-studied English sociolinguistic variables (see section 4.1 below), neither have been examined in a study of linguistic change across the individual lifespan. I show that students from higher socioeconomic backgrounds reduced their use of non-standard variants in the second interview, despite the students’ increased familiarity with me, the interviewer. Students from lower socioeconomic backgrounds tended to remain the same across the two interviews.

4.1  Stable sociolinguistic variables

For English, a small number of linguistic features have been shown to demonstrate stable variation across anglophone communities and across time. They include:

- simplification of word-final consonant clusters in eg. kept, most, fold, known as (-t, -d) deletion (eg. Guy, 1980; Labov, 1997; Tagliamonte & Temple, 2005)
- non-standard or “multiple” negation, as in *He don’t know nothing* (Eckert, 2000; Labov, 1972a; Wolfram, 1969)
- alternation of velar and alveolar nasal in (ing), in eg. *running, ceiling, morning* (see section 4.2 below);
- (th) and (dh), the alternation of stops and fricatives for word-initial and/or word-medial interdental fricatives in eg. *these, those, think, brother* (see section 4.3 below).

This list of stable sociolinguistic variables is not exhaustive, and there are certainly others, such as *them-those* alternation (Macek, 1995, 1997; Tagliamonte, 2006), or “h-dropping” (Bell & Holmes, 1992; Kerswill, Torgersen, & Fox, 2005; Kerswill & Williams, 2000; Trudgill, 1978) which have not been as widely studied but which are found in many non-standard dialects of English within or across national boundaries. Crucially, stable variables pattern alike with respect to their social evaluation\(^1\), with one variant consistently and often overtly considered to be standard, while the other is considered to be non-standard. Thus there is usually a positive correlation between non-standard variants, lower social class, and casual style. I discuss the relationship of stable variables to social factors in greater detail in sections 4.2, 4.3 and 4.4 of this chapter.

Stable sociolinguistic variables are usually subject to age-grading, with a peak in non-standard use among adolescents (Labov, 2001:110-112). These stable variables provide a symbolic resource for generation after generation of young people to align themselves with non-conforming reference groups. Like their parents, young people’s frequency of non-standard use is constrained by external factors such as social class, but
it is generally higher than that of any other age group in the community. A peak in mid adolescence drops off in late adolescence and young adulthood, as the speaker leaves secondary education and engages in full socioeconomic membership of the community.

In this chapter I examine two stable variables: (ing) and (dh). The focus of investigation is their use in real time by a panel of 22 Sacred Heart informants. The aim is firstly to establish that girls who attend Sacred Heart are not sociolinguistically anomalous, ie. that they behave similarly to other English speakers with respect to these two variables. A second and more important aim is to observe whether the girls’ use of non-standard variants of (ing) and (dh) decreases between 2005 and 2006. Given the expected peak in mid-adolescence (Labov, 2001), we can hypothesize that these girls, who are in late adolescence (aged 17-19), will show a decline in frequency of non-standard variants over the one-year period. Although apparent time studies of stable variables have been interpreted as age-grading, there is no real time confirmation of this interpretation in the literature. The current study will show whether the decline from the mid-adolescent peak really exists in the lives of individual speakers.

I begin with a linguistic and historical description of each variable in sections 4.2 and 4.3. Section 4.4 describes the social factors that have been found to constrain (ing) and (dh), with an account of the relevant sociolinguistic literature. Coding methodology for the present study is given in section 4.5, and the results of longitudinal analysis of (ing) and (dh) use are presented in section 4.6. Section 4.7 provides a conclusion.
4.2 (ing)

The main variants of unstressed\(^2\) (ing) in eg. *running, going to, ceiling* etc. are apical [\(\text{in}\)] and velar [\(\text{I}\eta\)]. Other variants exist, and differ in their distribution from speech community to speech community. For example, tense [\(\text{in}\)] has been noted in the English of Ottawa (Woods, 1978), Britain (Houston, 1985) and in the English of US Hispanic communities (eg. Fought, 2003; Mendoza-Denton, 1997). Other variants include [\(\text{I}\eta\eta\)] eg. in some northern British varieties (Clark, 2004) and [\(\text{I}\eta\text{k}\)] (eg. in Australia, (eg. Shopen, 1978). The variable (ing) has been studied in many locations in the US (Anshen, 1969; Campbell-Kibler, 2006; Cofer, 1972; Fischer, 1958; Labov, 2006; Mock, 1979; Wolfram & Christian, 1976 inter alia), across varieties in Great Britain (Douglas-Cowie, 1978; Houston, 1985; Kingsmore, 1995; Reid, 1978; Trudgill, 1978), and in Canada (Tagliamonte, 2004 ; Woods, 1978), in Australia (Wald & Shopen, 1981), New Zealand (Bell & Holmes, 1992) and South Africa (Gordon & Sudbury, 2002). In what follows, I report on research findings for the two principal variants, [\(\text{I}\eta\)] and [\(\text{in}\)].

The alternation of velar and alveolar variants of the suffix (ing) has a stable pattern found in most dialects of English. It reflects a historical morphological alternation between the verbal noun suffix *-ing* and the present participle suffix *-inde* (Houston, 1985). A reflex of the originally independent grammatical categories is found in the greater probability of velar [\(\text{I}\eta\)] being used with nominal words than with verbal words,
or as Houston describes it: "categorical variation in the past being preserved as noncategorical variation in the present." (ibid. p.287)

4.3 (dh)

There are two principal variants of (dh): a voiced interdental fricative [ð] and a voiced alveolar or dental stop [d]. Affricates were reported in New York (Labov, 2006:55) and in Philadelphia (Labov, 2001:78), as well as a more marginal zero variant in Philadelphia only. In some speech communities, notably in African-American English and some British varieties, a voiced labiovelar [v] is found. The (dh) variable to be investigated in this chapter is restricted to variation in word-initial position only. The alternation of voiceless interdental fricative [θ] and alveolar or dental stop [t], labeled (th) in Labov’s New York City study (Labov, 2006), was not found in speech of the Sacred Heart informants, and consequently is not included in the analysis to follow.

Alternation in (dh) is believed to have existed since the earliest history of English. Dubois and Horvath (1998:247) cite Dobson’s (1957:948) evidence in some English dialects of feather-feader and mother-moter alternation, as well as hypercorrect cannoth for cannot in the 16th and 17th centuries. Labov (2006:235-238) gives a summary of the dialectological evidence for (dh) and its voiceless counterpart (th), much of which in his estimation underestimated the frequency of stops. He writes, “It is very hard to accept the notion that a high level of stops and affricates in New York City speech is a new development.” (ibid:236).
4.4 Social constraints on (ing) and (dh)

4.4.1 General social evaluation of (ing) and (dh)

The original grammatically conditioned variation between [ŋ] and [n] has acquired social value, with the standard, formal velar variant opposed to the non-standard, informal apical variant. Labov (2001:90) suggests that the best conclusion to be drawn from the sometimes conflicting observations of historical commentators is that this social opposition has existed at least since the 19th century, and more likely for one or two centuries before that.

Stop variants of (dh) are socially stigmatized in all of the speech communities in which they have been studied to date, with subjective evaluation tests and self-report tests supporting this view. For example, the job suitability test conducted in Harlem (Labov et al. 1968) found that the fewer standard (dh) variants produced by a speaker, the lower he or she was rated on a scale of suitability for a newsreading job.

4.4.2 Social and stylistic correlates of (ing) and (dh)

In the earliest quantitative study of sociolinguistic variation of (ing), Fischer (1958) found stylistic and social variation in children aged 3 to 10 years. Girls used more [ŋ] than boys, and "model" (or school oriented) boys used more [ŋ] than "typical" boys. The stylistic variation of one ten-year-old boy was also studied. He used mostly [ŋ] in a formal situation and mostly [n] in a less formal interview.
In his study of the Lower East Side, Labov (2006) carried out a more detailed investigation of stylistic differences. He made a three-way comparison of "casual" and "careful" speech in interviews with speech in reading tasks. Use of the standard variants of (ing) and (dh) increased along a cline of formality, from reading, to careful to casual style. Contrary to Fischer’s findings, men were not found to use more [ın] than women, except in the lower class (Labov, 2006:257). For (dh), Labov did not explicitly report on gender differences, but an adaptation of his Figure 9.11 (ibid p.235) is given as Table 4.1 here. The calculation of the (dh) index is based on the sum of three coding values: 0 for the fricative, 1 for affricates, and 2 for stops, which are then averaged and multiplied by 100. The lower the index score, the more standard the speaker’s pronunciation of (dh). Cutting Labov’s original 5-point index scale in half at index value 40, we see that 61% of the female speakers have index values of 40 or lower, while the same percentage of men have index values of 41 or higher. Women are therefore more likely to use standard variants of (dh) than men.

<table>
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<td>N = 43/71</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td>41+</td>
<td>N = 30/49</td>
<td>N = 28/71</td>
</tr>
<tr>
<td></td>
<td>[61%]</td>
<td>[39%]</td>
</tr>
<tr>
<td>Total speaker N = 120</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.1 (dh) by gender on the Lower East Side (adapted from Labov 1966:235)

Fischer’s characterization of the “model” and “typical” boy may be considered to partially reflect social class differences: an independent variable also investigated by
Labov in New York. The variable (ing) was found to reveal fine social class stratification, with an increase in standard variants for every step up on the social class scale (ibid:259); (dh), on the other hand, displayed a gap between working class and middle class informants (ibid:156).

In the LCV survey of Philadelphia (Labov, 2001), logistic regression analysis of the use of (ing) and (dh) by 120 socially stratified informants was performed. Formal styles promoted use of the [ɪŋ] and [ð] variants, while casual styles favored [ɪŋ] and [d]. Socioeconomic status had the greatest effect on (ing) and (dh) production, especially in careful speech. Older speakers were more likely to use standard [ɪŋ] and [ð] than younger speakers (see the section 4.4.3 on “Age” below). Women used more of the standard variant of each variable than men.

The association of stable variables with multiple correlates of social meaning is discussed in Campbell-Kibler (2005b; 2006). Campbell-Kibler carried out matched-guise experiments with college students in California and North Carolina, and via a web-based survey. Based on data collected from open-ended and multiple choice questions (which tested eg. listeners’ perception of speaker age, region of origin, education, intelligence, casualness, attitude, goal, often in combined categories such as “Valley Girl” and “Stoner”), Campbell-Kibler demonstrated that listeners' social evaluation of (ing) varies depending on the age, region and perceived social class of the speaker. However, she found that standard [ɪŋ] is robustly evaluated as "educated", regardless of other interacting factors.
Another experiment involving controlled tokens of (ing) was carried out by Labov et al. (2006). This study revisited the familiar “job suitability” test used in Labov’s studies of New York City, Harlem and Philadelphia (Labov, 2001:207; 2006:269), in which listeners are asked to evaluate a speaker’s relative suitability for a job or range of jobs, based on a portion of audio. The taped recordings contained differing proportions of [1ŋ] and [1n]. Listeners’ sensitivity to the frequency of non-standard [1n] was highest at low proportions; above 10% [1n], all the speaker recordings were downgraded. In other words, very few tokens of [1n] are required to trigger negative social judgement.

To summarize, the stable variables (ing) and (dh) have consistently been found to have socially stigmatized variants that are used at a higher frequency by men and lower social classes. The frequency of non-standard variants increases for all social classes and ethnicities, and for both sexes, in casual styles. Importantly for this study, variants of (ing) and (dh) are perceived by listeners as indicators of speaker’s education and social class. In the next section, we consider the age-appropriateness of the variants in terms of production and perception.

4.4.3 Age

The relationship of speaker age to (ing) and (dh) use has been not been much investigated in comparison with other social constraints on these variables. Trudgill (1974), for example, examines the co-variation of (ing) with class, style and gender, but gives no information on the age distribution, despite the fact that a sixth of his informants are aged 10 to 20 years old.
In her work on children’s acquisition of stable variables Roberts (1994) found that the relevant linguistic constraints, such as the morphologically conditioned alternation of (ing), are learned before the social and stylistic constraints. Roberts’ 3-4 year olds had not yet learned the external constraints on (ing), for example, and she notes that:

Such findings do not seem surprising if one assumes that social constraints are learned by interacting with a variety of people, in a variety of situations, speaking on a variety of topics. The opportunities for these types of interactions would naturally increase as one grew older.

(Roberts, 1994:139)

This conclusion is supported by the Milton Keynes study of 4-, 8- and 12-year-olds conducted by Kerswill and Williams (2000). For socially stereotyped variables such as h-dropping, the older children were more skilled at style-shifting than the younger children, leading Kerswill and Williams to conclude that “children slowly gain sociolinguistic maturity in a manner that involves a gradual increase in the number of styles that are perceived and treated in an adult way.” (Kerswill & Williams, 2000:105 cited in; Smith, Durham, & Fortune, 2007:66). In a study of 8-19 year old’s (N=58) perception and production of two socially stigmatized variables in New York, (r) and (th), Labov (1964:484) found that there was a gradual increase with age in conformity to adult norms.

Smith, Durham and Fortune (2007) propose that any contradictory findings with respect to children’s acquisition of overtly socially evaluated variation cannot fully be accounted for by the type of variable (morphosyntactic versus lexical, for example), the complexity of its conditioning, or the age of the child. Instead, the social significance of
the variable is most important, namely that “a guiding principle in the acquisition of (socio)linguistic competence may lie in whether the variable is a marker or an indicator (Labov, 1994:78) in the community in which the child is growing up.” (Smith et al., 2007:91). They examined how children aged 2;10 to 3;6 in northeast Scotland acquired two sociolinguistic variables. For one of these, the use of –s in third person plural contexts (eg. *My trousers is falling down*), children acquired complex grammatical constraints, but no stylistic variation. For the other, in which the local monophthongal [u:] (eg. *hoose* [hu:s]) alternates with the more prestigious standard diphthongal pronunciation, children did acquire stylistic variation. Smith et al. point out that caregiver input had a significant effect only for the vowel variable, and that this variable is more locally salient (a marker) than the –s variable (an indicator). Caregivers consequently did not modify their linguistic behavior for –s as much as they did for the *hoose* variable when speaking to their children.

However children learn what is sociolinguistically appropriate in formal and informal contexts, it seems clear that caregiver influence wanes during the later childhood and pre-teen years (Kerswill & Williams, 2000). Young people begin to manipulate their knowledge of sociolinguistic norms by acting in sociolinguistically *inappropriate* ways – at least in the judgement of the wider community. By the teenage years, they are using non-standard variants at a greater rate than any other members of their speech community. With respect to (ing) and (dh), apparent time studies have found that younger speakers tend to use more non-standard variants than older speakers (eg. Labov, 2001, 2006; Woods, 1978). Shuy et al (1968) and Houston (1985) both report that the highest frequency of [ıŋ] is present in the speech of their adolescent age group: ages
10-17 in Houston’s British data, and ages 13-17 in Shuy et al.’s Detroit data. “[N]o serious difference” (Labov, 2006:257) was found for (ing) between adults older than 20 and those younger than 20 in the Lower East Side study, but for (dh), younger speakers tended to have higher rates of non-standard variants.

Given the long-term stable status of (ing) and (dh), this distribution seems to reflect age-grading rather than community change. As Roberts argues, social constraints are best learned through the gradual broadening of one’s interactional experiences, and until teenagers fully engage with wider society through work or college, they are (just like pre-schoolers) more limited than older members of the community in their knowledge and control of stable variables. Their high rate of use of non-standard variants acts as an adolescent symbol of non-conformity, from which they withdraw upon entry into college or the labor force.

