Part III
Social Factors

Time

One of the distinguishing characteristics of variationist linguistics vis-à-vis areas of language study such as historical and theoretical linguistics has been its insistence that the structure of language in the mind and its patterning in the community cannot be fully understood without paying careful attention to a host of social factors in addition to linguistic considerations. We begin this section by taking a look at one extralinguistic factor that is central to the investigation of language variation and absolutely essential in the study of language change: time. The effects of time on linguistic structure are felt in individuals and at all levels of social organization, ranging from the small village to the "global community." Variationists are interested in change at all levels, as well as in disentangling genuine changes in the course of a language or language variety from age-related changes in the speech of individuals.

Central to the variationist program has been the revelation that language change need not be observed "after the fact" but can be viewed in progress. Sometimes this is accomplished by revisiting the same community at different periods (that is, observing change in real time), but most often it is done through observing change in apparent time – that is, differences across different generations of speakers. In "Real and Apparent Time," Guy Bailey discusses both types of evidence, noting that both must be used cautiously, since neither provides a direct reflection of change in progress. For example, the apparent-time construct is grounded in the assumption that individual vernaculars remain stable after adulthood, but this assumption has yet to be tested in full and most likely is not warranted with features of which speakers are highly aware or with any speakers who have not reached adulthood, even those in late adolescence. In addition, teenagers are very likely to display patterns reflective of age-grading – that is, linguistic usages associated with a particular life stage that are repeated in every generation – rather than genuine change in progress. Although real-time data might seem ideal for investigating language change, Bailey points out that they too must be interpreted with caution, since linguistic differences between two time periods do not necessarily represent authentic changes in a community vernacular but may actually have to do with differences in interview methodology, sampling procedure, or community demographics. However, when judiciously used, both real and apparent time data are indispensable in understanding language change in progress.

Although it may be wise to avoid pre-adult speakers in investigations of community language change in apparent time, Julie Roberts demonstrates in her chapter, "Child Language Variation," that studies of variation in the speech of even preschool children can yield intriguing findings. Roberts notes that the study of child language variation is a relatively new area of study, for both theoretical and methodological reasons. For example, it can take quite a long time to obtain sufficient data from young children for a solid quantitative analysis, and it is difficult to tell whether the variation that is observed is actually socially motivated or merely developmental. Despite the challenges, researchers have been conducting quantitative investigations of child language variation for decades, and interest in this area continues to expand. Roberts provides an overview of such studies and shows that, from the start, results have proven that children actually do exhibit socially significant variation (for example, in terms of social class and gender). In addition, a number of studies, including Roberts' own work with preschool children in Philadelphia, have shown that children from an early age acquire both social and linguistic constraints on variation and even participate in community language changes in progress. Finally, studies indicate that variation in children's speech is modeled closely on that of their caregivers. This strongly suggests that, contrary to mainstream generative linguistic belief, variation in language input is not "noise" that is discarded during the acquisition process but rather an important stage in the development of communicative competence (that is, the ability to use language appropriately in a range of social situations, with a range of interlocutors), rather than mere grammatical competence. Hence, the investigation of variation in child language holds great promise not only for variationists but all linguists interested in how language is structured in the human mind and across social groups.

In the final chapter in this section, "Patterns of Variation, Including Change," J. K. Chambers presents an overview of what he terms the "three overriding social categories in modern industrialized societies": age, social class, and sex, with a special focus on what each of these, especially age, has to tell us about language change. Whereas the stratification of linguistic variants across social class and gender groups is often indicative of stable sociolinguistic variation, stratification by age is often indicative of change. This makes it possible to observe change in progress at a single moment in time (given the cautions discussed in Bailey's chapter). In addition, we can also observe changes in progress by observing language at different time periods, even ones quite distantly removed from one another, since written documents from earlier time periods often display variability between old and new forms, as do recordings of present-day speech. Further, when one is able to examine variable usage levels in detail (as with real and apparent-time data gathered in more recent decades), one will usually find that new variants spread through communities in neat patterns, typically proceeding through a three-stage process in which an initial period of gradual adoption is followed by a period of sudden, rapid change, which in turn is followed by a final period of slow

change. In the final section of the chapter, Chambers turns from the examination of *how* change progresses to the larger issue of *why*. Like all variationists, Chambers stands firm in the conviction that although new variants may come into being for linguistic reasons (for example, a marked feature may be altered so that it is unmarked), it is really social forces that drive language change. In particular, linguistic innovations, no matter how linguistically "natural," will not spread unless speakers have the opportunity and motivation to adopt them. In this age of ever-increasing contact among speakers of different languages and varieties, there is more opportunity than ever for dialect and language mixing and hence leveling. It remains to be seen whether speakers have sufficient motivation to relinquish local speech forms, with their strong connection to local identity, in favor of leveled varieties that allow for global communication.

NATALIE SCHILLING-ESTES

12   Real and Apparent Time

GUY BAILEY

The "synchronic approach" to the study of language change, the study of change in progress, forms one of the cornerstones of research in language variation and change. This approach has had an enormous impact both on our knowledge of the mechanisms of change and on our understanding of its motivations. In fact, Chambers believes that the study of change in progress might be "the most striking single accomplishment of contemporary linguistics" (1995: 147)

1   Apparent-time Evidence in Martha's Vineyard

Until the mid-1960s, most linguists concurred with Hockett's assertion (1958: 444–5) that the actual process of language change is unobservable – it can only be detected through its results. Historical linguists, the primary students of language change, simply relied upon the examination of data from different points in history to infer that linguistic changes had occurred and to describe the outcomes of those changes. The historical data provided little insight into how the changes had taken place or into what might have motivated them (except, of course, in the case of language contact). In work on Martha's Vineyard and in New York City in the 1960s, however, William Labov (1963, 1966) developed a set of methodological innovations that allowed linguists to track the progress of linguistic changes as they were taking place and thus established the basis for a synchronic approach to language change. These innovations included methods for quantifying the linguistic variation that is a prerequisite for language change; for examining how variation is embedded in the social and linguistic structures that motivate and constrain change; and for exploring the effect of contextual styles that are a response to the social evaluation of linguistic variants. Perhaps the most important innovation, though, was the apparent-time construct, a surrogate for the real-time examination of data at different points in history.[1]
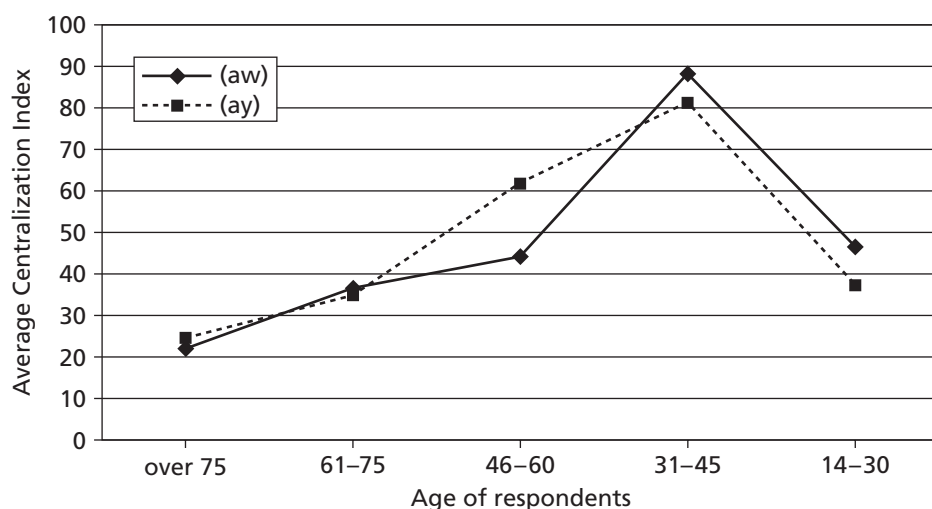
Figure 12.1   Centralization Index by age group for (aw) and (ay) on Martha's Vineyard