Both Sankoff (2004) and Chambers (1995) apply this interpretation to data from Macaulay’s (1977) apparent time study of Glasgow. Macaulay found that rate of use of non-standard glottal stop for medial and final [t] was greater than 65% for all 10-year-olds. Among 15 year olds, however, the upper class and upper middle class speakers had enormously reduced their use of glottal stops. These speakers are represented as groups 1 and 2a in Figure 4.1 below.
Figure 4.1 Percentage of glottal variants of /t/ used by female speakers in Glasgow
Adapted from Macaulay 1977 (Sankoff, 2006). 1 = professional; 2a = white collar; 2b = skilled manual; 3 = semi- and unskilled manual.

Sankoff (2005:103) suggests that the apparent time findings are a reflection of real time age-grading:

Apparently the middle and upper class adolescents withdraw from glottal stop as they get ready to enter the labor force, where the standard pronunciation is more appropriate to their social position.

Some of the most detailed data on age-graded (ing) and (dh) use is to be found in the LCV. Speakers in this study ranged in age from 8 to over 60, allowing for a breakdown of ages by decades, with extra subdivisions for those under 20. The under 20 group was split into ages 8-12, 13-16 and 17-19. These are the categories that Labov (2001:101)
justifies as corresponding to modern American life stages, which we examined in Chapter One. The LCV found an adolescent peak for (dh), (ing) and negative concord around age 16, with a sharp drop-off in the 17-18 age category (ibid p.110-112). Figure 4.2 and Figure 4.3 reproduce the findings for (dh) and (ing) respectively.

![Bar chart](image)

**Figure 4.2 Regression coefficients for (dh) in careful speech**
Adapted from Labov (1994:110, Fig. 3.13) (p **<.01, ***<.001)
It is surprising, given the recent interest in real-time studies in the field of quantitative sociolinguistics, that no panel studies have yet explored the adolescent peak in stable variables such as (ing) and (dh). Were Macaulay’s Glaswegian 15-year-olds and Labov’s Philadelphian 17-18-year-olds really responding to the pressures of encroaching adulthood and the world of work and college? Their findings have not yet been verified longitudinally.

In what follows, I attempt to provide some real time data on young people’s use of (ing) and (dh). The relationship between age and stable variables is of primary importance in this chapter. The prediction, following Labov (2001:101) and the Sankoff/Chambers interpretation of Macaulay (1977) is that speakers in the present study...
aged 17-19 are now descending from the mid-adolescent peak, and that their use of non-standard variants will decline between 2005 and 2006.

### 4.5 Coding methodology

#### 4.5.1 The panel for (ing) and (dh) analysis

Coding for (ing) and (dh) was conducted on sociolinguistic interview data from 22 of the 35 Senior and Junior panelists who were recorded in both 2005 and 2006 (see Table 4.2). 12 speakers were excluded because their token count for (ing) or (dh) was too low for individual real time comparison⁴.

<table>
<thead>
<tr>
<th></th>
<th>2004-5 and 2005-6</th>
<th>Removed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seniors</td>
<td>18</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Juniors</td>
<td>17</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35</strong></td>
<td><strong>12</strong></td>
<td><strong>22</strong></td>
</tr>
</tbody>
</table>

Table 4.2 Panel of 22 speakers for (ing) and (dh) analysis by cohort

Because informants were included in the stable variable analysis on the basis of their overall frequency of (ing) and (dh) tokens, the resulting sample of 22 is not balanced by any social factor. The number of Seniors and Juniors is uneven, and there is a skew in the distribution of socioeconomic status (Table 4.3), wherein the majority of Seniors are from the middle and upper strata, and the majority of Juniors are from the lower stratum.
Since the two cohorts are so different, we cannot consider calendar age as an independent variable. That is, we cannot compare apples to apples: or 18 year-olds (Seniors in 2005) to 18-year-olds (Juniors in 2006). The cohorts are therefore considered separately in the analyses to follow, and combined for explorations of relative change over time. Furthermore, in the rest of the chapter, I refer to Seniors as “Cohort 1” and Juniors as “Cohort 2”, so as to avoid any ambiguity about their age and/or class status in either the first or second time periods.

The distribution by ethnicity is more even, with 12 of the panelists self-identifying as Irish, and 10 as Italian. However, there is an interaction with socioeconomic status that makes the category of ethnicity not viable for the current analysis, as shown in Table 4.4:

<table>
<thead>
<tr>
<th></th>
<th>Irish</th>
<th>Italian</th>
</tr>
</thead>
<tbody>
<tr>
<td>SES 1</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>SES 2</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>SES 3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>N</td>
<td>12</td>
<td>10</td>
</tr>
</tbody>
</table>

Table 4.4 Distribution of panel by SES and ethnicity
With only 1 Italian speaker in the lowest socioeconomic group, and only 2 Irish speakers in the highest socioeconomic group, ethnicity cannot be considered in the longitudinal study of (dh) and (ing). It will, however, be examined in the apparent time study of vocalic variables (Chapters 5 and 6), when an ethnically and socioeconomically balanced sample of 18 speakers will be analyzed.

4.5.2 Coding protocol

Coding was conducted by myself and two undergraduate assistants. Coders followed a coding protocol outlined in the next section. Ambiguous tokens were examined in spectrographic form in Praat, and if after examination they could not be reliably identified, they were rejected.

4.5.3 Coding for (ing)

For each of the 22 speakers, up to 30 tokens of verbal (ing) were extracted from each of the 2005 and 2006 interviews. Only verbal tokens of (ing) were extracted, in order to avoid the interaction of grammatical category on (ing) production. Verbal (ing) was selected because, as discussed above, it exhibits the weakest constraint on the production of non-standard [in] and could therefore be expected to show a wider range of variation in the data than nominal (ing).

Verbal tokens were defined as:

- progressive eg. *I was running*; *He's giving*; *We had been laughing*
- participial eg. *I went shopping; He goes fishing; He keeps saying*

Exclusions (following Labov, 2001:79):

- adjectival eg. *mind-blowing, raging, disgusting*
- nominal eg. *ceiling, morning, swimming pool, the washing*
- *something, anything, everything, nothing*
- *gonna, tryna*
- *during, excluding*

The 2005 interviews lasted approximately 30 minutes on average, and 30 tokens generally exhausted the available data. For comparability, 30 tokens were also extracted from the second, longer interviews (approximately 90 mins on average). Tokens were extracted from two points in the interview if possible, to improve the chances of coding both casual and careful speech.

2005 interviews under 30 minutes were coded 10 minutes into the recording, until the token quota was filled. For longer interviews, 15 tokens of (ing) were extracted at 10 minutes from the start of the recording, and a further 15 tokens at 30 minutes from the start of the recording. If by the end of any recording the quota had not been filled, the coder then extracted from the start of the recording.

2006 interviews over 60 minutes were coded similarly. 15 tokens were collected at 10 minutes from the start of the interview, and 15 tokens were collected at 60 minutes
from the start of the interview. If the interview lasted less than an hour, the protocol for the longer 2005 interviews was applied.

A total of 1176 tokens of (ing) were retained after coding and selection of the panel.

4.5.4 Coding for (dh)

A similar protocol was followed for the extraction and coding of (dh) tokens. For each speaker, 60 tokens of (dh) were extracted from each of the 2005 interviews. 60 tokens were also extracted from the second, longer interviews (approximately 90 mins on average). Tokens were extracted from two points in the interview if possible, to improve the chances of coding both casual and careful speech.

All tokens of variants that appeared in an environment where the voiced interdental fricative phoneme was expected, were coded, with the following exceptions:

- in neutralizing environments (after alveolar stops and interdental fricatives)
- clear instances of reduced *them*, as in *seen 'em*
- preceding *down*, given the prevalence of stereotyped South Philadelphia phrases like *down the shore* (the Jersey Shore) which are almost categorically produced with zero initial consonant, as in "dahnashore"

Tokens were coded using a ternary coding scheme as either fricative, stop or intermediate. The intermediate code was used for zero variants and ambiguous tokens.
(eg. weakly articulated word-initial fricatives could not always be distinguished from stops, and the generally dental articulation of word-initial stops made them hard to distinguish from the interdental fricative). Fricatives were coded as 0, intermediates as 1, stops as 2. The coding values were averaged and then multiplied by 100 (Labov, 2001:78).

As for (ing), 2005 interviews under 30 minutes were coded 10 minutes into the recording, until the token quota was filled. For longer interviews, 30 tokens of (dh) were extracted at 10 minutes from the start of the recording, and a further 30 tokens at 30 minutes from the start of the recording. If by the end of the recording the quota had not been filled, the coder then extracted from the start of the recording.

2006 interviews over 60 minutes were coded similarly. 30 tokens were collected at 10 minutes from the start of the interview, and 30 tokens were collected at 60 minutes from the start of the interview. If the interview lasted less than an hour, the protocol for the longer 2005 interviews was applied.

A total of 2526 tokens of (dh) were retained after coding and selection of the panel.

4.6 Results

4.6.1 (ing)

Overall rates of non-standard apical [n] in verbal forms range between 62% and 95% over the one year time period from 2005 to 2006 (see Figure 4.4, below). Cohort 2 (who were Juniors in 2005), exhibits a higher overall rate of the non-standard variant than does
Cohort 1. This is expected, given the younger mean age and the high proportion of SES 1 speakers. However, both cohorts significantly decrease their use of the non-standard variant between 2005 and 2006 (Cohort 1, \( t = 1.96, p \leq 0.01 \); Cohort 2, \( t = 1.97, p \leq 0.1 \)).

![Bar chart](image)

**Figure 4.4 Mean percent frequency of apical (ing) by Cohort and Year of Recording**

Overall, the rate of non-standard [ɪn] use in 2005 is 81%, declining by 10% to 71% in 2006. This confirms the hypothesis, outlined in section 4.4.3 above, that in general the panel are descending from a mid-adolescent peak in non-standard variant use, as they approach graduation from high school and engagement with the wider linguistic and socioeconomic marketplace.

However, there is a marked difference in rate of decreasing [ɪn] use between the three socioeconomic groups. Figure 4.5 displays the rate of production of the apical variant for each social group over time.
Firstly, it is clear that in both 2005 and 2006 the greatest social division is between SES 1 (blue collar workers) and the other two social groups. This same gap between working and middle class was found in Labov’s 1966 study of the Lower East Side and Trudgill’s 1974 study of Norwich. Secondly, speakers in SES 1 do not significantly change their rate of [ɪn] use, $\chi^2 (1, N=395) = 1.39$, $p = n.s$. Indeed, their use of [ɪn] increases by 2%. Speakers in SES 2 slightly decrease their rate of [ɪn] (by 6%), but the decrease is not significant, $\chi^2 (1, N=412) = 1.98$, $p = n.s$. Speakers in the highest social group, SES 3, show the greatest decrease, at 17%, in use of the non-standard variant over time. This difference is significant at $p < 0.001 (\chi^2 (1, N=369)= 11.18)$. This considerable withdrawal from [ɪn] by the highest SES group (equivalent to Conn 2005’s upper middle class) mirrors the withdrawal from glottal stop of the upper class 15-year-olds in Glasgow.

Figure 4.5 Percent rate of apical (ing) by parents’ SES, 2005-2006, all speakers
(Macaulay, 1977). In both studies, the importance of standard speech to the highest socioeconomic group in the linguistic marketplace is reflected in their rapid rejection of non-standard forms in mid to late adolescence.

Let us list the individual scores, given in Table 4.5. Shown in Figure 4.6 are 18 of the 22 panel speakers. For clarity, the four remaining speakers are shown in Figure 4.7, and discussed below.
<table>
<thead>
<tr>
<th>Name</th>
<th>2005</th>
<th>2006</th>
<th>% change 06-05</th>
<th>SES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alison</td>
<td>100</td>
<td>93</td>
<td>-7</td>
<td>1</td>
</tr>
<tr>
<td>Kerry</td>
<td>97</td>
<td>93</td>
<td>-4</td>
<td>1</td>
</tr>
<tr>
<td>Lynne</td>
<td>100</td>
<td>97</td>
<td>-3</td>
<td>1</td>
</tr>
<tr>
<td>Erin</td>
<td>97</td>
<td>97</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Natalie</td>
<td>97</td>
<td>100</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Kathleen</td>
<td>93</td>
<td>100</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Melanie</td>
<td>93</td>
<td>100</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Joanna</td>
<td>77</td>
<td>27</td>
<td>-50</td>
<td>2</td>
</tr>
<tr>
<td>Julia</td>
<td>75</td>
<td>40</td>
<td>-35</td>
<td>2</td>
</tr>
<tr>
<td>Emma</td>
<td>83</td>
<td>70</td>
<td>-13</td>
<td>2</td>
</tr>
<tr>
<td>Mia</td>
<td>88</td>
<td>75</td>
<td>-13</td>
<td>2</td>
</tr>
<tr>
<td>Veronica</td>
<td>70</td>
<td>60</td>
<td>-10</td>
<td>2</td>
</tr>
<tr>
<td>Abby</td>
<td>93</td>
<td>90</td>
<td>-3</td>
<td>2</td>
</tr>
<tr>
<td>Kaitlyn</td>
<td>100</td>
<td>97</td>
<td>-3</td>
<td>2</td>
</tr>
<tr>
<td>Amanda</td>
<td>47</td>
<td>52</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Hayley</td>
<td>48</td>
<td>87</td>
<td>39</td>
<td>2</td>
</tr>
<tr>
<td>Chelsea</td>
<td>90</td>
<td>50</td>
<td>-40</td>
<td>3</td>
</tr>
<tr>
<td>Melissa</td>
<td>67</td>
<td>30</td>
<td>-37</td>
<td>3</td>
</tr>
<tr>
<td>Angela</td>
<td>43</td>
<td>10</td>
<td>-33</td>
<td>3</td>
</tr>
<tr>
<td>Deirdra</td>
<td>80</td>
<td>57</td>
<td>-23</td>
<td>3</td>
</tr>
<tr>
<td>Lucia</td>
<td>78</td>
<td>77</td>
<td>-1</td>
<td>3</td>
</tr>
<tr>
<td>Claire</td>
<td>76</td>
<td>83</td>
<td>7</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 4.5 Percent [%] by speaker, year of recording and SES
4.6.1.1 Categorical and near-categorical users of non-standard [in]

Looking first at Figure 4.6, three points of interest emerge. The first is that those speakers whose use of non-standard [in] was close to 100% in 2005 remain within a range of 93-100% in 2006. This finding resembles that of Sankoff and Blondeau (2007), who report that for a panel of Montreal French speakers, those who were categorical users of either apical [r] or uvular [R] in 1971 tended to remain categorical in 1984. Speakers who participated in the community change to [R] by increasing their use of this variant over the 13 years, were those who had been variable users of [R] in 1971. The influence of
categoricality is clearer in the Sankoff and Blondeau study since it affects categorical speakers in all socioeconomic categories, rather than principally working class speakers, as it does here. In addition, their study tracks a linguistic change in progress over real time, rather than a stable variable.

Besides social class and linguistic categoricality, we must also bear in mind that six of the nine speakers whose [In] score varies within the 93-100% range are younger Cohort 2 speakers who were in high school in 2005 and in 2006. The remaining three near-categorical speakers, Abby, Natalie and Kaitlyn, are the only Cohort 1 members in this panel who went on to community college (rather than a four year college) after high school. Could social circumstances have contributed to the lack of standardization exhibited by these speakers? Before we try to answer this question, we will look at the variable speakers, all of whom are in SES 2 and 3.

4.6.1.2 Variable users of non-standard [In]

The second point of interest, then, is that almost all of the 13 variable speakers (that is, speakers who were not categorical or near-categorical speakers in 2005) in SES 2 and 3 decrease their use of the non-standard variant over time. Five of these speakers—Chelsea, Julia, Joanna, Melissa and Angela—show dramatic decreases, as shown by the labelled lines on Figure 4.6. A minority of four, shown in Figure 4.7, either remain stable or increase their use of non-standard [In]. One speaker, Hayley, shows a quite dramatic increase.
Can we account for the girls’ linguistic behavior by looking at their post-high school transitions? Joanna, Melissa, Julia and Angela are high-achieving, academically-inclined girls who are attending good colleges, and that this may explain their marked avoidance of [In] in 2006. However, Hayley, Amanda and Lucia were also members of the group Abby once referred to disparagingly as “the smart girls”, and, unlike their friends, they do not avoid non-standard [In] when they get to college in 2006. Indeed, Hayley uses considerably more non-standard [In] in her second interview than in her first.

Teasing out social explanations, therefore, for the differing linguistic behavior of members of this panel, is difficult with evidence from only one linguistic variable. We
will have to return to an individual-level analysis when we have looked at (dh) and the vocalic variables.

4.6.1.3 Individual SES

The third and final point of interest with regard to (ing) is that SES correlates poorly with this variable, both in 2005 and 2006. A glance back at Figure 4.5 serves to remind us that although the highest users of [m] are in SES 1 and the lowest in SES 3, within this range there is little pattern. Naturally, we cannot expect to see perfect correlation at the individual level. Nonetheless, we will look in Chapter 6 at alternative ways of grouping the girls other than by parents’ socioeconomic status.

4.6.2 (dh)

(ing) and (dh) are not equally sensitive indicators of the increasing social awareness of the 22 panel speakers. Unlike the findings for (ing), the panelists’ use of non-standard (dh) variants does not significantly decrease between 2005 and 2006. The range of (dh) index scores for individuals over the period is great, at 5 to 123 points, where 5 indicates a low frequency of non-standard variants, and 123 indicates a high frequency of such variants. There is also a great deal of intra-speaker variation in increase and decrease of index value, with a range of +22 to -34 index points between 2005 and 2006. Yet the average (dh) scores for each cohort as a whole are no greater than 55. As can be seen in Figure 4.8, the (dh) score for Cohort 1 is the same, at 49, in both years. Cohort 2 registers a very slight decrease, from 55 to 53 points.
The overall stability of (dh) as displayed in Figure 4.8 again conceals the differential behavior of the three socioeconomic groups. In Figure 4.9, it is once again clear that only the highest social group, SES 3 registers a significant decrease in non-standard forms, $t(679) = 1.96$, $p < 0.1$, while SES 1 and SES 2 showed no significant change, $t(837) = 1.96$, $p = 0.582$ and $t(950) = 1.96$, $p = 0.610$ respectively.
Overall, then, while speakers in SES 1 and 2 show no change in (dh) use, speakers in SES 3 again show a marked dispreference for non-standard variants in the second recording session. The hypothesis that speakers in this age group will decrease their rate of use of non-standard variants in the last two years of high school is true only for the highest social class group.

Nonetheless, it was noted in Chapter 2 that by a number of qualitative measures, the 2006 interviews were more informal than the first interviews in 2005. They tended to be longer, some took place out of school, and the participants were familiar both with me and with the interview procedure. In addition, everyone who agreed to a second interview did so under no pressure from me, and those who did not wish to be interviewed a second time left the project. Thus the 2006 interviews reflect interactions with a group of girls who were positively oriented towards myself and the project, and who were motivated to
reunite for a second time. Under such circumstances, one would expect the number of non-standard variants to have increased, not decreased, over time. Instead, we find confirmation in the stability of SES 1 and 2 that the first interviews were already reflective of these speakers’ most informal style. In the rapid withdrawal from non-standard variants in SES 3, we see that in this social class group, it is age (and its accompanying awareness of age-appropriate sociolinguistic variants) that trumps familiarity. Speakers in SES 3 decrease their use of non-standard (ing) and (dh) in the second interviews, despite the increased informality of the interview context.

If we list the values for individual speakers, given in Table 4.6, we see that only in SES 3 do speakers consistently decrease their index score, or remain roughly stable. The overall stability in SES 1 and 2 is accounted for by a “cancelling out” effect, whereby individuals decrease and increase their index score within each group.
<table>
<thead>
<tr>
<th>Name</th>
<th>(dh) index score 2005</th>
<th>(dh) index score 2006</th>
<th>Change in pts 06-05</th>
<th>SES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alison</td>
<td>98</td>
<td>90</td>
<td>-8</td>
<td>1</td>
</tr>
<tr>
<td>Kerry</td>
<td>7</td>
<td>8</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Lynne</td>
<td>33</td>
<td>47</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>Erin</td>
<td>123</td>
<td>108</td>
<td>-15</td>
<td>1</td>
</tr>
<tr>
<td>Natalie</td>
<td>53</td>
<td>75</td>
<td>22</td>
<td>1</td>
</tr>
<tr>
<td>Kathleen</td>
<td>28</td>
<td>45</td>
<td>17</td>
<td>1</td>
</tr>
<tr>
<td>Melanie</td>
<td>38</td>
<td>30</td>
<td>-8</td>
<td>1</td>
</tr>
<tr>
<td>Joanna</td>
<td>70</td>
<td>57</td>
<td>-13</td>
<td>2</td>
</tr>
<tr>
<td>Julia</td>
<td>48</td>
<td>68</td>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td>Emma</td>
<td>53</td>
<td>70</td>
<td>17</td>
<td>2</td>
</tr>
<tr>
<td>Mia</td>
<td>33</td>
<td>32</td>
<td>-1</td>
<td>2</td>
</tr>
<tr>
<td>Veronica</td>
<td>62</td>
<td>72</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Abby</td>
<td>85</td>
<td>75</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Kaitlyn</td>
<td>28</td>
<td>27</td>
<td>-1</td>
<td>2</td>
</tr>
<tr>
<td>Amanda</td>
<td>18</td>
<td>13</td>
<td>-5</td>
<td>2</td>
</tr>
<tr>
<td>Hayley</td>
<td>65</td>
<td>78</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>Chelsea</td>
<td>47</td>
<td>53</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Melissa</td>
<td>58</td>
<td>47</td>
<td>-11</td>
<td>3</td>
</tr>
<tr>
<td>Angela</td>
<td>42</td>
<td>30</td>
<td>-12</td>
<td>3</td>
</tr>
<tr>
<td>Deirdra</td>
<td>45</td>
<td>27</td>
<td>-18</td>
<td>3</td>
</tr>
<tr>
<td>Lucia</td>
<td>50</td>
<td>38</td>
<td>-12</td>
<td>3</td>
</tr>
<tr>
<td>Claire</td>
<td>23</td>
<td>5</td>
<td>-18</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 4.6 (dh) index score by speaker, year of recording and SES

As we saw for the (ing) variable, then, individual SES does not pattern consistently with (dh) production, at least for individuals in SES 1 and 2. While Erin, the girl with the highest index score is in SES 1 as we would expect, it is one of the other SES 1 girls, Kerry, who has the lowest overall score. Between these polar speakers lie a mixture of seniors and juniors, community college-goers and Ivy League students.

Two possibilities suggest themselves. Firstly, the socially stratified patterns for (ing) and (dh) that we have come to expect from large-scale surveys of adult speakers simply cannot be captured in a small, highly homogenous group of adolescents. Rather,
we can capture only the broadest of trends: in this case, that girls in the highest social class show the most consistent decrease in use of non-standard variants over time.

The second possibility is that the methods used here to calculate social and/or linguistic factors were not sufficiently sensitive or fine-grained to fully capture patterns of (ing) and (dh) use. Social categories are discussed further in Chapter 5. To test whether a linguistic factor might have been set up incorrectly, I re-calculated the (dh) data to show speakers’ per cent use of stops versus the other two variants. Stops, after all, are more socially salient and more stigmatized than the intermediate (usually zero) variants, and might be expected to co-vary more tightly with social class than a general index score. The outcome, however, was similar, in that all three SES groups demonstrated very little change over time. Indeed, this is true for all three variants of (dh), as shown in Table 4.7:

<table>
<thead>
<tr>
<th></th>
<th>% stops</th>
<th>% intermediate</th>
<th>% fricatives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SES 1</td>
<td>SES 2</td>
<td>SES 3</td>
</tr>
<tr>
<td>2005</td>
<td>20</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>2006</td>
<td>22</td>
<td>16</td>
<td>14</td>
</tr>
</tbody>
</table>

Table 4.7 Variants of (dh) as a percentage of all variants, by SES and year of recording.

Within every SES group, the change over time for any variant is no greater than ± 4%. In other words, the proportion of standard to non-standard variants remains approximately the same in every group from 2005-2006. Using a (dh) index score confirmed the finding for (ing) that it is the highest social group who recedes from non-standard variants after high school. However, a breakdown by variant shows that this group actually remains more or less stable with respect to its proportional use of the three variants, although
there is a significant increase over time in the number of fricatives for SES 3, $\chi^2 (1, N=720) = 3.32, p < 0.1$, which is due to small decreases in the number of stops and intermediate variants.

At both points in time, across social classes, the lowest social group has the highest proportion of stops, the middle social group has the highest proportion of intermediate variants, and the highest social group has the highest proportion of fricatives. This symmetry is surprising, but pleasing. While speakers in SES 2 align with SES 3 in disfavoring the socially stigmatized stops (at around 16% for both groups), their second-highest status is nonetheless reflected in their use of intermediate (mainly zero) variants:

Um, so [ð] then we come out and we do cheers and dances. And then always, every year, our last dance [Ø] that we do, it’s [Ø] the last thing we do before we get off the court, it’s always like [d] this really um upbeat high-energy dance. It always looks really good.

Julia (E05-S031-I015-R039), talking about cheerleading in 2005

To conclude, then, we have found that the (dh) index score illuminates the retreat of the highest social class from non-standard variants in real time, while a breakdown by percent use of each variant gives a more nuanced picture in apparent time.

### 4.7 Summary

The stable sociolinguistic variables (ing) and (dh) have repeatedly been found to co-vary with a number of social variables, including age, sex, style, social class, and sometimes
ethnicity. For the Sacred Heart panelists, the independent variable examined was social class, calculated on a 3-point composite scale of parents’ education, occupation and residence value (SES). Commensurate with earlier studies, social class was found to be inversely correlated with use of non-standard variants, with the highest social group particularly disfavoring them.

Other relevant independent variables, such as gender, style and ethnicity, were excluded from the analysis for reasons explained in this and previous chapters. The two cohorts represent two age groups (16-17 and 17-18), but the very different social distributions of the cohorts precluded any apparent time comparison. In other words, a comparison of the (dh) and (ing) use of younger and older teenagers could not be carried out.

Real time use of (ing) and (dh), however, was examined in two time periods: 2005 and 2006. This represents a step forward in the sociolinguistic analysis of these two well-known variables, since they have not previously been the subject of a longitudinal study. As predicted, and despite greater informality in the second interviews, the overall rate of non-standard alveolar (ing) dropped for both cohorts. Contrary to expectations, on the other hand, there was no such overall decrease in non-standard variants for (dh). A breakdown of the data by SES revealed that in fact only speakers in the highest social group significantly decreased their use of non-standard variants from one year to the next. This suggests that not only are speakers from higher status backgrounds more likely to use standard variants of stable variables in general, but that they are sensitive to the importance of standard variants for their future place in the linguistic market (cf. Chambers (1995) and Sankoff (2004)’s interpretation of age-grading among Glasgow
youth in Macaulay (1977)). This preparation is ongoing in the last year of high school and first year of college, and if the apparent time findings for teenagers in the LCV and Glasgow do indeed reflect age-grading, may have begun a year or two before, at around the age of 15 or 16. A follow-up study of the panelists would show whether speakers in the next highest socioeconomic group are simply lagging behind, and will significantly decrease their non-standard variants after they have been out of school for more than a year; or whether they (as might be expected for the lowest group, SES 1) will maintain their high school levels of non-standard variants into early adulthood and beyond.

In the next chapter, we will turn to ethnographically-based social categories as a basis for real time analysis, to see if they provide further illumination. The categories are explored in relation to Philadelphia vowels engaged in change from below.

NOTES

1 Social evaluation data may be collected overtly via direct questions to the informant, or more covertly, via more experimental means such as matched guise tests (Lambert, Hodgson, Gardner, & Fillenbaum, 1960). The overt method will only be successful in those speech communities where awareness of the variation is similarly explicit. Labov (2001:196) remarks that unlike (neg), (ing) and (dh), the deletion of (-t, -d) is subject to overt social judgement in formal tests, but is rarely commented on.

2 Stressed /In/ in monosyllabic ring, king, sing etc. is not considered to be within the envelope of variation for (ing). For most native speakers, these are pronounced categorically with the velar variant (Hazen, 2006:583). Stressed variants of (ing) also occur in Chicano English (Mendoza-Denton, 1997:108) in multisyllabic words such as nothing, and have been included in variationist studies of (ing) use in this dialect.

3 In working-class varieties of English, [v] can be heard in both medial position, eg. bovver for bother, and in final position, eg. smoov for smooth. In African-American English, [v] for [ð] is heard only in final position.
N < 20 for (ing) and N < 30 for (dh).

Joanna, Julia and Angela are at research universities on the East Coast; Melissa attends a liberal arts college near Philadelphia.

Scores over 100 are only possible if the speaker uses some stops.

The very slight increase in (dh) index values in 2006 for SES 1 and SES 2 is hard to account for. However, since the difference is less than or equal to 5 index points in each social group, I consider it to be of little importance to the interpretation of the data.

By this I mean their most informal style in a sociolinguistic interview. We can only speculate on the rate of non-standard (ing) and (dh) use outside of the interview. The results suggest that informants in SES 1 and 2 were already speaking in their most casual interview style in the first interviews.
Chapter 5  Vowel variables (e), (aw) and (ay0)

I joined the student union at my school, and I went to a meeting... [Y]ou know the genocide in Darfur, it’s in Africa. [T]his one girl was like, “It was my dream. I actually wanna set up tents around Philadelphia and lobby.”...I was like, “Yeah...[C]ould you imagine me on the corner of like Passyunk like in a fucking tent?” Yeah, that would not work. Like you just can’t do that, you know what I mean?

Amanda, 2006

5.0  Introduction

Sacred Heart students’ emphasis on their Irish or Italian ethnicity, discussed in Chapter 3, raises an additional research question. Is ethnic difference reflected in the speech of the Sacred Heart students? Italian and Irish teenagers grow up in separate neighborhoods, attend separate grade schools, and tend to retain separate friendships into high school. One might reasonably expect this separation to be evident in speech, as it is for Mendoza-Denton’s (2007) Norteñas and Sureñas, Eckert’s (2000) Jocks and Burnouts, and Moore’s (2003) Popul"ars and Townies. In this chapter, I therefore begin by examining the synchronic distribution of (e), (aw) and (ay0) and two additional variables, (ow) and (uw) across the two ethnic groups, as well as across social class. Afterwards, I return to the main research question: Do speakers continue to participate in change from below after making the transition from high school to college?

Sections 5.1 and 5.2 describe the construction of the panel for synchronic vowel analysis and the methods used to select and measure vowel nuclei. A general outline of the Philadelphia vowel system in the present and the recent past is given in section 5.3,
and is compared with the overall vowel systems of the panel of Sacred Heart students. Section 5.4 focuses on the synchronic distribution of selected vowels with respect to social class and ethnicity. In section 5.5, I report on the real time analysis of the vowels of 9 of the 18 panel speakers in terms of their individual post-high school transitions to adulthood. Section 5.6 summarizes the chapter and the dissertation.