Source: Labov (1963)

Labov hypothesized that when social and stylistic factors were held constant, linguistic differences among different generations of a population (apparent-time differences) would mirror actual diachronic developments in the language (real-time linguistic changes). For instance, Labov argued that the increase in the use of centralized onsets of (ay) and (aw) in apparent time, as shown in figure 12.1, mirrored a diachronic increase in the use of these features on Martha's Vineyard. The youngest group does not have the largest index of centralization because, as Labov (1963) points out, the expansion of centralization was a reaction to threats to island identity, such as the need to leave the island to make a living, and these pressures had not yet affected the youngest islanders. Labov's comparison of these apparent-time distributions with real-time evidence collected for the Linguistic Atlas of New England some 30 years earlier corroborated his arguments.

While Labov's work on Martha's Vineyard and in New York City did not provide absolute confirmation of the validity of the apparent-time construct, it did demonstrate the value of the construct as a surrogate for real time in exploring mechanisms of language change. Examining the intersection of apparent-time differences with social and stylistic differences enabled Labov to show how innovations enter the speech of a restricted social group, spread to members of other subgroups, and either expand to the limits of the speech community or give way to retrograde changes. Labov showed, for example, that on Martha's Vineyard, the centralization of (ay) and (aw) began in the speech of Yankee fisherman (those of English descent) whose way of life was threatened by pressures to leave the island; it then spread to other groups as a
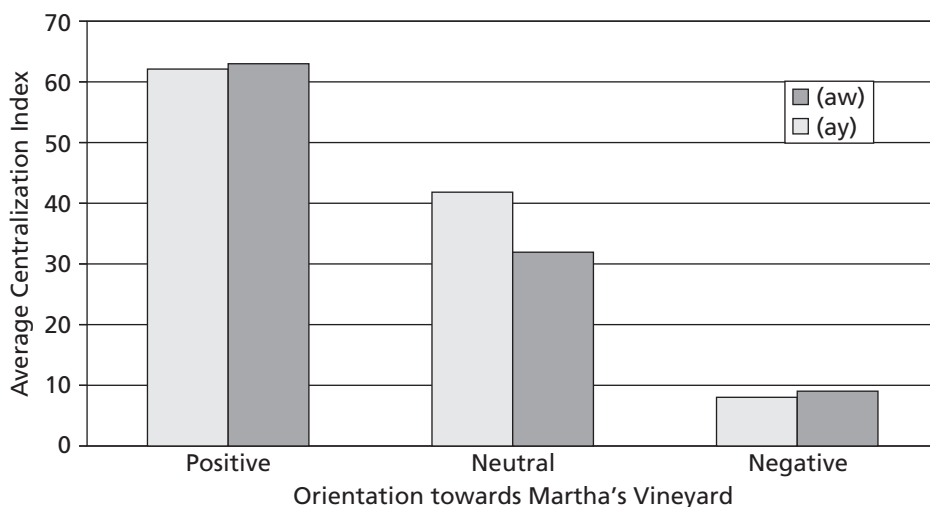
Figure 12.2   Centralization of (aw) and (ay) and orientation towards Martha's Vineyard

Source: Labov (1963)

marker of island identity. As figure 12.2 shows, the use of centralized onsets correlated strongly with a positive orientation toward the island – so strongly that Labov could conclude that the social meaning of this feature was "traditional Vineyarder."

2   The Use of Apparent-time Evidence

Largely as a result of Labov's success in using apparent time to explore the mechanism of language change, over the last 30 years linguists have used the apparent-time construct in a wide range of situations to make inferences about ongoing changes. Nevertheless, the apparent-time data are only a *surrogate* for real-time evidence, and apparent-time data cannot uncritically be assumed to represent diachronic linguistic developments. At least three situations pose potential problems for the apparent-time construct. These include the generality of apparent time (2.1), the stability of individual vernaculars (2.2), and the occurrence of age-graded features (2.3).

2.1   *The generality of apparent time*

While the apparent-time construct has been useful for exploring a wide range of features, how generally apparent-time differences represent ongoing linguistic changes is not entirely clear. To begin assessing the generality of the apparent-

Table 12.1   PST and GRITS features

Target item	Process	Innovative form	Conservative form
lost	merger of /ɔ/ and /ɑ/	[lɑst]	[lɔst]
walk	merger of /ɔ/ and /ɑ/	[wɑk]	[wɔk]
field	merger of /i/ and /ɪ/ before /l/	[fɪɫd]	[fild]
sale	merger of /e/ and /ɛ/ before /l/	[sɛl]	[sel]
school	merger of /u/ and /ʊ/ before /l/	[skʊl]	[skul]
Tuesday	loss of /j/ after alveolars	[tuzdl]	[tjuzdɨ]
Houston	loss of /h/ before /j/	[justn]	[hjustn]
fixin to	use of quasimodal	*fixin to*	—
Washington	intrusive /r/	[waʃɪŋtən]	[waɚʃɪŋtən]
forty-a	merger of /ɑ/ and /ɔ/ before /r/	[fɔɚɾi]	[fɑɚɾi]
forty-b	unconstricted postvocalic /r/	[fɔɚɾi]	[fɔəɾi]
thousand	fronted [aʊ] (to [æə])	[θæəzn]	[θaʊzn]
might could	use of double modal combination	*might could*	—
night	monophthongization of /ai/	[naːt]	[naɪt]

time construct, Bailey et al. (1991) compared apparent-time distributions of 14 features of Texas speech in a Phonological Survey of Texas (PST) and a Grammatical Investigation of Texas Speech (GRITS), both of which were completed in 1989, with real-time evidence for those features from the Linguistic Atlas of the Gulf States (LAGS), data for which were gathered some 15–20 years earlier. These features, which are listed in table 12.1, include both phonological and grammatical items. While many of the phonological features occur in other varieties of English, the two grammatical features are largely restricted to Southern American English and African-American Vernacular English. They are the grammaticalized quasimodal *fixin to* (meaning roughly "about to"), as in "I'd be happy to help you but I'm *fixin to* leave," and the multiple modal combination *might could* (meaning roughly "might be able"), as in "I *might could* come early if you need me to."