5.1 The panel for vowel analysis

In the chapter 4 analysis of the stable variables (ing) and (dh), all students who were interviewed twice, and who produced a sufficient volume of speech for analysis of both variables were included in the eventual panel of 22 speakers. The data collected from these panelists was sufficient to successfully investigate social class as independent variables, but ethnicity was not equally well represented across the three socioeconomic groups. There were, for example, only two (out of twelve) Irish speakers in SES 3, and only 1 (out of 10) Italian speakers in SES 1.

If we are to determine whether ethnicity has any influence on the vowel systems of Sacred Heart students, it will be necessary to construct a new panel. Since it was clear in Chapter 5 that the personal attributes of “typical” Irish girls and “typical” Italian girls overlap with working and middle class norms respectively, we will want to separate class from ethnicity, in order to examine their independent effects. The only way to do this with the Sacred Heart data is to fill some cells with speakers who were interviewed only once, but for a synchronic analysis this does not pose any practical problems. Where possible, the new panel does contain speakers who can be analyzed in real time, however.
Six speakers in each SES category were selected, and nine in each ethnic category, as shown in Table 5.1.

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>SES 1</th>
<th>SES 2</th>
<th>SES 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irish</td>
<td>Erin</td>
<td>Abby</td>
<td><em>Danielle</em></td>
</tr>
<tr>
<td></td>
<td>Kerry</td>
<td>Joanna</td>
<td>Deirdra</td>
</tr>
<tr>
<td></td>
<td>Melanie</td>
<td>Julia</td>
<td>Claire</td>
</tr>
<tr>
<td>Italian</td>
<td>Natalie</td>
<td>Hayley</td>
<td>Angela</td>
</tr>
<tr>
<td></td>
<td><em>Courtney</em></td>
<td>Amanda</td>
<td>Lucia</td>
</tr>
<tr>
<td></td>
<td><em>Becky</em></td>
<td>Emma</td>
<td>Chelsea</td>
</tr>
</tbody>
</table>

Table 5.1 Panel for vowel analysis, 18 speakers by SES and ethnicity.
(Speakers interviewed once are in italics).

The inclusion of Courtney, Becky and Danielle in the panel for synchronic vowel analysis ensures that there are now equal numbers of Irish girls in SES 3, and Italian girls in SES 1. All of the remaining 15 girls form a sub-set of the panel of 22 speakers analyzed for the stable variables. They were selected because of their demographic characteristics; where a choice had to be made between two or more girls in the same category, the most voluble speaker was chosen.

Table 5.2 displays the distribution of the 18 panelists across the two cohorts. The panel has been weighted to include more Cohort 1 members than Cohort 2 members, because the real time analysis in the latter half of this chapter will focus on types of transition from high school to college. Cohort 2 members were juniors in 2005, and still in high school, as seniors, in 2006.
<table>
<thead>
<tr>
<th>Cohort</th>
<th>SES 1</th>
<th>SES 2</th>
<th>SES 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohort 1 (Seniors in 2005)</td>
<td>Natalie, Courtney</td>
<td>Abby, Joanna, Julia, Hayley, Amanda, Emma</td>
<td>Danielle, Deirdra, Claire, Angela, Lucia</td>
</tr>
<tr>
<td>Cohort 2 (Juniors in 2005)</td>
<td>Erin, Kerry, Melanie, Becky</td>
<td>--</td>
<td>Chelsea</td>
</tr>
</tbody>
</table>

Table 5.2 Panel for vowel analysis, 18 speakers by SES and Cohort.

5.1.1 The location of the panelists in the Sacred Heart social network

The panelists are widely distributed across the social landscape of Sacred Heart. Figure 5.1 abstractly reproduces the social network diagrams (Figure 3.1 and Figure 3.2) of Chapter 3. Most of the 18 panelists were strongly associated with one of the major social clusters; Emma, Danielle and Courtney were more loosely affiliated with the main clusters, while Deirdra was outside the principal social networks of the school altogether. They are discussed in the rest of this section.
5.1.1.1 Girls associated with Second Street

Abby, Kerry, Claire and Erin were members of the Second Street network. Abby and Kerry in particular were part of the crowd who played or watched basketball in the Second Street community center. Erin’s friend Becky is Italian, but Becky spent most of her time on Second Street with Erin. All five of these girls were loud, talkative, confident and at ease around the opposite sex.

In contrast to Becky, Danielle is Irish and lives on Second Street, but spent most of her time with Italian friends from her grade school. Ambitious and assertive, she seemed to me to play up her knowledge of the hard-knock world of the South.
Philadelphia streets, to which her co-interviewee Courtney had a more legitimate claim. Danielle’s family was stable and well-educated, and Danielle herself was confident and outgoing.

Melanie, a resident of South West Philadelphia, preferred to socialize on Second Street than her own neighborhood, and sat with a group of Second Streeters in the cafeteria.

5.1.1.2 Italian girls

Natalie was one of the few members of the exclusive extreme-Italian network who agreed to an interview; in fact, she was also one of the few Sacred Heart students to contact me a year or two later to ask me how things were going. Like all the members of her group, she was self-conscious and polite, but overtly flirtatious and coquettish around boys.

Chelsea was both a member of the mixed-ethnicity Cohort 2 “smart” girl group, and a resident of the wealthier Packer Park neighborhood. Although I did not observe Chelsea spending time with members of Natalie’s extended Italian network, she was similar to them in terms of her concern for her personal appearance, and talked in her second interview about her weakness for clothes and purses. Her best friend, Donna (not in the panel) was Italian and not smart girl; like the extreme Italians, she could be found in the hallways and cafeterias giggling and flirting with boys.

Courtney, an anxious girl who had had her share of difficult family life, was described during the pile-sort task as someone who had not been popular in her grade
Deirdra was of mixed Irish and Italian heritage but identified primarily as Italian. She had mainly neighborhood friends, but was also part of a marginal mixed-sex group in school who were involved with a violent role-playing sport known as “extreme backyard wrestling”, in which Deirdra herself did not participate. She never wore make-up and favored baggy pants and shirts.

5.1.1.3 Smart girls

Fully a third of the panel come from the Cohort 1 “smart” group, in part because all members of this group completed second interviews, but also because of the range of ethnic and socioeconomic backgrounds. Angela and Lucia come from well-educated, financially comfortable homes in prosperous Italian neighborhoods; Amanda, Julia, Hayley and Joanna’s parents have at most a high school diploma, and several of the parents are in blue-collar occupations. Only Julia lives in the Second Street neighborhood, although Joanna is Irish, too. When I discussed ethnicity with this group, they were aware of their different ethnic and territorial backgrounds, but were generally quite proud of their differences: they were never a source of conflict. Their shared participation in AP classes and in school-based clubs and societies was the engine of their friendship.
5.2 Vowel measurement methodology

5.2.1 The 2005 measurements

For each of the 18 panelists, their 2005 interviews were segmented in Praat for stressed tokens of 47 vowel classes and allophones. The coding system of the Plotnik program was used, which identifies 25 American English vowel classes, 13 classes of allophones before /l/ and 9 classes of allophones before /r/. In the present study, relatively little attention was paid to allophones before /l/, as they are not the focus of the investigation. However, tokens before /r/ which have undergone change in the Philadelphia dialect (/ohr/ and /ahr/) were included wherever possible. Vowel classes, adapted from Labov (1994; 2001) are given in Appendix 1. A minimum of 10 tokens per main vowel class was aimed for, although in practice this was not always achieved, due to the brevity of some interviews. Frequent distortion of the acoustic signal due to extremely fast speech, very loud speech, breathiness, nasality, high pitch, creaky voice and laughter, also reduced the number of potential tokens for analysis. Special emphasis was given to the vowel variables that are the focus of this study—(aw), (ay0) and (e)—and so as many tokens of these variables as possible were segmented. An average of 270 total tokens per speaker was retrieved.

Vowel formant analysis of F1 and F2 was performed on the segmented data, using a 0.7 second averaging window for each nucleus. Information from linear predictive coding (LPC) analysis in the Praat program was used for single point measurement at the major point of inflection of the nucleus (Labov, 2001:155-156) or at least 50ms from any
consonantal onset. Data were examined for coding or measurement errors, and outliers were subjected to particular scrutiny. The cleaned data were then normalized in Plotnik using Nearey’s log mean normalization (Labov, 2001:159) so that measurements would be comparable across speakers. This step was necessary even though all the speakers were of the same age and gender, since they were impressionistically quite varied in terms of their average pitch. Plotnik was used to calculate average means for each vowel class for each speaker, and these means are referred to in the synchronic analysis section of this chapter.

5.2.2 The 2006 measurements

Half of the synchronic analysis sample (N=9 speakers), were measured again using almost exactly the same vowel measurement procedures on interviews from the second time period, 2006. An average of 282 total tokens per speaker was collected, comparable with the 2005 interview mean of 270. Since the real time study involves comparison of individual speakers’ own 2005 and 2006 vowel systems, it was not necessary to normalize their data.

5.3 The Philadelphia vowel system

The vowel system of Philadelphia, including South Philadelphia, has been studied repeatedly since the 1970s (see Chapter 1). Philadelphia has been referred to as the northernmost of the Southern cities (Labov, 2001:132); at least until the mid-20th century it was participating in a vowel chain shift known as the Southern Shift (Labov, 1994:208-
218) which is represented in Figure 5.2 below with the numbers indicating typical ordering of the vowel movements.

Figure 5.2 The Southern Shift (from Labov, 1996)

On the front periphery, however, in varieties participating in the Southern Shift (Labov, 1994:209) the long front vowels /iy/ and /ey/ tend to back and lower, while the short front vowels /i/ and /e/ correspondingly front and raise. Philadelphia exhibits the opposite pattern. Long /iy/ and /ey/ are not backing and lowering but fronting and raising. There has been no conclusive evidence to suggest that /i/ and /e/ are lowering, as symmetry would demand, although as noted in Chapter 1, Labov (2001:471) reports that his 1970s LCV study found some non-significant backing and lowering of /e/. In other respects, Philadelphia retains a clearer linguistic association with the South. Step 1 in Figure 5.2 refers to the fact that in most of the South, /ay/ monophthongizes, but in other areas, such
as the Outer Banks of North Carolina, /ay/ rises to /oy/ and /oy/ rises to /uy/. This latter pattern (referred to as a Pattern 4 chain shift in Labov, 1994) is found in Philadelphia, where /ay/ has risen and centralized, giving *fight* as eg. [fɔɪt]; and /oy/ (not shown in the figure) has risen to high back position, giving eg. *boy* [bui]. A set of additional vowel movements associated with the South, but also with the Midland (Labov, Ash, & Boberg, 2006:153) is the fronting of the back upgliding vowels /uw/ and /ow/, labelled as steps 5 and 6 in Figure 5.2. Philadelphia shows moderate to extreme fronting of these vowels, in line with Midland cities such as Columbus, Indianapolis and Pittsburgh.

Philadelphia is further aligned with Midland varieties (and other Mid-Atlantic varieties) in its fronting of the nucleus of /aw/ to eg. [eo]. The raising of the back vowels before /r/, indicated by numbers 7 and 8 in Figure 5.2, is found generally in the southeastern United States. It leads to the merger of /ahr/ in eg. *bar, car* with /ohr/, and in Mid-Atlantic cities such as Philadelphia there is a further merger of /ohr/ and /uhr/. Despite its general alignment with Southern and Midland systems, however, movements such as the raising and fronting of (eyC) and (iyC), and the incipient lowering of /e/ led Labov (2001:471) to state, “For reasons that are not clear, Philadelphia has partially resigned from the South and joined itself to Northern patterns.” While the regional affiliation of the Philadelphia dialect is not discussed further here, it suffices to say that there is much still to discover about the vowel changes located in this conflict of systems.

A striking display of the features of the Philadelphia vowel system is given in Figure 5.3. It shows the advanced system of Barbara Corcoran, a 16-year-old girl from the Irish working class neighborhood of Kensington, who was interviewed for the LCV
project in the 1970s. Arrows represent the direction of change. Long /iy/ and /ey/ are raised and fronted to the top left periphery of the system, and Barbara’s /ay/ before voiceless consonants, notated as (ay0), has risen to a mid central position, while /oy/ has raised to high back position. /uw/ and /ow/ have fronted to mid position, while Barbara’s nucleus of (aeh)—the tense allophone of /ae/—is raised to extreme high front position, overlapping (iy) and (eyC). In contrast, her nucleus of /aw/ is also tense, but has not risen to upper or upper-mid position; it remains mid-front and is not as advanced as the other tense front vowels.

Figure 5.3 Vowel system of Barbara Corcoran, Kensington, aged 16 in early 1970s (Labov 2001:138).
We can broadly represent the South Philadelphia system of girls of comparable age to Barbara in the 21st century by amalgamating measurements from all 18 speakers in the Sacred Heart panel: a total of 4865 vowel measurements. Figure 5.4 shows the mean normalized values for 22 vowels (including some allophones) for all 18 speakers in the vowel analysis panel in 2005. The circles in the diagrams represent means of means: that is, the overall means of the entire vowel system based on the entire dataset. It thus gives a reasonably representative picture of the vowel system of the white, female, Sacred Heart community at this time.

![Figure 5.4 Normalized vowel means of all 18 panel speakers](image)
The diagram is reproduced, this time with the standard deviations of F1 and F2 of each mean, in Figure 5.5. Each bar extends to one standard deviation from the mean.

Figure 5.5 Normalized vowel means of all 18 panel speakers, with standard deviations.

The vowel system represented here is, in fact, still typical in most respects of the Philadelphia system reported by the LCV project in the mid 1970s, at least for the most advanced speakers, like Barbara Corcoran. It is also very similar to the more modern vowel system of Marcia Finnegan, a 19-year-old working-class female speaker who is described in Conn’s 21st century re-study of Philadelphia (Conn, 2005:57 and see Chapter
and is the only individually identified speaker in that study who is comparable to the Sacred Heart girls.

As mentioned in Chapter 1, the LCV identified ongoing change in almost all of the vowels in the Philadelphia system, with changes classified as

a. nearly completed
b. mid-range
c. new and vigorous
d. incipient

In what follows, I discuss the mean Sacred Heart vowel system with reference to these vowel change subsets.

5.3.1 Nearly completed changes (ohr), (aeh)

Of the nearly completed changes, the formerly distinct lexical classes (ohr) and (owr) have merged and are represented here simply as (ohr). They have reached high back position, overlapping (oy), but (oh) has not yet reached this position, remaining in mid-back. The tense allophone of (ae), notated as (aeh), is high and front, very close to (iy).

5.3.2 Mid-range changes (ow), (uw)

The LCV study drew a distinction between (ow) and (uw) in checked and free syllables; that is to say, lexemes such as go, so, know and too, do, boo represent (owF) and (uwF),
while lexemes such as toad, nose, foam and soon, food, room represent (owC) and (uwC) respectively. The distinction, in Philadelphia, was found to be productive, with the free vowels in advance of their checked counterparts. I have retained, for purposes of analysis, the distinction between (owF) and (owC), since the nuclei of these vowels occupy overlapping but different territory in two dimensional vowel space. However, I did not observe any systematic differences between (uwC) and (uwF) in the data, and have instead made a distinction between coronal (Tuw) and non-coronal (Kuw) onsets. This distinction, and the corresponding code names, are discussed in Labov (2001:476-478). Vowel nuclei in syllables with coronal onsets, such as too, do, soon are markedly more fronted than those in syllables with non-coronal onsets, such as food, move, boot. In this respect the Sacred Heart girls are in line with most of the rest of North America, in which the fronting of (uw) is a large-scale, ongoing change, with coronal-onset syllables in advance of those with non-coronal onsets (Labov, Ash & Boberg, 2006:154). Overall, with regard to the fronting of (uw) and (ow), it seems that the South Philadelphia girls have generally reached a central position, with only /uw/ after coronal consonants, notated (Tuw), in front of the low central vowel (ae). This also puts them in line with the white Philadelphian women in Conn’s (2005) study, including Marcia Finnegan, whose (uw) means are less than 100 Hz fronter than her (ae).

5.3.3 New and vigorous changes (ay0), (aw), (eyC)

The Sacred Heart students are also generally similar to Conn’s Marcia Finnegan with respect to the new and vigorous changes. There is a clear split between (ayV), the nucleus
of /ay/ before voiced segments, and (ay0), the nucleus of /ay/ before voiceless segments. In the LCV, some of the most advanced speakers, such as Barbara Corcoran and her younger brother, Rick (Labov, 2001:141) had an (ay0) nucleus that was either fronter or backer than (ayV), indicating that there was no correlation between advancement in raising and the front-back dimension. There was no significant community change in the F2 dimension for this variable. The data gathered by Conn and myself (2002-3 and 2005-2006 respectively), confirms that there is no significant movement in F2 in apparent time, although Conn found that when he combined his own 65 speakers with those of the LCV project to create a real-time analysis, a significant correlation of F2 with age revealed a slow backing tendency (Conn, 2005:99). This is discussed in more detail in section 5.4.3.1 below.

Conn argues (2005:116, 122) that his apparent and real time analyses of (aw) in Philadelphia show a reversal of the fronting change, subsequent to the nucleus having “hit its apex in F2 peripherality” (Conn, 2005:138). The advanced LCV speakers in the 1970s regularly realized (aw) in upper-mid position, but for both Marcia Finnegan and the Sacred Heart students, (aw) is in mid position, and thus backer as well as lower than that of their 1970s counterparts.

Finally, there is a split between (eyC)—the nucleus of /ey/ in closed syllables—and (eyF), the nucleus of /ey/ in open syllables. This time, the Sacred Heart speakers more closely resemble Barbara Corcoran, one of the advanced younger speakers in the LCV, with (eyC) in high front peripheral position, and (eyF) raised almost to the same position as (i). Marcia Finnegan, in Conn’s study, has a backer, lower (eyC) mean.
5.3.4 Incipient changes

A non-significant lowering of the short front vowels /i/, /e/ and /æ/ was identified in the 1970s LCV project via regression analysis (Labov, 2001:137). In the Sacred Heart student data, /i/ is somewhat backed and lowered, while /e/ and /æ/ are also centralized. /e/ (henceforth notated as the sociolinguistic variable (e)) appears to be in low central position. Lowering of (e) could not be confirmed in the 1970s, nor has there been any recent large-scale systematic exploration of (e), so we will pay particular attention to this vowel variable in both the synchronic and real time analyses of individual speakers in the sections to follow.

In the next section, I examine in more detail the position of three vowels across the speaker sample: (e), (aw) and (ay0).

5.4 Synchronic distribution of (e), (aw) and (ay0)

5.4.1 Lowering of (e)

5.4.1.1 Previous findings for (e)

The lowering of short (e), which was described as an incipient change in the LCV, appeared to have developed into a vigorous change when it was re-examined in the 1990s. Labov (2001:473) reports an overlapping vowel space for (e) and (æ) in a 28-year-old speaker, Jackson O., who was interviewed for the TELSUR project: a telephone survey of speakers across the USA and Canada that provided the data for the Atlas of North American English (Labov, Ash & Boberg, 2006). His (e) and (æ) means are in
100 Hz of each other on the F1 axis, and one of his tokens, *better*, is lower than his lowest token of (ae). The completed Atlas included only 3 Philadelphia speakers, and the other two (Dawn T. and Roseanne V.) do not have lowered (e) means. Labov provides further evidence for the lowering of (e), however, in a more detailed study of Chris G., a groundsman at the University of Pennsylvania aged 22 (Labov, 2001:473), whose (e) and (ae) means are also only 100 Hz apart in height; (e) having lowered away from (i). There is considerable overlap of his (e) and (ae) tokens. Labov (ibid) concluded in 2001 that although only a few contemporary speakers had been studied, it seemed that the lowering of (e) had moved from an incipient to a vigorous change in the Philadelphia vowel system.

Conn’s research several years later on (2005) was focused on the three changes identified as “new and vigorous” in the LCV project: (aw), (eyC) and (ay0). However, in his initial examinations of three of the speakers in his study, he found that all of them showed centralization of the three short front vowels /i/, /e/ and /ae/ (Conn, 2005:59-63). The three speakers were chosen to represent advanced vowel systems: Dena Simpson, aged 40, is a case study of an older female system; Ernie Sokowski, aged 45, an older male system; and the previously mentioned Marcia Finnegan, aged 19, a younger female system. Speakers with less advanced systems were not examined individually, but the pooled means for all speakers in the sample (N = 65) give a community-wide picture for the three short front vowels. Figure 5.6 reproduces Conn’s diagram of movements in the Philadelphia vowel system, using regressions of F1 and F2 with age as the independent variable.
Figure 5.6 Movement of Philadelphia vowels in apparent time for 65 speakers (Conn, 2005:65, Fig. 4.7)

Black circles represent mean normalized values for each vowel class, and any significant age co-efficients were used to calculate the estimated mean values for speakers 25 years older and 25 years older than the mean age of the sample, and thus the direction of change (Conn, 2005:64). Of the three short front vowels, (e) and (ae) show significant movement in both F1 and F2, while (i) shows significant lowering. Overall, the vowel showing the strongest movement (p < 0.001) is (e), which is both backing and lowering.
It seems that Labov’s earlier conclusion regarding the transition of (e) to a vigorous new change is well supported by the evidence in Conn’s more recent study.

5.4.1.2 Lowering of (e) at Sacred Heart: Extreme outliers

Do the Sacred Heart students demonstrate backing and lowering of (e), as we would expect them to, given Conn’s finding? We will start with an individual example. Figure 5.7 plots the short vowels of Claire, an Irish Sacred Heart student in SES 3, who was close to her 18th birthday when first interviewed in 2005. Like Jackson O. and Chris G., her (e) mean is lower and backer than the Philadelphians of the 1970s, and is located close to her mean for (ae), so that the two means are only about 150 Hz apart. Furthermore, five tokens of both monosyllabic and polysyllabic (e) appear within the (ae) area: Guess, Second, best, met, ever.
Referring to a study of natural misunderstandings, Labov (2001:473) mentions that the lowering of (e) in Philadelphia causes occasional hearer confusion of *left* and *laughed*. I tested (Wagner, 2007) whether advanced tokens of (e) and several other vowels can be distinguished by speakers of the local dialect and by non-locals in a gating experiment using audio samples of the Sacred Heart students’ interviews. Gating experiments (see e.g. Labov & Ash, 1997) require listeners to listen to audio samples out of context, and then with context. The majority of samples in the South Philadelphia experiment were of (iyC) and (eyC), which tend to overlap in the Sacred Heart students’ vowel space. One sample of (e) was included: the word *neck*. Following the methodology of Labov and Ash
(1997), I played the selected word three times in isolation, twice with minimal context, and then twice with full context:

Word: neck
Phrase: break my neck
Sentence: I thought he was either gonna break my neck, rip my shirt off, or break my nose.

The neck token is an extreme outlier, and appeared in a humorously-related narrative about a playful wrestle with a friend that got a little out of control. The speaker, Sheena, is not one of the panelists, as she was not re-interviewed in 2006. Listeners were asked to write down what they thought they had heard, no matter how nonsensical, and were not allowed to revise their responses to the Word and Phrase rounds after hearing the full context. I played the audio to two groups of listeners. The first consisted of 64 Sacred High students who were juniors in 2006 (i.e., who were at least a year younger than the youngest panelist), aged 16-18, with 30 girls and 34 boys. The second group were drawn from two undergraduate classes (linguistics and sociology respectively) at the University of Pennsylvania, almost all of whom were non-local, aged 18-22, with 37 women and 16 boys. Overall, the South Philadelphians correctly guessed the target vowel more frequently than the non-Philadelphians, with the strongest advantage appearing at the Word level. As many as 92% of the non-Philadelphians mis-identified the word neck in isolation (compared with only 48% of South Philadelphians). The most frequently occurring wrong answer was nag. South Philadelphians arguably do better at this task.
because they are exposed to extreme variants of lowered and backed (e); however, the fact that they correctly identify neck only slightly more than 50% of the time suggests that not all locals are equally exposed to these variants.

5.4.1.3 (e) in 2005 at Sacred Heart

All tokens of (e) from the normalized vowel systems of all 18 panelists were combined to see if this vowel appears in lowered position, near (ae), at Sacred Heart. A visual inspection of its position relative to both (ae) and (aw) shows that the Sacred Heart girls’ (e) is lower than the overall mean position of (e) in both Labov’s LCV study in the 1970s, and Conn’s restudy of Philadelphia in the early 2000s (Figure 5.8 and Figure 5.9 respectively). Figure 5.10 clearly shows that overall for the 18 Sacred Heart speakers, the nucleus of (aw) is now higher than (e), suggesting a continuing trend of lowering.
Figure 5.8 Overall means of (aw) and (e) in Philadelphia, 1970s
Adapted from Labov (1994:59).
Figure 5.9 Overall means for (aw) and (e) in Philadelphia, 2003
Adapted from Conn (2005:63)

Figure 5.10 Overall means for (aw) and (e) for 18 speakers, South Philadelphia, 2005
The distribution of (e) tokens across independent factors, shown in the summary in Table 5.3, reveals no significant differences within each factor. That is to say, the mean F1 for Irish speakers is not significantly different from the mean F1 for Italian speakers; similarly the mean for SES 1 is not significantly different from SES 2, nor SES 2 from SES 3.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean /e/ F1 (Hz)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Socioeconomic status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SES 1</td>
<td>690</td>
<td>81</td>
</tr>
<tr>
<td>SES 2</td>
<td>682</td>
<td>67</td>
</tr>
<tr>
<td>SES 3</td>
<td>677</td>
<td>100</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irish</td>
<td>689</td>
<td>122</td>
</tr>
<tr>
<td>Italian</td>
<td>677</td>
<td>126</td>
</tr>
<tr>
<td><strong>Total N</strong></td>
<td></td>
<td>248</td>
</tr>
</tbody>
</table>

Table 5.3 Normalized F1 means for (e), 18 speakers.

A multiple regression analysis of F1 of (e) was run with ethnicity and social class as independent variables, and the results are given in Table 5.4. Only SES1 significantly contributed to the adjusted $r^2$ of the model; SES2 and SES3, whether included separately or as a combined category, reduced $r^2$. Even so, SES1 is significant only at the $p \leq 0.1$ level and explains only 0.4% of the variation when it is regressed alone on F1. When combined with Irish ethnicity, the amount of variation explained by the model rises only by one additional percentage point, to 1.4%. Given the relative newness of this change, however, it is perhaps not surprising that (e) shows very little social patterning in this fairly homogenous pool of speakers. We turn in the next section to an older change: (aw).
<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Effect</th>
<th>t-ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>SES 1</td>
<td>13.4608</td>
<td>8.261</td>
<td>1.63</td>
<td>0.0856</td>
</tr>
<tr>
<td>Italian</td>
<td>13.3752</td>
<td>7.750</td>
<td>1.73</td>
<td>0.1045</td>
</tr>
<tr>
<td>Constant</td>
<td>671.754</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ r^2 \text{ (adj)} = 1.2\% \quad N = 248 \quad d.f. = 245 \]

Table 5.4 Significant regression co-efficients for F1 of (e), 18 speakers, \( p \leq 0.1 \).

5.4.2 (aw)

The tensing and raising of the nucleus of (aw) in *house, South, now* etc. is one of the changes described as “new and vigorous” by the LCV project (Labov 2001:203-204) and was below the level of social awareness at that time. As mentioned earlier, however, Conn (2005:113-116), found that by the early 2000s, this change was retrograde, and that the reversal was being led by the upper middle class. The possibility that (aw) has changed direction makes interpretation of its distribution in the present study quite a lot harder. Figure 5.11, however, shows that for all the Sacred Heart students in the panel, the nucleus is in mid to lower mid position, some 100 Hz lower than the overall mean F1 for (aeh). Furthermore, one of the Sacred Heart speakers with the laxest nuclei is Angela, who is in the highest social class group, SES 3. If South Philadelphia is indeed participating in the reversal of the tensing of (aw), then it is unsurprising that Angela—who is the highest ranked student in terms of parents’ occupation and education—would be the linguistic leader of the panel.
Figure 5.11 Normalized mean (aw) values for 18 panel speakers (triangles) and pooled means for the panel (circles).

Following Labov (1994:104), a calculation was made of position on the front diagonal:

$$\text{Height}_{\text{FRONT}} = \sqrt{F2^2 - (2*F1)^2}$$

The higher the value of $\text{Height}_{\text{FRONT}}$, the higher and fronter the nucleus of the vowel. An analysis of within-factor variation for Height, displayed in Table 5.5, finds that higher, fronter (aw) nuclei are associated with SES 1. In the table, asterisks indicate that the marked value was calculated in a t-test to be significantly different from the value directly above. SES 2 and SES 3 were not significantly different from one another, and
have been combined. Since Conn found that the reversed (aw) change is being led by the upper middle class, it might be that those SES 1 speakers with the highest, frontest nuclei are indeed linguistic laggars. However, the main point of interest for the present study is that whether (aw) is advancing or regressing, it displays a correlation with social class such that SES 1 is significantly differentiated from the other two social class groups. Also of particular importance to this investigation is the finding that for this panel of Sacred Heart students, ethnicity and (aw) do not significantly co-vary.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Height-FRONT (aw)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Socioeconomic status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SES 1</td>
<td>1425</td>
<td>136</td>
</tr>
<tr>
<td>SES 2 + SES 3</td>
<td><strong>1307</strong></td>
<td>205</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irish</td>
<td>1373</td>
<td>174</td>
</tr>
<tr>
<td>Italian</td>
<td>1334</td>
<td>167</td>
</tr>
<tr>
<td><strong>Total N</strong></td>
<td></td>
<td>341</td>
</tr>
</tbody>
</table>

** p ≤ 0.001

Table 5.5 Normalized means of (aw) for 18 speakers

5.4.3 (ay0)

The only vowel shift for which a significant effect of ethnicity was found was the centralization of (ay) before voiceless consonants, notated as (ay0). Table 5.6 displays the mean F1 and F2 by socioeconomic status, ethnicity and cohort, as well as a measure of position on the back diagonal, calculated using the following formula:

$$\text{Height}_\text{BACK} = \sqrt{F2^2 - F1^2}$$
For this measurement, higher values for Height_{\text{BACK}} represent a more conservative position on the diagonal, and high numbers represent greater advancement on the diagonal. Table 5.6 shows that the Irish are significantly more advanced than the Italians. (Once again, an asterisked value is significantly different, by t-test, from the value above). Looking at the breakdown by F1 and F2, we see that it is in the front-back dimension that the ethnic effect appears, with the Irish on average 50 Hz backer than the Italians. However, there is a significant difference on the F1 dimension between SES 1 and the other social classes, a difference which disappears in the Height calculation.

<table>
<thead>
<tr>
<th>Variable</th>
<th>F1 (ay0) Hz</th>
<th>F2 (ay0) Hz</th>
<th>Height_{\text{BACK}}</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socioeconomic status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SES 1</td>
<td>621</td>
<td>1413</td>
<td>1263</td>
<td>77</td>
</tr>
<tr>
<td>SES 2 + SES 3</td>
<td>**647</td>
<td>1432</td>
<td>1272</td>
<td>196</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irish</td>
<td>644</td>
<td>1401</td>
<td>1244</td>
<td>138</td>
</tr>
<tr>
<td>Italian</td>
<td>635</td>
<td>*1450</td>
<td>*1295</td>
<td>135</td>
</tr>
<tr>
<td>Total N</td>
<td></td>
<td></td>
<td></td>
<td>273</td>
</tr>
</tbody>
</table>

** p ≤ 0.001; * p ≤ 0.05

Table 5.6 Normalized means of (ay0) for 18 speakers by social status and ethnicity.