Of the 14 features, 11 show a straightforward relationship between apparent and real time, as shown in figures 12.3 and 12.4. Figure 12.3 shows the percentages of survey respondents by age cohort who use the innovative form of seven phonological and one innovative grammatical feature.[2] This figure shows a progressively increasing use of innovative forms across the four age groups for all eight variables, with the oldest cohort using the smallest percentage of each innovative form and the youngest using the largest percentage. Middle generations use percentages that are somewhere in between. Since age is statistically significant at the .05 level for each variable (determined by chi square tests) and since other social variables are controlled by the random sampling procedure, which ensures that factors such as social class and ethnicity will be
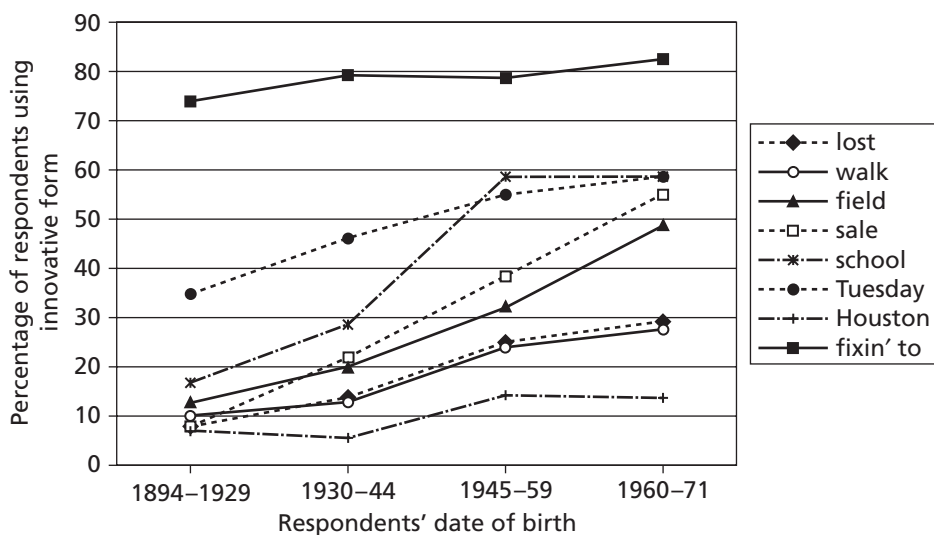
Figure 12.3   Apparent time distributions of innovative features in PST and GRITS
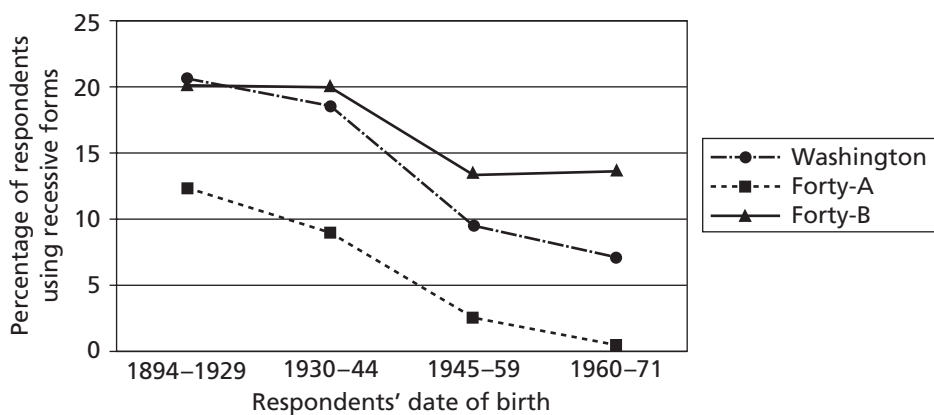*Source*: Bailey, Wikle, Tillery, and Sand (1991)

Figure 12.4   Apparent time distributions of recessive features in PST
Source: Bailey, Wikle, Tillery, and Sand (1991)

in proportion to their distribution in the larger population, the apparent-time distributions in figure 12.3 suggest that all eight variables represent diachronic changes that were in progress at the time when the survey was conducted.

The apparent-time distributions in figure 12.4, on the other hand, show a progressively decreasing use of recessive features, with a pattern that forms
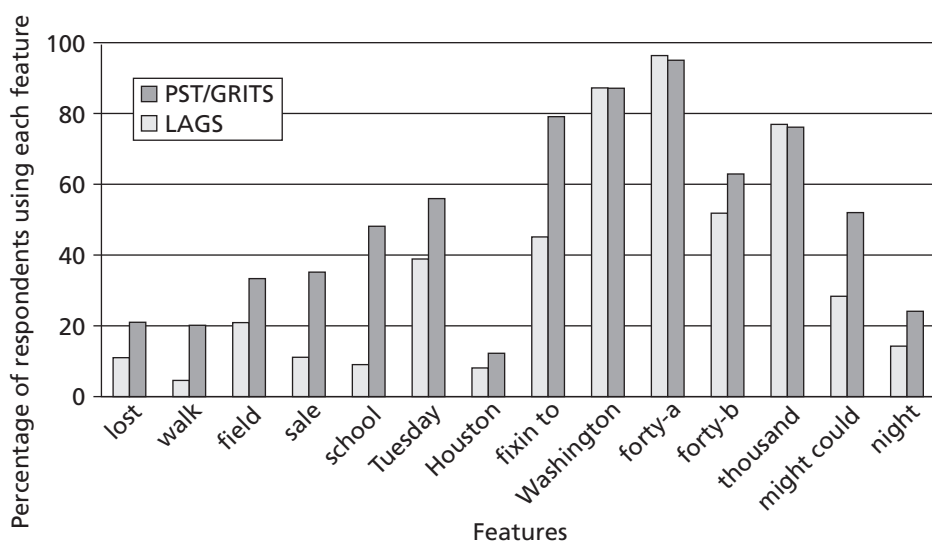
Figure 12.5   Real time comparison of PST/GRITS data with LAGS data
Source: Bailey, Wikle, Tillery and Sand (1991)

a mirror image of figure 12.3. Again, since age is statistically significant, the distributions suggest linguistic change in progress.

Real-time evidence from LAGS confirms the apparent-time distributions in every case, as figure 12.5 shows. For all of the features in figure 12.3, the percentage of PST or GRITS respondents who use the innovative form substantially exceeds the percentage of LAGS informants who do, indicating that these features represent innovations that are accelerating diachronically. For the features in figure 12.4, the percentage of LAGS informants who use the features either exceeds or equals the percentage of PST and GRITS informants who use the forms, confirming that the recessive features are gradually disappearing.