Separate multiple regression analyses of Height_{\text{BACK}}, F1 and F2 with social class and ethnicity as independent variables, confirm the results presented in Table 5.6. For Height_{\text{BACK}}, only ethnicity contributed significantly to the model, at p < 0.05, but it accounts for only 1.4% of the variation. When social class was added, it had no significant effect on the model, but the value of the adjusted $r^2$ was reduced to 1%, while the effect of ethnicity remained significant. A regression of F2 of (ay0) against ethnicity
and social class produced similar results, with only ethnicity contributing significantly to the model ($p < 0.05$), and accounting for only 1.8% of the variation. Finally, only social class (SES 1, with SES2+3 as residual) contributed significantly ($p<0.001$) to a regression on F1 of (ay0), accounting for 3.8% of the variation. The results are a little perplexing, since they explain so little of the variation in realization of (ay0) in this sample of speakers. However, it is nonetheless very striking that this vowel variable displays this admittedly small, yet significant, ethnic differentiation. To explore this finding further, I will present an analysis of the (ay0) data by individual.

Firstly, for all speakers except one (Natalie), their un-normalized means of (ay0) and (ayV) are significantly different from one another ($p < 0.05$) in height, when checked with a t-test. Thus all speakers except Natalie\textsuperscript{8} display the allophonic distribution of (ayV) and (ay0) that we would expect for Philadelphians their age, none are anomalous in this respect, and we can proceed to an examination of the front-back dimension.

For this, each individual’s values of F2 of (ayV) and (ay0) were compared with each other in a t-test. Speakers whose (ayV) and (ay0) F2 values were significantly different (ie, their mean (ay0) was significantly fronter or backer than (ayV), are indicated in Table 5.7 with asterisks.
<table>
<thead>
<tr>
<th>Speaker</th>
<th>Social background</th>
<th>Mean F2 (ayV)</th>
<th>Mean F2 (ay0)</th>
<th>Mean diff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abby</td>
<td>Ir, 2</td>
<td>1374</td>
<td>1396</td>
<td>22</td>
</tr>
<tr>
<td>Amanda</td>
<td>It, 2</td>
<td>1378</td>
<td>1439</td>
<td>61</td>
</tr>
<tr>
<td>Angela</td>
<td>It, 3</td>
<td>1425</td>
<td>1536</td>
<td>111</td>
</tr>
<tr>
<td>Becky</td>
<td>It, 1</td>
<td>1380</td>
<td>1259</td>
<td>**-121</td>
</tr>
<tr>
<td>Chelsea</td>
<td>It, 3</td>
<td>1441</td>
<td>1533</td>
<td>**91</td>
</tr>
<tr>
<td>Claire</td>
<td>Ir, 3</td>
<td>1349</td>
<td>1346</td>
<td>-3</td>
</tr>
<tr>
<td>Courtney</td>
<td>It, 1</td>
<td>1319</td>
<td>1269</td>
<td>-50</td>
</tr>
<tr>
<td>Danielle</td>
<td>Ir, 3</td>
<td>1394</td>
<td>1369</td>
<td>-25</td>
</tr>
<tr>
<td>Deirdra</td>
<td>Ir, 3</td>
<td>1358</td>
<td>1307</td>
<td>-51</td>
</tr>
<tr>
<td>Emma</td>
<td>It, 2</td>
<td>1550</td>
<td>1550</td>
<td>0</td>
</tr>
<tr>
<td>Erin</td>
<td>Ir, 1</td>
<td>1429</td>
<td>1354</td>
<td>-75</td>
</tr>
<tr>
<td>Hayley</td>
<td>It, 2</td>
<td>1390</td>
<td>1431</td>
<td>41</td>
</tr>
<tr>
<td>Joanna</td>
<td>It, 2</td>
<td>1458</td>
<td>1430</td>
<td>-28</td>
</tr>
<tr>
<td>Julia</td>
<td>Ir, 2</td>
<td>1420</td>
<td>1339</td>
<td>-81</td>
</tr>
<tr>
<td>Kerry</td>
<td>Ir, 1</td>
<td>1311</td>
<td>1375</td>
<td>64</td>
</tr>
<tr>
<td>Lucia</td>
<td>It, 3</td>
<td>1422</td>
<td>1541</td>
<td>**119</td>
</tr>
<tr>
<td>Melanie</td>
<td>Ir, 1</td>
<td>1499</td>
<td>1601</td>
<td>**102</td>
</tr>
<tr>
<td>Natalie</td>
<td>It, 1</td>
<td>1375</td>
<td>1409</td>
<td>34</td>
</tr>
</tbody>
</table>

** p < 0.01; * p < 0.05; all others not significant.

Table 5.7 Un-normalized mean values of (ayV) and (ay0) by individual speaker.
Ir = Irish; It = Italian; 1, 2, 3 = SES 1, 2, 3 respectively

5.4.3.1 (ay0) and ethnicity

Most speakers show no significant difference in F2 between their nuclei of (ay0) and (ayV); the exceptions are Melanie, Lucia and Chelsea, whose (ay0) is significantly fronter than their (ayV), and Becky, whose (ay0) is significantly backer, as displayed in Table 5.7.
Overall, however, Irish girls’ F2 of (ay0) is on average 75 Hz backer than their mean F2 of (ayV), and Italian girls’ (ay0) is on average 287 Hz fronter than their (ayV), as derived from the individual normalized mean differences in the right-hand column of Table 5.7.

Figure 5.12 displays the normalized mean (ay0) and (ayV) for all eighteen speakers. Even though, at the individual level, the speaker with the frontest mean (ay0) is an Irish girl, Melanie, and the backest nuclei were produced by Italian girls, Becky and Courtney, the general trend is for Irish girls to have backed nuclei relative to their (ayV), and for Italian girls to have fronter (ay0) nuclei than relative to their (ayV).

![Figure 5.12](image_url)  
Figure 5.12 Normalized mean values of (ayV) and (ay0) for 18 panel speakers.

Why should it be (ay0), of the three vowels under investigation, to show a small yet significant effect of ethnicity on its distribution? And how do we account for the extreme
positions of Melanie, Courtney and Becky? To answer these questions, we must bear in mind the Sacred Heart characterization of Irish girls “acting like men”. In Chapter 1, it was stated that in the LCV research project, (ay0) was the only vowel variable in the Philadelphia system to be led by men: an extraordinary finding in any speech community, given the pre-eminence of women as leaders of linguistic change. Men led only in the raising of the nucleus of (ay0) on the F1 axis; no significant social correlation of any kind was found for the F2 axis.

Conn (2005), found that while men are still leading this change in Philadelphia, there is now also a slow backing change in F2 of (ay0). Because this change is slow, it did not appear in Conn's apparent time comparisons and could be seen only in Conn’s real time comparison of his own data with that of the LCV project. The backing change was not subject to sex differentiation, but working class speakers were ahead of all other socioeconomic groups (Conn 2005:102). Despite the lack of significant sex differentiation in F2, the LCV project noticed a similarly non-significant tendency for women to front their (ay0) nuclei and for men to back them. Figure 5.13 reproduces the vowel system of Barbara Corcoran, and compares it with that of her younger brother, Rick Corcoran, in Figure 5.14. Each mean (ay0) is highlighted with a black circle, and the sex difference in F2 reported on in the LCV project can be clearly seen.
Figure 5.13 Vowel system of Barbara Corcoran, 16, in the 1970s (Labov 2001:138).
Putting together the findings of both Conn’s and Labov’s studies of (ay0), backed nuclei appear to be associated with men, and with the working class. How has this tendency come to appear in the speech of Irish girls at Sacred Heart high school?

The 1970s LCV survey carried out a range of self-report and subjective reaction tests in Philadelphia. In the subjective reaction tests, people consistently downgraded advanced variants of (ay0). But the self-report test participants showed no overt awareness of the (ay0) change. After listening to conservative and advanced variants of fight, however, a few comments were noted down by the fieldworker, Ann Bower (Labov 2001:203). In South Philadelphia, an Italian informant described the advanced variants as “Two-streets! sounds like the Irish on 2nd St.” Barbara Corcoran, introduced in section
6.3 above, said that the advanced variants sounded “like tough kids.” This rare remark suggests an association of this male-led variable with something other than gender: toughness on a subjective level.

Don Hindle’s (1980) dissertation study of the speech of a single subject, Carol Meyers, over the course of a single day, provided data on (ay0)’s sensitivity to social situations. Carol produced more advanced variants when she was at work, and less advanced variants when playing bridge at home with her girlfriends. In other words, we can suppose that more advanced, male-like variants were appropriate in the male-dominated world of work, while more conservative, female-like variants were appropriate for the bridge game.

Conn (2005), who also carried out subjective reaction tests, found that advanced variants produced by females were downgraded, while advanced variants produced by males were evaluated as tougher and more masculine than the conservative variants. In other words, advanced (ay0) variants carry covert male prestige.

We saw in Chapter 3 that the Irish girls at Sacred Heart place particular value on toughness and unpretentiousness. They indicate their allegiance to this value system not only in what they say, but in their demeanour, physical appearance and now apparently also in their speech. Centralized variants of (ay0) are already symbolically associated in the community with the personal qualities they prize most highly. Indeed, centralized (ay0) is associated with toughness in other communities, too: the Burnouts at Belten High produced the most advanced tokens of this vowel in general, and particularly when discussing their own non-conformist behavior (Eckert, 1996). Gordon and Heath (1998) go so far as to suggest that the association of men (or in the present case, stereotypical
features of masculinity) with back vowel changes might prove to be a sociolinguistic universal for English, although the evidence for this is weak. Whether or not this is true, the generality of (ay0)’s connection with toughness goes some way to helping us account for the exceptionally back (ay0) means produced by non-Irish speakers. Backed (ay0) is not the exclusive symbolic province of the Irish, as the tiny $r^2$ value for ethnicity in the multiple regression analysis goes to show. Rather, it can be employed by any speaker displaying toughness: something that is much likelier to be necessary for SES 1 speakers such as Becky and Courtney⁹, who are not Irish, but Italian.

Courtney devoted a good deal of time in her only interview to describing South Philadelphian territories. She told me her neighborhood was “okay where I’m at, but two blocks down it’s pretty bad.” Friends and family from suburban New Jersey, she told me scornfully, were usually scared when they came to visit: “they wanna go home so bad […] I don’t see anything wrong with it though. I guess I’m just a city girl.” More than any other student, Courtney talked with authority about the rivalry between particular “corners” and her brother’s loyalty to Eighteenth Street: “He stays there on that corner all day every day.” While it seemed clear that it was her brother who generally participated in actual fights, Courtney too was prepared to get involved, because “the worst thing you can do is back down from someone around here.” Perceived slights should always be responded to, especially if directed at members of her family:

Courtney: I hate that, when people try to make me look inferior. I hate that. And then the only time I ever f- like I fought other than that was wi- over my brother.
Courtney told me that her parents raised her (and presumably also her brother) to defend herself. People in her neighborhood fight all the time, she said, “I mean, to be dead honest, like, some people say they like to fight […] That’s how my brother is. He enjoys it. He’ll sit on that corner all day and wait for trouble to fall into his lap. See I’m not like that. I just stay out of everything.” But while Courtney might not, indeed, be an participant in corner fights, it was clear that she was proud of both her brother’s and her neighborhood’s notoriety.

Becky, by contrast, did not talk about fights, but her best friend is Irish and she spends more time at her friend Erin’s house on Second Street than her own, because “her [Erin’s] parents don’t care”. If Becky is making use of backed (ay0), it is perhaps to assert her allegiance to the more casual, unpretentious lifestyle of the Second Streeters whom she admires, whereas for Courtney this vowel is associated with her self image as a potentially tough street fighter who will defend herself if provoked.

If the correlation of (ay0) with ethnicity can be analyzed as a correlation with toughness instead, is it meaningful to say that ethnicity has linguistic correlates at Sacred Heart? To find out whether ethnicity has any substantial influence on vowel production,
the next section considers the two variables, \((ow)\) and \((uw)\), that displayed ethnic differentiation in the LCV project.

### 5.4.4 A short exploration of ethnicity, \((ow)\) and \((uw)\)

The story is in general a simple one: ethnicity differs from age, gender, social class, and neighborhood in that it has little systematic effect on language change in progress. For most of the sound changes, there are no ethnic effects.

(Labov 2001:257)

With respect to vowel shifts in Philadelphia, Labov and the LCV project found that ethnicity (Italian, Irish, Jewish, German, WASP\(^{10}\)) generally did not co-vary with the vowel variables they studied in the white population. Only in the fronting of \((uw)\) and \((ow)\) did the LCV find a clear effect of Italian ethnicity, with Italians lagging around 100-200 Hz behind other ethnic groups (Labov 2001: 258). As Labov points out, there is no obvious linguistic explanation for the retarding effect of Italian ethnicity on \((ow)\) and \((uw)\). The Italian phonological system includes a monophthongal /u/, but no front /y/, for example. However, the same is true of the languages spoken by other immigrant groups such as the Irish and Polish, and yet these groups do not lag in the fronting of \((ow)\) and \((uw)\) as the Italians do. Labov (2001: 259) concludes that in general, “ethnic effects are rarely predicted or explained by the direct comparison of the two [L1 and L2] systems”, at least in US cities studied to date, such as New York, Boston, Grand Rapids and Philadelphia.
It is therefore intriguing that F2 of (āy0) should show a pattern with speaker ethnicity in the Sacred Heart data, and worth examining whether these speakers also demonstrate a correlation of Italian ethnicity with the vowels (ow) and (uw).

5.4.4.1 (owC)

A first analysis of the data for the fronting of (owC)—that is, /ow/ in checked position in eg. phone, most, hose—suggests that not only ethnicity but also social class have an effect on fronting of this vowel. There is an inverse relationship between fronting and social class: the higher the social status, the backer the realization of (owC). Figure 5.15 displays the mean F2 values for the three SES groups. The difference between each pair of means (SES 1 and 2, SES 2 and 3) is significant (t = -7.73, p < 0.05; t = -2.72, p < 0.05 for respective pairs).

Figure 5.15 Mean F2 of (owC) for 18 speakers by socioeconomic status (SES).
Similarly, the difference in mean F2 for Irish and Italian speakers was significantly different ($t = -4.30, p < 0.001$), with Irish speakers’ (owC) an average of 134 Hz fronter than that of Italian speakers. The results are summarized in Table 5.8, below. Once again, asterisks signify that the value is significantly different from the number in the cell directly above it.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean owC F2 (Hz)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Socioeconomic status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SES 1</td>
<td>1614</td>
<td>72</td>
</tr>
<tr>
<td>SES 2</td>
<td>*1525</td>
<td>43</td>
</tr>
<tr>
<td>SES 3</td>
<td>*1342</td>
<td>69</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irish</td>
<td>1564</td>
<td>84</td>
</tr>
<tr>
<td>Italian</td>
<td><strong>1430</strong></td>
<td>100</td>
</tr>
<tr>
<td><strong>Total N</strong></td>
<td></td>
<td>184</td>
</tr>
</tbody>
</table>

Table 5.8 Mean F2 of (owC) by socioeconomic status and ethnicity.
* = significantly different from number in cell above, $p < 0.05$; ** = $p < 0.001$.

I ran a multiple regression analysis to check that the relationships in Table 6 held true when they were all taken into account simultaneously. The results are given in Table 5.9. The linear relationship of socioeconomic status and (owC) fronting is now disrupted, with only SES 3 having a retarding effect on fronting. Of particular importance to the present study, however, is the finding that Italian ethnicity has a consistently negative effect on the fronting of (owC), just as it did in the LCV project in the 1970s.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Effect</th>
<th>t-ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>SES 3</td>
<td>-193.833</td>
<td>36.14</td>
<td>-5.36</td>
<td>$\leq 0.0001$</td>
</tr>
<tr>
<td>Italian</td>
<td>-144.528</td>
<td>36.14</td>
<td>-4.00</td>
<td>0.0001</td>
</tr>
</tbody>
</table>

Table 5.9 Significant regression co-efficients for the fronting of (owC), 18 speakers

$R^2$ (adj) = 28.0%  N = 128  d.f. = 125
Although Italian ethnicity has a negative effect on the fronting of (owC), it does not have the same effect on (owF): /ow/ in free position in words such as go, know, so. Although membership in SES 1 has a significant promoting effect on F2 of (owF), there is no significant difference in Irish and Italian F2 means for this vowel (t = -1.47, p = n.s., N= 283), and ethnicity was not a non-significant factor in a multiple regression analysis (Table 5.10 and Table 5.11), explaining only 0.2% of the variation.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean owF F2 (Hz)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Socioeconomic status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SES 1</td>
<td>1696</td>
<td>100</td>
</tr>
<tr>
<td>SES 2 + SES 3</td>
<td><strong>1585</strong></td>
<td>183</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irish</td>
<td>1611</td>
<td>153</td>
</tr>
<tr>
<td>Italian</td>
<td>1637</td>
<td>130</td>
</tr>
<tr>
<td>Total N</td>
<td>283</td>
<td></td>
</tr>
</tbody>
</table>

Table 5.10 Mean F2 of (owF) by socioeconomic status and ethnicity. ** = significantly different from number in cell above, p < 0.001.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Effect</th>
<th>t-ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>SES 2 + 3</td>
<td>-102.607</td>
<td>19.45</td>
<td>-5.61</td>
<td>≤ 0.0001</td>
</tr>
<tr>
<td>Italian</td>
<td>-22.4940</td>
<td>18.65</td>
<td>-1.21</td>
<td>0.2288</td>
</tr>
</tbody>
</table>

Table 5.11 Regression co-efficients for the fronting of (owC), 18 speakers

5.4.4.3 (Tuw) and (Kuw)

Before discussing the social factors influencing the fronting of (uw), I explain the linguistic distinctions I made during the measuring and coding process. As I described
earlier in this chapter, I followed the Plotnik coding categories for (uw), which reflect the
fact that in many American dialects, including Philadelphia English, (uw) is significantly
more fronted after coronal consonants (notated Tuw) than after non-coronal consonants

This is also true, in general, for the Sacred Heart panel under discussion here. For
17 speakers\(^\text{11}\), 14 have (Tuw) and (Kuw) F2 means that are significantly different from
one another (p < 0.05) in a two-tailed t-test, and this supports the decision to code these
two allophones separately. The LCV research team, however, treated (uw) in free
position differently from (uw) in checked position (uwF and uwC respectively) in their
survey of Philadelphia. Checked (uwC) was not as fronted as (uwF), and the two were
coded as separate allophones.

As I listened to tokens of (Tuw) in free position, it became clear that for almost all
the speakers, it would be necessary to distinguish a third variant, which I call pre-pausal
(Tuw), or (TuwP). Almost always in absolute sentence-final position or in clause-final
position with falling pitch, the Sacred Heart speakers produced nuclei of free (Tuw) that
were lower and often backer than those produced sentence-medially\(^\text{12}\). My observations
are necessarily constrained to (Tuw) tokens in free environments because the dataset
contains only checked tokens of (Kuw), none of which were backed or lowered in pre-
pausal position\(^\text{13}\). For some speakers, the peripheral (TuwP) tokens are around 100 Hz
lower and up to 300 Hz backer than other tokens of (Tuw). To exemplify, Figure 5.16
displays (Tuw) tokens for Erin. There is a clear separation in phonetic space between
sentence-medial (Tuw) tokens (from which the mean was calculated) and sentence-final
tokens. There are two medial tokens of knew which pattern with (TuwP), a fact which
suggests that centralization is not conditioned solely by phonological environment: it may also be a stylistic resource. Eckert (p.c.) found that lowered, backed tokens of (ow) occurred in the speech of some California pre-teenagers when they were especially angry or sullen, and this association of (TuwP) tokens with an emotional stance could be true for the Sacred Heart students, too. Further research is required.

Figure 5.16 Formant measurements for Erin’s tokens of (Tuw) and (TuwP). The latter are represented by bold symbols and were not included in the calculation of the (Tuw) mean. The two tokens of knew pattern with the (TuwP) tokens, but were not pre-pausal.

Although some of Claire’s medial tokens pattern with (TuwP), however, none of the (TuwP) tokens pattern with the high front (Tuw) tokens near the mean, and this was true for all the panelists. Since the (TuwP) tokens form such a distinct subgroup, I excluded
them from calculation of each speaker’s (Tuw) mean. In the discussion to follow, therefore, only non-(TuwP) tokens are intended in any reference to (Tuw). Table 5.12 shows that when means were calculated, those for Irish and Italian speakers were not significantly different from one another, while SES 1 was again significantly fronter than speakers in the other two social classes.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean Tuw F2 (Hz)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Socioeconomic status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SES 1</td>
<td>1909</td>
<td>36</td>
</tr>
<tr>
<td>SES 2 + SES 3</td>
<td>*1762</td>
<td>58</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irish</td>
<td>1770</td>
<td>50</td>
</tr>
<tr>
<td>Italian</td>
<td>1873</td>
<td>44</td>
</tr>
<tr>
<td><strong>Total N</strong></td>
<td></td>
<td>94</td>
</tr>
</tbody>
</table>

Table 5.12 Mean F2 of (Tuw) by socioeconomic status and ethnicity.

* = significantly different from number in cell above, p < 0.05.

Multiple regression analysis confirmed the effect of class; when SES 2 and 3 were combined as an independent variable (Table 5.13), they had a retarding effect on fronting of over 100 Hz, significant at p < 0.05. The effect of ethnicity was significant only at p ≤ 0.1, and contributed to 1.5% of the variation.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Effect</th>
<th>t-ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>SES 2 + 3</td>
<td>-134.602</td>
<td>55.52</td>
<td>-2.42</td>
<td>0.0173</td>
</tr>
<tr>
<td>Italian</td>
<td>-85.7390</td>
<td>54.09</td>
<td>-1.59</td>
<td>0.1164</td>
</tr>
</tbody>
</table>

Constant 1946.83  
$r^2$ (adj) = 7.6%  
N = 94  
d.f. = 91

Table 5.13 Regression co-efficients for the fronting of (Tuw), 18 speakers
Ethnicity, then, appears not to correlate with the fronting of (Tuw) as strongly as it did for (owC). To summarize, although Irish and Italian ethnicity are frequently referred to by the Sacred Heart girls, the impact of ethnicity on their vowel systems is minimal. Of the mid-range vowel changes affected by ethnicity in the LCV project, only (owC) correlated significantly with speaker ethnicity in the Sacred Heart study, showing, in line with the earlier findings, a retarding effect of Italian background. One vowel not previously found to correlate with ethnicity in Philadelphia, (ay0), was found to present significant patterning with ethnicity in F2 only. Italian girls on average have fronter (ay0) means than Irish girls. In this respect, Irish girls are “acting like men” linguistically as well as socially, as they show the same tendency to back the nucleus of (ay0) that was found for men in the LCV project. However, backed (ay0) seems to index something more abstract than male-ness: toughness, casualness, lack of pretension.

It is a puzzle why Irish girls and Italian girls, who consider themselves to be so different from one another, should yet be so linguistically homogenous. Socially, ethnic identity is very important: the girls (especially the Irish girls, as we have seen in Chapter 3) talk about it, and frame their discussion of differences in terms of street corners and historical feuds, but these conflicts are not the stuff of everyday presentation of self. More important is the availability of ethnic images in constructing personae out of the behavior that they and their peers use in presenting their selves: hair styles, makeup and dress choices, ways of orienting to other girls and to the opposite sex. That these behaviors are not accompanied, in general, by numerous ethnic differences in speech, does not make ethnic identity less important to everyday social life.
That ideological differences in the school are far greater than their associated linguistic differences is entirely in line with previous research on long-established white ethnic groups in the big cities of the Eastern seaboard. Ethnicity is of much lesser significance in the internal differentiation of the speech community than social class, age and gender (Labov, 2001; Laferriere, 1979). Milroy and Milroy (1985), in their work on Belfast, also generally found small, often non-significant effects of Protestant and Catholic ethnicity on the speech of their interviewees. Yet the effects were demonstrably there. Thus, while ethnicity might account for only a small percentage of linguistic variation among Sacred Heart girls, this finding contributes further to our understanding of ethnicity’s influence on the monolingual speech community.

5.5 Real time vowel analysis

5.5.1 Composition of the panel

Fifty percent of the synchronic sample, a total of 9 speakers, was subjected to a real time analysis of participation in Philadelphia sound change from below. The nine speakers are given in bold type in Table 5.14. They were all seniors in 2005 and were all in college at the time of their second interview in 2006.
<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>SES 1</th>
<th>SES 2</th>
<th>SES 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irish</td>
<td>Erin</td>
<td>Abby</td>
<td>Danielle</td>
</tr>
<tr>
<td></td>
<td>Kerry</td>
<td>Joanna</td>
<td>Deirdra</td>
</tr>
<tr>
<td></td>
<td>Melanie</td>
<td>Julia</td>
<td>Claire</td>
</tr>
<tr>
<td>Italian</td>
<td>Natalie</td>
<td>Hayley</td>
<td>Angela</td>
</tr>
<tr>
<td></td>
<td>Courtney</td>
<td>Amanda</td>
<td>Lucia</td>
</tr>
<tr>
<td></td>
<td>Becky</td>
<td>Emma</td>
<td>Chelsea</td>
</tr>
</tbody>
</table>

Table 5.14 Sub-sample of 6 panel speakers for vowel analysis (in bold).

Speakers with only one recorded interview are in italics.

The only speaker to go straight into full-time work was Courtney, who declined to participate in the second round. Nonetheless, the sub-sample speakers attended a variety of colleges, from a local city community college, to an Ivy League university and thus represent a range of different transitions from high school.

*Natalie* and *Abby* are the only speakers in the panel who went to Philadelphia’s community college after high school, where they pursued diplomas in business and nursing, respectively. *Deirdra* was attending a vocational business college in the city when I recorded her for the second time; she later dropped out and took a full time retail job. *Emma* also pursued vocational education, in nursing, at a Catholic college near Philadelphia.

The remaining five Sacred Heart students were all in the “smart girl” group in high school. *Amanda, Julia* and *Angela* were accepted to prestigious colleges, but in their 2006 interviews they expressed very different attitudes to their new institutions. Amanda, at a selective liberal arts college, was deeply uncomfortable and talked about leaving to do a vocational nursing degree at another institution. Angela and Julia, on the other hand,
were enjoying their college experiences. Angela was overwhelmed and homesick in her first semester, but by the time we talked she was happy.

*Joanna* and *Hayley* provide a similar contrast in attitudes. Hayley’s experience of her local Catholic college is of a home away from home in which she has plunged herself into new activities and friendships. Joanna, on the other hand, attends college in a neighboring state, but comes home at least once a week to handle her part time job and various family responsibilities. She is not enjoying her university life. Joanna and Hayley were also selected for the real time vowel analysis because their (ing) and (dh) scores were as contrastive as their experiences of college. Joanna dramatically retreated from non-standard variants of these two variables, while Hayley dramatically increased her use of non-standard variants. We should like to know if these sharp contrasts are also reflected in their participation in vowel changes.

5.5.2 Overall results

The un-normalized vowel system measurements from 2005 and 2006 for each of the nine speakers were compared, and the results are given in Table 5.15. The three vowels selected for the present study, (e), (ay0) and (aw) are listed first. A fourth vowel, the tensing and raising of (aeh) is listed below the other three, and as for (aw), measurements were made along the front diagonal using the algorithm above. Tense (aeh) is a highly salient stereotype of Philadelphia speech, and was the only vowel sound ever explicitly commented on by the Sacred Heart girls. It is therefore sensible to hypothesize that if a
speaker retreats from non-standard (ing) and (dh), she will also retreat from stigmatized (aeh). However, as I discuss below, this hypothesis is not confirmed.
**Vowel measurement**  | Speaker  | Mean difference | t-ratio | N (2005, 2006)  
---|---|---|---|---
(e)-F1 | Natalie | 77 | *-3.07 | 7, 15  
| Abby | 59 | *-2.29 | 22, 17  
| Angela | 102 | **-3.86 | 19, 20  
| Amanda | -9 | 0.40 | 10, 19  
| Hayley | 2 | -0.08 | 7, 20  
| Joanna | -25 | 0.86 | 6, 17  
| Emma | -40 | *2.57 | 12, 34  
| Julia | -18 | 1.15 | 16, 40  
| Deirdra | -39 | 1.54 | 17, 29  

(ay0)-back diagonal  
| Speaker  | Mean difference | t-ratio | N (2005, 2006)  
---|---|---|---
| Natalie | 86 | -1.41 | 13, 14  
| Abby | 86 | *2.01 | 14, 15  
| Angela | 57 | -0.48 | 11, 7  
| Amanda | 33 | -0.55 | 35, 15  
| Hayley | -250 | **5.72 | 17, 27  
| Joanna | 204 | **-4.31 | 14, 21  
| Emma | -3 | 0.20 | 10, 10  
| Julia | 127 | -0.94 | 9, 18  
| Deirdra | 69 | -1.15 | 18, 16  

(aw)-front diagonal  
| Speaker  | Mean difference | t-ratio | N (2005, 2006)  
---|---|---|---
| Natalie | -42 | 0.61 | 33, 14  
| Abby | 188 | -1.38 | 17, 10  
| Angela | 479 | **-4.38 | 16, 10  
| Amanda | -36 | 0.23 | 11, 18  
| Hayley | -28 | 0.42 | 21, 26  
| Joanna | -52 | 0.53 | 16, 37  
| Emma | -306 | **3.71 | 23, 16  
| Julia | -46 | 0.50 | 18, 11  
| Deirdra | -82 | 1.23 | 19, 19  

(aeh)-front diagonal  
| Speaker  | Mean difference | t-ratio | N (2005, 2006)  
---|---|---|---
| Natalie | -150 | *2.25 | 18, 13  
| Abby | 210 | *1.80 | 16, 10  
| Angela | -25 | 0.32 | 20, 13  
| Amanda | -239 | 1.95 | 8, 14  
| Hayley | 171 | -2.65 | 21, 29  
| Joanna | -99 | 1.71 | 13, 13  
| Emma | -24 | 0.26 | 16, 10  
| Julia | -128 | 1.08 | 18, 21  
| Deirdra | -136 | 1.57 | 14, 21  

** p ≤ 0.001; * p ≤ 0.05. All others not significant.  
Table 5.15 Comparison of vowel nuclei for 9 Sacred Heart speakers in 2005 and 2006.
Overall, the picture is one of stability, with very few significant shifts (indicated with asterisks in Table 5.15) between 2005 and 2006. However, six of the nine speakers have shifted their means of at least one of the four vowels since they left high school. Vowels are listed from newest change to oldest change in Table 5.15, and the two newest changes, (e) and (ay0), show the most movement over the course of the year. The changes for each speaker are summarized in Table 5.16. For (e), the movement is generally in the direction of increased F1, indicating that some speakers have continued to participate in the lowering change after high school. For (ay0), two speakers, Hayley and Abby, have advanced in the direction of the change, while the others have almost all remained stable.