The apparent-time distributions of one of the remaining three features (the use of fronted onsets in *thousand*) suggest that no change is taking place – that the situation is one of "stable variation."[3] The difference in the use of the fronted onsets between the youngest and oldest age cohorts is less than 5 percent, and those differences are not statistically significant. The variation that does exist in the use of fronted onsets of /au/ is primarily a consequence of ethnic differences in the distribution of allophones. Anglos usually have fronted onsets as the result of a linguistic change that began during the last half of the nineteenth century and went to completion by World War II. African Americans and Hispanics, for the most part, did not participate in the process and generally have central onsets (see Bailey 1997). The real-time evidence from LAGS confirms the scenario of stable, ethnically conditioned variation: 77 percent of the LAGS informants have fronted onsets in *thousand*,
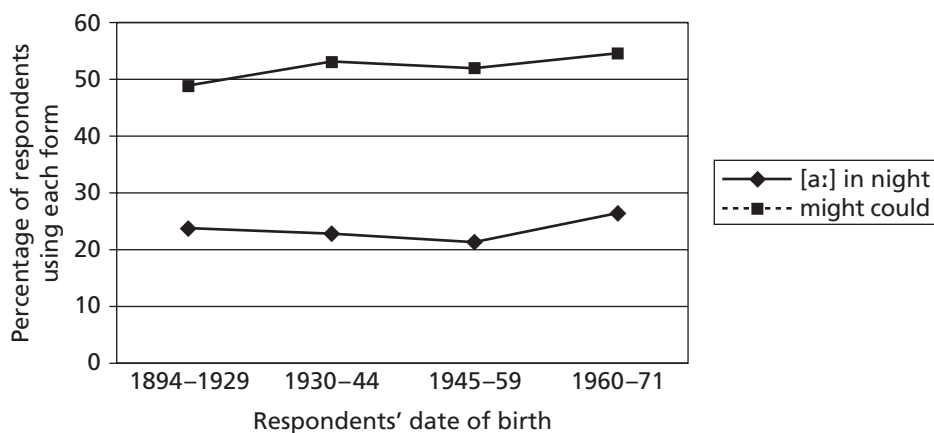
Figure 12.6   Apparent time distributions of *might could* and [aː] in *night* in PST/GRITS

while 76 percent of the respondents in PST do (see figure 12.5). Likewise, in LAGS Anglos are more likely to have fronted onsets, while African American and Hispanics are more likely to have centralized ones.

The distributions of the two remaining features (monophthongal /ai/ in *night* and the use of the double modal *might could*) are more complex. At first glance, their apparent-time distributions suggest situations of stable variation (see figure 12.6).

A comparison with the real-time evidence in LAGS (see figure 12.5) suggests diachronic change, however, with the use of these features increasing over time. In neither case does the real-time evidence actually contradict the apparent-time distributions, though. Rather, the large discrepancy in the occurrence of *might could* in the two surveys reflects methodological differences between them. LAGS generally relied on indirect elicitation to obtain tokens of *might could*, while GRITS relied on informants' self-reports on their use of the form. As Bailey et al. (1996), Bailey and Tillery (1999), and Tillery (2000) point out, the percentage of respondents who acknowledged using *might could* was far greater than the percentage who used the form in response to indirect elicitation, in large part because of the difficulty of framing questions that would actually elicit *might could*.[4] The differences in how the data were elicited for LAGS and GRITS account for most of the variation in the results of the two surveys, and the methodological differences between the surveys in this instance make assessing the status of *might could* impossible.[5]

The discrepancy in the use of monophthongal /ai/ in *night* also reflects methodological differences, but in this case the differences are resolvable since the discrepancy between the real- and apparent-time data reflects differences in the sample populations. The LAGS sample includes only native Texans, while PST and GRITS comprise a random sample of Texas residents that includes
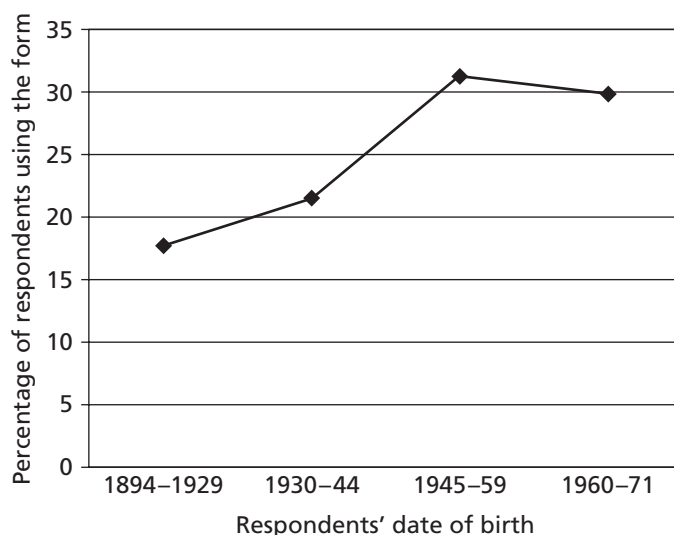
Figure 12.7 Apparent time distribution of [a:] in *night* among native Texan respondents in PST

Source: Bailey, Wikle, Tillery, and Sand (1991)

both natives and non-natives. An analysis of just the native Texans in the PST sample (see figure 12.7) helps clarify the differences between PST and LAGS in regard to /ai/ in *night*.

Figure 12.7 shows that when only native Texans are considered in PST, the data do in fact suggest a change in progress (i.e. monophthongal /ai/ is expanding in words like *night*); the apparent-time data, then, shows exactly what the real-time data lead us to expect.

The comparison of the apparent-time data from PST and GRITS with real-time evidence from LAGS clearly provides strong support for the generality of the apparent-time construct, at least for features of phonology and morphosyntax. In 13 of the 14 cases, the apparent-time distributions were confirmed by the real-time evidence, and in the remaining case methodological differences between the two surveys made the relationship between real and apparent time impossible to assess. In no case did the real-time evidence contradict the apparent-time evidence. Two points, however, should be made with regard to this comparison. First, the apparent-time data come from two random samples of 1,000 Texans each. The generality of the apparent-time construct for the data used here is in large part a function of the size and the representativeness of the samples. Smaller, less representative samples can be expected to produce less general and less valid results.[6] Second, the validity of the apparent-time construct has yet to be shown for lexical, semantic, or pragmatic features. Whether it is useful for exploring ongoing changes for these types of features remains to be seen.

2.2   *The stability of individual vernaculars*

Just as the apparent-time construct relies on the assumption of generality, it also relies on the assumption that in most cases individual vernaculars remain stable throughout the course of an adult lifetime. While many variationists believe that the vernaculars people learn in adolescence remain the basic verna- cular that they use throughout their lives, only recently have data become avail- able that bear directly on the subject. That data, of course, can only be acquired through re-interviews with the same informants over an extended period of time – through panel studies in real time. Labov indicates that the extant stud- ies of the stability of phonological systems suggest that while "variables oper- ating at a high level of social awareness are modified throughout a speaker's lifetime, with consistent age-grading throughout the community . . . , the pho- nological categories that underlie the surface variation remain stable" (1994: 111–12). Labov further notes that the relatively small number of vowel systems that have been investigated instrumentally show "no overall change that would justify a reinterpretation of the apparent-time data as a result of age grading. The most significant shifts are in the reverse direction: they show older speak- ers influenced slightly by the changes taking place around them" (1994:105).

   Cukor-Avila (2000) has examined the stability of individual vernaculars in the rural Texas community of Springville, population 180. (Note that the name "Springville" is a pseudonym, as are all other names used in the project. In a community this small, residents could be identified by the substance of their interviews if the name of the community were known.) To test the assumption that individual vernaculars remain stable over the course of a lifetime, she examined the progress of four well-known features of African-American Ver- nacular English (AAVE) in the speech of four residents of Springville over a period of nearly a decade. These features include

(1)   zero third person singular, as in
         (a)   let's see how it *look* down there
         (b)   she *work* for the V. A. hospital

(2)   zero copula, as in
         (a)   he jumpin' barrels
         (b)   somebody puttin' the law on them folks

(3)   habitual *be+v+ing*, as in
         (a)   we *be* watchin' a really cute guy come in
         (b)   I *be* doin' those doctors [cleaning the doctors' offices]

(4)   *had*+past used as a simple past
         (a)   when I was workin' at Billups me an' the manager *had became* good friends
         (b)   an' one day I had came over to the store and' tha's when B. *had wanted* to go to work.

The four Springville residents – Wallace (b. 1913), Vanessa (b. 1961), Sheila (b. 1979), and Brandy (b. 1982) – were all first interviewed in 1988 and were frequently reinterviewed for a decade thereafter (see Cukor-Avila 1995, Cukor-Avila and Bailey 1995). Their different social histories provide a range of possible scenarios regarding the stability of individual vernaculars. Wallace was 75 years old and retired by the time of the first interviews in 1988, and while he was formerly quite active selling produce from his garden, his movements and social contacts have become increasingly restricted as he has gotten older. He was 82 at the time of the last interview.

At one time Vanessa spent most of her time in Springville, where she was the clerk at the only store in town, but her social contacts expanded significantly after she got a job as a maid at a nearby university in the early 1990s and began taking classes to help her qualify for her Graduate Equivalency Degree. She was 27 when she was first interviewed and 38 at the time of the most recent interview. Sheila spent most of her early life entirely in Springville, but when she was 12 she began spending summers in Wilson, a nearby city of 100,000. At that time she developed a new set of friends and an orientation away from Springville and toward the city. While in the ninth grade, she dropped out of school and moved to Wilson, although she still spends a great deal of time in Springville. Sheila was nine when she was first interviewed and 20 at the time of the most recent interview. Like Sheila, Brandy began spending most of her summers in Wilson after she turned 12, but unlike Sheila, she remained in school, graduated in May 2000, and is now preparing to attend college. Brandy was 6 at the time of her first interview and 17 at the time of the most recent one.

Figures 12.8–12.11 summarize the real-time data on the four AAVE features (copula absence, verbal -*s* absence, habitual *be+v+ing*, and *had*+past used as a simple past) for the four Springville residents. As figures 12.8 and 12.9 show, the data for Wallace and Vanessa provide strong confirmation of the stability of individual vernaculars. Like most African-Americans born before World War I, Wallace does not use *had*+past as a simple past and rarely uses habitual *be* (it comprises 0.04 percent of the tokens of the present tense of *be* during 1988–89 and does not occur at all during 1994–95). He does, however, frequently have zero copula and zero third person singular. As figure 12.8 indicates, his use of these features changed only slightly between 1988–89 and 1994–95, and the differences are not significant (as determined by a chi square test). While Vanessa does use both the innovative habitual *be* and the innovative *had*+past, her use of all four AAVE features remains virtually unchanged between 1988 and 1997, as figure 12.9 shows; none of the differences are significant. The stability of Wallace's vernacular is not surprising given his restricted social contacts and movement, but given the changes in her personal history, the stability of Vanessa's vernacular over a ten-year period is remarkable.

By contrast, the data on the vernaculars of the two younger residents, raises a number of questions about the stability of vernaculars of adolescents and teenagers. As figure 12.10 shows, Sheila's vernacular changed substantially between 1988 and 1998. When she was first interviewed, her vernacular was
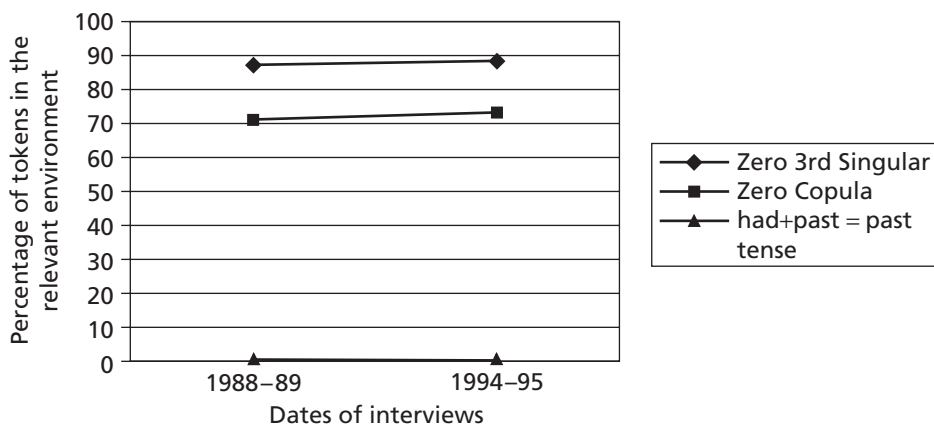
Figure 12.8 Real time distribution of three AAVE features in the speech of an African American male, b.1913
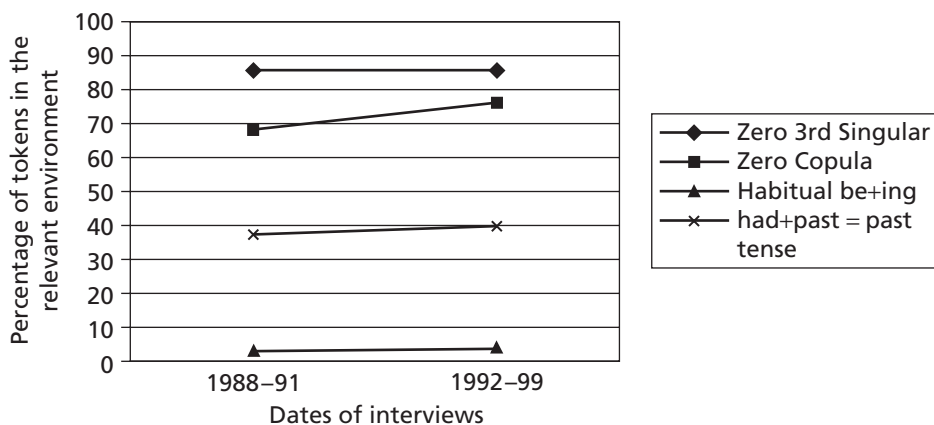
Source: Cukor-Avila (2000)

Figure 12.9 Real time distributions of four AAVE features in the speech of an African American female, b.1961