As for the two other vowels, Angela has increased her tensing of (aw) and Emma has laxed her nucleus of (aw). Assuming that (aw) is now backing in Philadelphia, this means that Angela has withdrawn from the change, while Emma advances. For the stereotyped vowel (aeh), only Abby and Natalie show change (advance and retreat, respectively).

<table>
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<tr>
<th>Speaker</th>
<th>Advancing</th>
<th>Retreating</th>
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</thead>
<tbody>
<tr>
<td>Natalie</td>
<td>(e)</td>
<td>(aeh)</td>
</tr>
<tr>
<td>Angela</td>
<td>(e)</td>
<td>(aw)</td>
</tr>
<tr>
<td>Emma</td>
<td>(aw)</td>
<td>(e)</td>
</tr>
<tr>
<td>Joanna</td>
<td>--</td>
<td>(ay0)</td>
</tr>
<tr>
<td>Hayley</td>
<td>(ay0)</td>
<td>--</td>
</tr>
<tr>
<td>Abby</td>
<td>(e), (ay0), (aeh)</td>
<td>--</td>
</tr>
<tr>
<td>Amanda</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Julia</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Deirdra</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Table 5.16 Changing vowel variables 2005-6, by speaker
There are two surprises in Table 5.16. The first is that only one speaker retracts the nucleus of (aeh). Since (aeh) is a stereotype of Philadelphia speech, it was hypothesized that speakers would begin to retract their (aeh) nucleus to a more conservative mean value as they made the transition from high school. Instead, only Natalie shows a significant retreat, despite the fact that she has remained in Philadelphia, is in SES 1 and attends community college. She works at the same Italian restaurant as she did in high school. Her (aeh)-retraction cannot be contributed to the influence of non-local peers, since her fellow community college-goers are from the Philadelphia area. I suggest that it is Natalie’s growing sense of herself as an adult that has perhaps contributed to her retreat from (aeh). There has been one quite significant change in her lifestyle since high school: she spends most nights at her boyfriend’s house, and rarely sees her parents or friends. The boyfriend, a high school dropout, is a successful building contractor who owns his home. Natalie jokingly told me that they were like an old married couple.

The other community college attendee, Abby, is by contrast the speaker who continues to participate in more vowel changes than anyone else. Abby lives at home with her parents and has a local part-time job; she also has a boyfriend. However, she is a key member of the Second Street network, within which she continues to socialize regularly. At community college, she spends her free periods larking about with old acquaintances from high school. Abby’s real time results give a good hint that if a speaker remains embedded in their local social network, their post-adolescent
participation in community sound change will persist for longer than for those who leave town.

The second surprise is that Angela, a conservative speaker who drastically reduced her use of non-standard (ing), has not retreated from her 2005 mean for (aeh). Nor have Amanda or Julia, who, like Angela, are attending prestigious colleges and mixing with students who are from very different geographic and socioeconomic backgrounds than their friends from Sacred Heart. Angela however maintains very strong ties to her family and boyfriend in Philadelphia. She talks to her boyfriend for hours at a time on the telephone, and told me that her parents have learned how to use instant messaging and are always checking in with her via IM or telephone. But the impetus to stay in touch comes from Angela, too:

“Like my mom and I are always very close. I still call her once a day. I call her every day just to like catch up on our days and I always call her just to say goodnight just for like thirty seconds, nothing. Last semester I was like calling her like five times a day. I was like, “I wanna go home. I hate my life, blah blah blah.”

Amanda and Julia’s stability across all the vowels analyzed is perhaps a reflection, not of stasis, but of competing pressures. At Amanda’s nationally selective college, she is the only girl she knows who has grown up in inner city Philadelphia, and she is surrounded by mainly suburban peers from across the country. There is undoubtedly pressure to fit in, both linguistically and socially, which Amanda handles by going home most weekends. She told me that sometimes on Thursdays she wants to scream because the weekend is still so far off. The only people she feels she can somewhat identify with are her room-mate, who is from Brooklyn (“I really think that we’re, like, the poor kids, and
we got stuck together”) and a new friend from suburban Philadelphia. Once Amanda gets home, any hints of pretentiousness are quickly stamped on:

And I was telling my mom the story. I was like, “Yeah, I was laughing[læfɪn] really hard at that.” My mom was like, “Did you just say laughing[læfɪn]?” And I was like, “Yeah, I did.” She was like, “Never fucking say that again.”

Amanda’s mother swoops on her use of lax short-a [æ] in a phonological environment where it would normally be tense (eg. [ɛː] or [eʰ]) for Philadelphians. The comment is at once an indication of Philadelphians’ level of awareness of this vowel variable, as well as a testament to its symbolic value as a marker of covert prestige and local pride. It is an extraordinary remark, quite unlike anything previously reported in Philadelphia for this vowel (William Labov, p.c.). It constitutes an explicit identification of lax (ae) with pretentiousness and a betrayal of Amanda’s South Philadelphia roots. She is, in effect, being accused of ‘talking posh’, and responds by taking a middle way: she stops participating in local sound change, but does not retreat from them. She stabilizes.

For Amanda does exert a certain amount of counter-balancing pressure on herself to remain true to her local values. She described her feelings when she came across some students at her college holding an Eagles rally:

[And they were like, “That girl’s from South Philly!” and they like wanted me to go there. And like, I’m not really a big Eagles support- like- which is- oh God, you know. Don’t- don’t spread that around. […] Cause like they were- they were like, “Whooo! Go Eagles!” And like, it was just the most pathetic thing I’ve ever seen. Like if you had done that in our school-- […] Cause like, South Philly fans like- especially, you don’t mess
with their Eagles. Like you just- you know what I mean?[...] And, yeah so it was just like- I was like, “Listen, I can’t even show my face there,” because that would just be the most pathetic thing ever, to be like “Whoo!”

Here, although Amanda is apparently offered the chance to represent herself as a true Philadelphian, she rejects the opportunity. She happens to be uninterested in football, but the real reason for her rejection is clear: the students are not genuine Eagles fans, and to align herself with them would represent an affront to all the South Philadelphians she is connected with. In this particular instance, loyalty to her roots comes before the impetus to integrate with her fellow college students. Her stories draw a picture of someone who is see-sawing between two social worlds, as well as different dialects.

5.5.4 (ay0) and (e)

There are two other patterns in the real time data that require some comment. Firstly, the results for (ay0) show that two best friends, Hayley and Joanna, have entirely opposed pathways of change for this vowel. In the analysis of (ing), they were shown to present opposing outcomes, too: Joanna reduced her use of the alveolar non-standard variant by 50%, while Hayley increased hers by 39%. At the same time, Joanna retreats from the centralization of (ay0) by over 200 units (Figure 5.17) on the back diagonal, while Hayley advances over 200 units. How have two very close friends come to differ from each other linguistically? And why is this difference registered for (ay0), and not for the more socially salient (aeh)?
When I asked Hayley if she was enjoying college, she told me “I’m having the time of my life.” She shares a room with a Sacred Heart friend and goes home most weekends, but has forged strong social ties to her sports team and their friends. Her stories about college were full of funny anecdotes and hair-raising escapades, and she summed up her college using a phrase she’d recently learned: “[My college] is the only party with a $35,000 cover charge.” Joanna’s college experience has been completely different. She doesn’t have a room-mate and rarely sees the other residents of her corridor. She missed the first week of classes because she had to work at her job in Philadelphia, and when I asked her about her social life that first semester, she said:
“Everybody’s back and forth from classes and that kind of thing so you don’t really meet anybody. Then on the weekends I was constantly working.”

For Joanna, who like Hayley was one of the “smart girls” in high school, college is just a series of academic obligations that she fits in around her uninteresting and low-paid job at a sports venue in Philadelphia. Difficulties at home mean that her parents cannot support her financially at college, and so the job is a necessary evil. In addition, these same difficulties mean that her weekends are spent helping her family at home, and she is constantly tired and demoralized.

When Hayley and Joanna have such contrasting post-high school lives, contrasting linguistic trajectories are not completely surprising. What about the second question? Why have Joanna and Hayley differed in their participation in the centralization of (ay0)? We saw earlier in this chapter that (ay0), a change led by men, is associated at Sacred Heart with the Irish speakers, who themselves are associated with stereotypically male and working class behavioral characteristics. To be Irish is to be tough, casual, sporty and carefree. These are all adjectives that we could apply to Hayley’s life at college. She is free from most family worries, is still highly sporty, and values her toughness: Hayley told me a story about how she threatened to beat up another girl, and how as a consequence she gained a reputation in college for being intimidating. Joanna, by contrast, who described herself and Hayley in their first interview as “the two toughest girls ever”, has had to give up the luxury of sports and being carefree. She is still tough, but in a more adult way, and her retreat from (ay0) reflects the loss of her relatively untroubled adolescent life.
Finally, and most importantly, this real time study has shown that a third of the speakers in the subsample are continuing to participate in the lowering of (e); only one, Emma, is retreating from this change. As an incipient change in the 1970s, and still a change which (to my knowledge) attracts no social comment, this vowel variable is the farthest below the level of social awareness of all four vowels in the table. That it is the one with the highest level of participation is consonant with the hypothesis that when speakers have no social incentive to withdraw from a change, they will continue to move along with the rest of the community.

5.6 Summary

In this chapter, the socially salient Irish-Italian division was found to correlate only with one of the main vowels being investigated, (ay0), and with one of the mid-range changes with which Italian ethnicity co-varied in the LCV project: (owC). The variable (ay0) was found in the 1970s to involve an upward movement on the F1 axis that was, exceptionally, led by men. Furthermore, a tendency for men to have backer nuclei of (ay0) than women was reported (Labov 2001). Since, as discussed in Chapter 3, ethnicity and gendered behavior appear to be strongly associated in the stereotypes propagated at Sacred Heart, it is particularly interesting that it is backed means of this male-associated vowel that distinguish the Irish from the Italians. The fact that ethnicity does not correlate with any of the other vowel variables under study suggests that as in other communities studied to date, ethnic divisions may be much discussed, but not reflected strongly in the vowel system. It is of course possible that Sacred Heart speakers mark their ethnic
identity linguistically using non-vocalic features. In the English of both monolingual Louisiana Cajuns (Dubois & Horvath, 1999) and monolingual Maoris in New Zealand (Holmes, 1997), stopping of interdental fricatives, inherited from earlier generations of L2 English learners, was used with greater frequency by younger people than any other age group, presumably as a mark of ethnic identity. Beyond phonology, Meyerhoff (1994) found in another study of monolingual English-speaking Pakeha and Maoris that the latter were much more frequent users of the discourse particle *eh* than Pakehas, while Stubbe (1998) reported that Maoris used fewer backchannels than their Pakeha counterparts. However, an investigation of pragmatic and non-vocalic features in the speech of Sacred Heart students goes beyond the scope of the present study.

The real time analysis of a sub-sample of 9 speakers showed that two thirds experienced some change to their mean formant frequency of (e), (aw), (ay0), or a control variable, (aeh). All four of these vowels are changes from below in origin; the tensing and raising of the nucleus of (aeh) is now above the level of social awareness in Philadelphia. The results indicate that older teenagers making the transition from high school to college are generally still participating in some community sound change. For the most part, they have not yet loosened their social network ties to friends and family, and in some cases are under pressure to conform to local norms of behavior when they come home to visit. Speakers in this life stage appear likelier to advance their production of the newest changes: those that are least likely to exhibit social variation. In this case, the incipient change (e) showed the most overall advancement.

An unexpected outcome was that the two sub-sample speakers, Abby and Natalie, who remained in the city and attended a local community college, did not advance more
than the other speakers. In Chapter 1 these speakers were described as “at the heart of the investigation”: the best test cases for adult modification of the sociolinguistic repertoire in the absence of dialect contact. But simply staying on in the city is not enough to influence a person into continued local sound change participation. Nor is aspiring to a local job, or having a local boyfriend. Ultimately two other factors appear to be of critical importance: frequent socializing with local peers, and the delaying of adult-like stages such as moving in with a partner (Natalie), or taking care of a household (Joanna). I suggest that it is because of these factors that the two control speakers demonstrated different linguistic behavior. Natalie, who isolated herself with her boyfriend, retreated from the socially salient (aeh) and advanced only with respect to the non-socially salient (e). Abby, on the other hand, produced more advanced means for three of the four vowel variables, and maintained a busy social life in her neighborhood.

Data from nine speakers, especially over a time span of only one year, can merely give us general indications of an answer to the question: Do speakers continue to participate in change from below after adolescence? However, the indications are suggestive, and should inspire further work on the transition to young adulthood. In particular, the roles of covert normative pressure, parental ties and social networks deserve more detailed investigation.
NOTES

1 Becky was interviewed only in 2006. I have included her in the panel to ensure a balanced distribution of Italian speakers. Natalie and Courtney were the only SES 1 Italians interviewed in 2005.

2 Praat is free acoustic phonetic software, written by Paul Boersma and David Weenink and available for download from http://www.fon.hum.uva.nl/praat/. Version 4.5.11 was used for the current project.

3 Plotnik is free vowel plotting software, written by William Labov and available from http://www.ling.upenn.edu/~wlabov/Plotnik.html. Plotnik version 8 was used for the current project.

4 In free syllables, however, such as see, say, the nuclei of both /iy/ and /ey/ are backing and lowering. The allophonic distributions of /iy/, /ey/ and /ay/ suggest a split Southern-Northern system.

5 All of which Philadelphia influenced linguistically in the course of its history as a port of entry for Midland settlers (Labov, Ash & Boberg 2006:237).

6 I did, however, find that within the (TuwF) class, realizations of this vowel in certain environments was considerably backer and lower than (TuwF) in other environments. See section 5.4.4.3 for further discussion.

7 Barbara Corcoran, however, did not. Her (aw) is in lower-mid position, and has not reached the left periphery of her vowel space.

8 Natalie’s mean formant values for (ayV) and (ay0) are both high and mid-back, suggesting that Natalie places tokens of (ayV) in the centralized (ay0) class: an unusual finding.

9 The extreme frontness of Melanie’s (ay0) is harder to account for, as she is both Irish and in SES 1. However, Melanie is not from South Philadelphia, although she spends a lot of time there: she is from South West Philadelphia, a different neighborhood altogether. She is linguistically exceptional in other ways, too; she has, for example, extremely fronted tokens of (Kuw).

10 White Anglo-Saxon Protestant.

11 Abby produced only 1 Tuw token and was excluded from the (uw) analysis.

12 I made a similar coding decision for tokens of pre-pausal (eyF) and (iyF), which also exhibited lower, backer glide targets than (eyF) and (iyF) tokens in medial position. It occurred particularly frequently in the phrase the other day. I do not discuss pre-pausal (eyF) or (iyF) further in the present study, but the phenomenon merits further investigation.

13 The exceptional behavior of who required case-by-case coding. For some speakers, who patterns with (Tuw) and for other speakers, with (Kuw).
APPENDIX 1

Vowel classes and allophones

<table>
<thead>
<tr>
<th>Short vowels</th>
<th>Front vowels</th>
<th>Back vowels</th>
<th>Other vowels</th>
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<td><strong>Vowel</strong></td>
<td><strong>Example</strong></td>
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</tr>
<tr>
<td>far</td>
</tr>
<tr>
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Adapted from the Plotnik program ([http://www.ling.upenn.edu/~wlabov/Plotnik.html](http://www.ling.upenn.edu/~wlabov/Plotnik.html)) and Conn (2005:52).
Bibliography