Source: Cukor-Avila (2000)

similar to that of older rural African-Americans. She used habitual *be* rarely (it comprised only 3.1 percent of her present tense of *be* tokens in 1988–89) and had no tokens of *had*+past as a simple past. After she began spending her summers in Wilson in 1990, her use of habitual *be* more than doubled in the 1991–92 interviews, and her use of *had*+past expanded to include nearly three-quarters of all her (morphologically) past perfect tokens (both develop-ments are significant at the .05 level by chi square). Her use of zero copula and zero third singular also increased and continued to do so through 1998. The use of the former increased by more than 10 percent between 1988 and 1998,
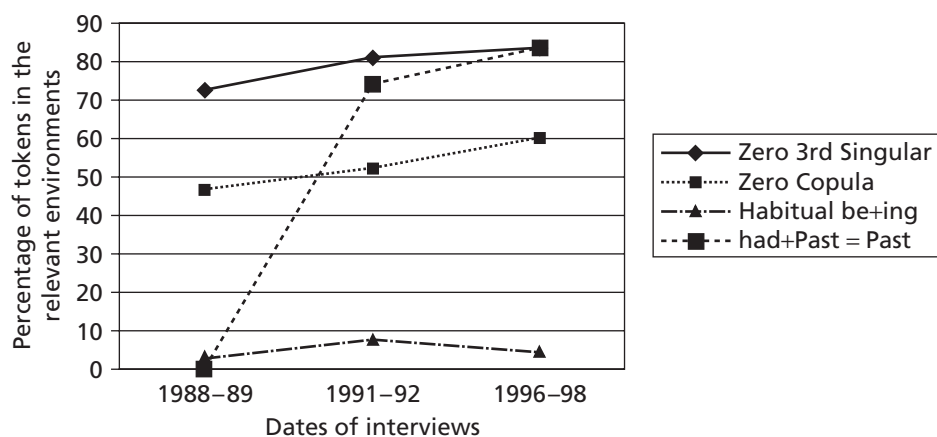
Figure 12.10 Real time distributions of four AAVE features in the speech of an African American female, b.1979
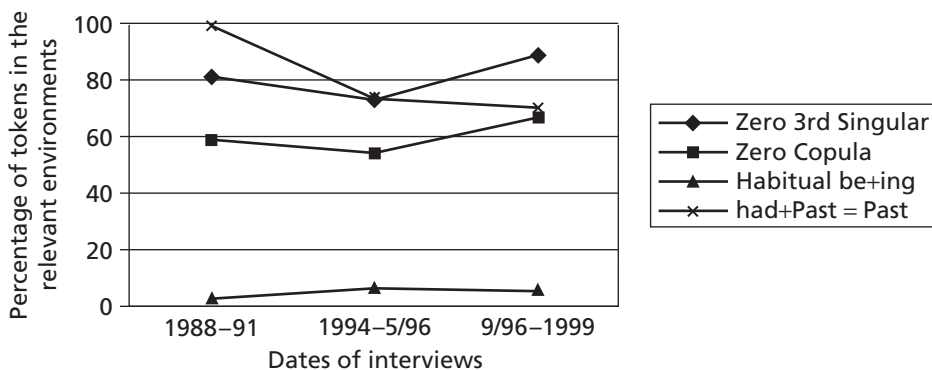
Source: Cukor-Avila (2000)

Figure 12.11 Real time distributions of four AAVE features in the speech of an African American female, b.1982

Source: Cukor-Avila (2000)

while the latter increased by some 14 percent during that time (both statistically significant). It seems clear that after 1990 Sheila's vernacular underwent a substantial shift away from the rural norms she grew up with and toward the urban norms she began to encounter in Wilson (cf. Bailey and Maynor 1989). This shift continued throughout Sheila's teenage years and only now as she is reaching adulthood does her vernacular seem to be stabilizing.

The data from the interviews with Brandy provide additional evidence that vernaculars may continue to change throughout even the late teenage years (see figure 12.11). During the 1988–91 period, Brandy's vernacular was generally

like that of Sheila's before Sheila began spending summers in Wilson (the high rate of *had*+past use is misleading since there are only two relevant tokens in the data). As she began to spend summers in Wilson, Brandy was clearly affected by her urban peers (note the increased use of habitual *be*), but changes in her vernacular do not represent a straightforward linear development toward urban norms, like Sheila's, but rather the interplay of competing urban and rural norms. For instance, her use of both zero third person singular and zero copula decreased between 1988–91 and 1994–96 and then increased between 1996 and 1999. Her use of habitual *be* and *had*+past as a simple past, on the other hand, declined slightly (but not significantly) after 1994–96. While the full extent of the influence of urban norms on Brandy's vernacular is not yet clear, it is clear that her vernacular had not stabilized by the time she graduated from high school and that it is still developing.

When taken in conjunction, the research discussed in Labov (1994) and the evidence presented in Cukor-Avila (2000) provide strong support for the hypothesis that vernaculars generally remain stable during the adult years. The phrase *adult years* forms an important caveat, however. Cukor-Avila's data clearly demonstrate that in many instances the vernaculars of teenagers, even those of older teenagers, are not yet stable. It is only in the early adult years that we can reasonably assume that a vernacular is relatively stable. Apparent-time data that use teenagers as one of the age cohorts, then, must be viewed with some suspicion.

2.3   *The possibility of age grading*

Changes that are age-graded, that is, correlated with a particular phase in life and repeated in successive generations, have long been recognized as potential problems for the apparent-time construct. Chambers notes that "very few changes of this kind have been reported" (1995: 188). Most of those that have been reported involve the speech of children or adolescents and are thus less relevant to the apparent-time construct than they might otherwise be. More relevant to the construct are the sociolectal adjustments that young adults sometimes make in response to the pressures of the marketplace.

Research in both Canada and the United States suggests that in some cases adults, especially younger adults, may adjust their vernaculars toward the norms of the larger society to better meet the demands of their jobs. Sankoff and Laberge (1978) showed that market pressures were a significant factor in the occurrence of three grammatical variables of Montreal French: auxiliary *avoir* and *être*, complementizer *ce que/ qu'est-ce que*, and indefinite *on/ils*. To some extent, the linguistic changes that New Yorkers make in Labov's (1966) department store survey also seem to represent sociolectal adjustments to the new norm for constricted (r). Labov (1966, 1972) notes that in his New York City department store survey, the youngest Saks employees have the highest rate of r-fulness, but at Macy's it is the oldest group that has the highest rate of

r-fulness (see the discussion below). Apparently, Macy's employees do not become aware of the norm for constricted /r/ that is pervasive in much of the United States until later in their careers, when their range of social contacts begins to expand. Responding to this broader social norm, they then make adjustments that Saks employees had made at an earlier age. The study of the effects of the marketplace is not well developed, but it seems clear that for young adults, professional pressures may have linguistic consequences. Age-grading that is driven by the marketplace is much more restricted in scope than is the age-grading that is associated with language acquisition. The relationship between these different kinds of age-grading has yet to be explored, but the possibility of its occurrence must be taken into account in any apparent-time study.

3   The Use of Real-time Evidence

At first glance, real-time evidence would seem to be the ideal mechanism for exploring language change, but real-time evidence actually poses a number of potential problems for researchers. Researchers who want to use real-time evidence for studying language change have only two options: (1) they can compare evidence from a new study to some pre-existing data, or (2) they can re-survey either a community (through a trend survey) or a group of informants (through a panel survey) after a period of time has elapsed. Neither option is without problems, but both can offer valuable insight into language change.

3.1   *The use of existing evidence*

In many cases, earlier linguistic evidence does not exist, and when it does, it often was not collected or organized in a manner that permits straightforward comparisons. For instance, linguistic atlas data collected between 1930 and 1980 exist for many parts of the United States. Linguistic atlases survey a region to catalog its primary linguistic features, outline the spatial (and to a lesser extent, social) correlates of those features, and provide a historical baseline for reconstructing their linguistic history and measuring their future development.[7] Linguistic atlases record the data they elicit using a fine-grained phonetic alphabet, and because of their historical and spatial orientation, they necessarily have samples that are biased toward older informants and rural areas. Variationists using atlas data to study phonological change may find that the detailed impressionistic phonetic transcriptions used to record atlas data actually provide so much phonetic detail that the transcriptions must be recoded to be comparable to data from other sources. Such recoding requires familiarity with the phonetic norms used by atlas scribes and introduces a

potential source of error. Bailey et al. (1991) are able to use LAGS data profit-
ably to test the apparent-time differences in PST mainly because Bailey was
both a LAGS scribe (and thus intimately familiar with LAGS phonetic norms)
and the principal transcriber of the PST data.

   Differences in sampling procedures also pose potential problems. As Bailey
et al. (1997b) have shown, relatively small differences in sample populations
can have statistically significant effects on results, even when surveys are con-
ducted in the same way. As noted above, differences between the sample
populations of LAGS and PST account for the fact that the apparent-time
distributions of monophthongal /ai/ in *night* in PST suggest stable variation
in the use of this feature, while the differences between LAGS and PST suggest
a change in progress. Further, as the discussion of *might could* above shows,
differences in the ways that information is elicited can also create significant
differences in results (Bailey et al. 1997b).

   Although the effects of different elicitation strategies can sometimes be seen
even within a single survey (see Bailey and Tillery 1999), apparent time evid-
ence minimizes the variation that might arise from differences in sample
populations, in elicitation strategies, and in the recording and presentation of
data when evidence from an existing data source is compared to data from a
new study. A re-survey of an area can also minimize this kind of variation by
explicitly controlling for those factors.

3.2   Re-surveys

Labov notes that "the ideal method for the study of change is diachronic: the
description of a series of cross sections in real time" (1982: 218) either through
a trend survey (a series of independent random samples) or a panel survey
(reinterviewing the same individuals over a period of years). Although re-
surveys overcome many of the limitations of existing data, re-surveys are also
not without potential problems (see Labov 1994: 73–112). For instance, if we
were to re-do PST using the same methods (a random sample telephone sur-
vey), the sample populations of the two surveys would not be exactly the
same simply because of the rapid, ongoing demographic changes currently
taking place in Texas. In 1990, for instance, Hispanics comprised 25.6 percent
of the Texas population, while Anglos comprised 60.6 percent and African
Americans 11.6 percent. Projections for 2000, however, suggest that Hispanics
now make up 29.7 percent of the population of Texas, while the proportion of
Anglos has declined to 56.1 percent, and the African-American population
remained stable (Murdock et al. 1997). These trends are expected to accelerate
over the next few years so that the more distant from 1990 the re-survey is, the
more different the sample populations are likely to be.

   Because ethnicity correlates with many linguistic features in Texas, the
demographic changes that affect the sample populations can be expected to
have significant linguistic consequences. Thus a re-survey of Texas in 2000, for

example, might find a smaller percentage of the Texas population using *fixin to* (as in "I'd be happy to help you but I'm *fixin to* leave") than our 1989 survey found. The decline in the percentage of *fixin to* users, however, would probably not reflect a change in progress, with a recessive feature disappearing, but rather a change in the demographics of the state. The segment of the population that uses *fixin to* the least, the Hispanics, is expanding rapidly, while the segments that use it the most (Anglos and African-Americans) are either declining or remaining stable. Thus even the apparent-time evidence from a re-survey might also suggest that *fixin to* was disappearing. Since the Hispanic population tends, on average, to be younger than the Anglo population, younger age cohorts in future samples will have higher percentages of Hispanics and, most likely, lower percentages of *fixin to* users.

Researchers conducting trend studies must always be on their guard against confusing demographic change with actual linguistic change within a population. While the evidence from trend studies must be interpreted carefully, they can provide significant insights into language change that either corroborate or lead to the reinterpretation of data from an earlier study, as Johnson (1996) and Fowler (1986) demonstrate. Fowler's precise replication of Labov's department store survey of (r) is particularly useful here since Labov relied heavily on the apparent-time construct in reaching his conclusions about change in New York City speech. In 1962 Labov attempted to gauge the encroachment of constricted /r/, the norm for most of the nation, into New York City, traditionally a bastion of unconstricted /r/. To do this, Labov carried out a rapid, anonymous survey of three Manhattan department stores: Saks Fifth Avenue, a high-end retail store; Klein, a low-end store; and Macy's, a mid-range department store. His basic assumptions were that the linguistic norms of the sales personnel in each store would mirror the linguistic norms of the customers and that, other things being equal, generational differences among personnel would mirror linguistic changes over time. In 1986 Fowler replicated Labov's department store survey by interviewing the same number of informants in the same stores (except that May's had to be substituted for Klein, which had closed) using the same set of questions asked in the same sequence.

Figures 12.12a and 12.12b, which present some of the results of both the 1962 and the 1986 studies, support Labov's hypothesis that the development of a new prestige norm of constricted (r) is leading to linguistic change, but the new data also show that the change is proceeding slowly and in a relatively complex manner. In addition, the re-survey confirms Labov's (1966) identification of a pattern of age-grading, or perhaps "sociolectal adjustment," to use Chambers' term (1995: 181–4), that is superimposed on the pattern of phonological change.[8] In upper-middle-class speech, exemplified by the data from Saks, the new norm is most evident in the speech of the youngest subjects, but in the speech of the lower middle class, exemplified by the data from Macy's, the norms for constricted /r/ are most evident in the oldest informants. Labov (1982) suggests that this pattern reflects the fact that members of the lower middle class only become aware of the new norm as their social contacts and
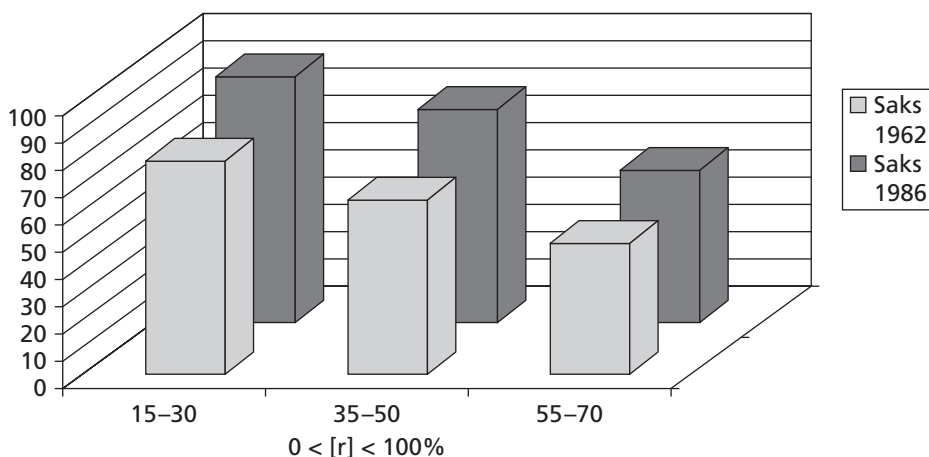
Figure 12.12a   Age stratification of (r) in Saks in 1962 and 1986
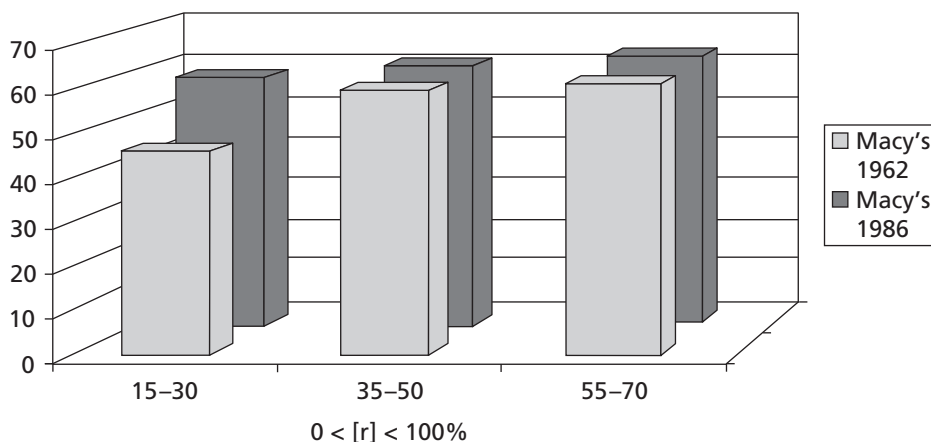*Source*: Labov (1994)

Figure 12.12b   Age stratification of (r) in Macy's in 1962 and 1986
Source: Labov (1994)

social awareness expand as they grow older. Hence they begin to shift toward the new norm at a later age. Labov (1994: 86–94) points out that the re-survey shows the same pattern of age-grading, though the basic rate of r-fulness has increased in the 24-year interval.

Panel surveys are not affected by demographic changes that transform the population of an area, but they present other practical problems. Researchers must find the same informants they originally interviewed and interview them again in the same way. The mobility of many populations makes finding the

same informants a difficult task, especially in large-scale surveys. Further, the changing dynamics of communities may make it difficult to re-interview informants in the same way that they were interviewed earlier. Moreover, because it is difficult to re-interview all of the original informants in a panel survey, the sample is likely to be significantly smaller and less representative in the re-survey. Nevertheless, panel surveys are crucial for exploring stability and change in individual vernaculars, as discussed above, and may also offer insight into how linguistic changes diffuse.

The Springville project discussed above represents an attempt to carry out a panel survey on a relatively large scale. The project currently includes interviews with more than 80 residents of the area, half of whom have been interviewed at least twice. About half of these have been re-interviewed on an ongoing basis for more than a decade. The Springville evidence is particularly valuable in documenting the diffusion of features of urban AAVE to the surrounding countryside and in suggesting mechanisms by which this diffusion takes place. The data from Sheila presented above indicate that as late as the mid-1980s, the vernacular which Springville children, 12 years old and under, first acquired was for the most part the older, rural AAVE that had characterized Springville speech for a century or so (Bailey and Maynor 1989). As those children developed urban ties and became more oriented to life in nearby towns and cities as teenagers, they then acquired the urban AAVE that developed in cities after World War II. As these teenagers have reached their 20s, they have maintained the urban vernacular so that if things continue in this fashion, it will supplant rural AAVE as the primary vernacular of the Springville community (for details, see Cukor-Avila and Bailey 1996). In many respects, then, the evolution of Sheila's vernacular is a kind of microcosm of the evolution of AAVE in rural Texas.

4   Progress with Caution

Real-time evidence can clearly provide unique insights into the mechanisms of language change, but it often cannot be used in a straightforward, mechanical way. Real-time evidence introduces issues of comparability, sample design, elicitation strategies, and demographic change in the target population that must be taken into account. Further, the simple difficulty of acquiring real-time evidence often weighs against its use.

Fortunately, the apparent-time construct has proven to be an excellent surrogate for real-time evidence, and the relative ease of collecting apparent-time data means that it will be used most often in research on language change in progress. Like real-time evidence, though, apparent-time evidence often cannot be used in a straightforward, mechanical way. The value of apparent-time data is in large part a function of the size and representativeness of the sample from which it is taken. Moreover, researchers should use only adult cohorts in

apparent-time studies, and even then they must be alert to the possible effects of sociolectal adjustments. When researchers heed these cautions, however, apparent time offers a powerful tool for the analysis of language change as it is taking place and forms the basis for a synchronic approach to language change.

In the best of circumstances, of course, researchers will be able to combine apparent-time data with real-time evidence, with the relative strengths of one approach offsetting the weaknesses of the other. It is in these circumstances that researchers will attain the kind of insights that revolutionize our understanding of language change and make the study of change in the progress the apogee not only of sociolinguistics but perhaps, as Chambers (1995: 147) says, of contemporary linguistics.

ACKNOWLEDGMENT

NOTES

1   As Labov points out, he was not the first to use generational differences to make inferences about diachronic change. Gauchat (1905) had used apparent time to study sound change in the Swiss village of Charmey near the end of the nineteenth century. Hermann's (1929) reinvestigation of the village some 30 years later largely confirmed Gauchat's findings.

2   For a description of PST, see Bailey and Bernstein (1989); both PST and GRITS are discussed in Bailey et al. (1997a) and in Bailey et al. (1997b).

3   It may be that the proportion of the Texas population having fronted onsets will decline over the next three decades as the demographics of the state change, but none of the three ethnic groups shows any evidence of changing its norms for /au/. See Bailey (1997) for further discussion.

4   Internal evidence from LAGS confirms the role of question strategies in obtaining data on *might could*. The one LAGS fieldworker who relied on self-reports rather than indirect elicitations to obtain the form accounts for more than a third of the LAGS data, even though she conducted fewer than a fifth of the LAGS interviews. See Bailey et al. (1997b).

5   Note, however, that the methodological differences do not affect every feature the same way. The GRITS data on *fixin to* also comes from self-reports, while the LAGS data again come primarily from indirect elicitation. Framing questions that would elicit this feature proved much easier than framing questions for *might could*, and those questions elicited more positive responses in LAGS.

6   Although linguists have sometimes argued that large samples are not as important for linguistic surveys as for

other types of surveys (see Sankoff, 1980: 51–2), there are no empirical studies which actually test the issue of sample size and representativeness in linguistics. Our work on survey methods, however, suggests that even small changes in sample populations can have significant effects on results in linguistic surveys (Bailey et al. 1997b). We are currently exploring the specific issue of sample size and representativeness.

7 See Pederson et al. (1986) for an example of contemporary linguistic atlas methodology.

8 The idea of a "superimposed pattern" represents my interpretation of the New York City data. It may be, however, that the pattern of change is superimposed on the pattern of age-grading since the effects of age-grading are larger than the effects of generational change (see Labov 1994: 86–94).

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