Chapter 2

Background of (ING): Literature and pilot study

Given the wealth of social meanings available in even a single social interaction, it can be difficult to know where to start looking for meanings likely to be influenced by a given variable such as (ING). As discussed in Chapter 1, the logical place to look for guidance is the existing literature, which has extensively investigated the social correlates of (ING). Accordingly, the first half of this chapter is devoted to reviewing this literature with a particular focus on noting social correlates, to consider the suitability of each as a potential "meaning" of (ING), in the sense of being a perceptual as well as a production correlate.

This study aims to explore evaluative correlates of (ING) and proposes to do so with enough nuance and care for context to be able to think of them as meanings. Given that this is in many ways an entirely novel project, it makes sense to establish that some evaluative correlates exist before seeking the ways they vary. The second half of this chapter describes the pilot study carried out prior to the main study, in which a small sample of listeners rated excerpts of read speech which had been manipulated to create minimal pairs differing only in (ING).

This study revealed a number of correlates, showing that listeners do shift their perceptions of a speaker based on a single token of a variable. The study was limited in number of ways, however. After describing the pilot study in detail and exploring

its results, I will explain the ways in which it falls short, setting the stage for the larger study.

2.1   The literature on (ING)

The first half of the chapter reviews the existing literature on the variable (ING), focusing primarily on social factors. (ING) is one of the best-known sociolinguistic variables and has been studied in the speech of a wide range of English speakers with relatively consistent social, phonological and grammatical constraints across many communities. Research has documented (ING) variation in rural New England (Fischer 1958), New York City (Labov 1966), Detroit (Shuy *et al.* 1967), North Carolina (Anshen 1969), Philadelphia (Cofer 1972; Roberts 1994; Labov 2001), Norwich, England (Trudgill 1974), rural Northern Ireland (Douglas-Cowie 1978), Canberra, Australia (Shopen 1978; Wald and Shopen 1985), Ottawa (Woods 1979), Los Angeles (Wald and Shopen 1985), Edinburgh (Reid 1978) and among fraternity men in Virginia (Kiesling 1998). While (ING) has been shown to correlate with many major social categories, social class and situational formality are the most consistent.

The exact variants of (ING) differ from community to community, but the central choice is between a realization with a velar nasal, which I will call *-ing* and one with an aveolar nasal, which I will call *-in*.[1]   The *-in* form may be realized in speech as [ɯ] or as [ən] or simply as syllabic [n] (Trudgill 1974), while *-ing* is generally [ŋ]. Some areas feature a third variant, such as [ŋk] in Canberra (Shopen 1978; Wald and Shopen 1985) or [in] in Ottawa (Woods 1979) and British English (Houston 1985), but these are limited in area and coexist with the first two, in most cases. I will not address them here.

The existing literature provides a crucial source of information about the social correlates of (ING). I will first briefly go over the internal constraints that have been documented, including phonological, grammatical and lexical constraints. I will then

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[1]I use these terms in reference to the spelling given to each, in order to avoid involving the vowels preceding the nasals. Cofer (1972); Houston (1985) use G and N for similar reasons but I find these somewhat opaque.

discuss in detail the two most robust social correlates: socioeconomic status and situational formality and suggest what types of evaluative meanings might relate to them. Then I will move on to other social correlates that are found in the literature, namely race, gender, age and region and discuss what they tell us about the overall social meaning of (ING). After reviewing the literature, I will describe the pilot study and its results, implications and shortcomings.

Internal constraints

The phonological influences on (ING) are relatively few and straightforward. The variable only occurs in unstressed environments, as stressed syllables (e.g. in the noun *thing*) require an *-ing* pronunciation in most varieties. Non-categorical phonological constraints include regressive assimilation, with following velar stops favoring the *-ing* and alveolar stops favoring the *-in* forms. There is also progressive dissimilation, with velar stops favoring the *-in* forms and alveolar stops favoring *-ing* (Cofer 1972; Houston 1985; Roberts 1994).

The *thing* words (*something*, *everything*, etc.) have a strong influence on the rates of (ING) use in some communities, but these are divided into *something* and *nothing*, which favor *-in*, and *everything* and *anything* which are categorically or near-categorically *-ing*. Cofer (1972) and Houston (1985) observe that this is likely due to the syllable structure, in that the latter have a secondary stress on (ING). But while Houston's data from the American South shows a categorical divide for the two groups, her British data is much less sharp. Rather than categorical differences, the two pairs of lexemes show only a strong preference for their respective variants, suggesting that these varieties differ in some way either in their assignment of stress in these words or their constraints around (ING) and secondary stress. Table 2.1 gives those numbers, showing percent of *-ing* the two categories (Houston 1985:22). The set phrase *going to* in some areas is categorically *goin* or *gonna* (e.g. in Los Angeles), while in others it is variable but strongly favors *-in* (in Canberra) (Wald and Shopen 1985).

Houston (1985) and Labov (1989) both discuss the historical development of (ING)

	U.S. Southern		British	
	Men	Women	Men	Women
Some/nothing	2	0	74	87
Every/anything	100	98	94	95

Table 2.1: Percentage of -ing in British and American Southern speech, -thing words. Reproduced from Tables 2.4 and 2.5 from Houston (1985:22-23).

in some depth, in particular how the current variable's grammatical constraints are residual evidence of (ING)'s beginning as an incomplete merger of two distinct morphemes. Table 2.2 shows the breakdown by grammatical category for Houston's data on the American South. This history bears out Labov's description of (ING) as "a case of stigmatization without change" (Labov 1966:394), in that it has been in use since the nineteenth century with roughly the same variants and social associations. This historical stability may account for the wide geographic and social range of the variable and the consistency of the internal constraints.

It is not clear the degree to which internal constraints influence the social structures involved in using and hearing linguistic variation. Categorical constraints are relatively straightforward, in that tokens which violate them will be infelicitous and thus impossible to interpret or otherwise be rejected. Conversely, tokens which comply with categorical constraints may lack social meaning, due to the lack of choice speakers have in selecting the variant. It is still not clear the degree to which knowledge of more flexible internal constraints contributes to social reasoning. One possibility is that variants used in disfavored environments will carry more social weight than others (the "oomph" hypothesis by Bender (2001)). Bender's work suggests that this may be the case but more work needs to be done.

In practice, it becomes prohibitively difficult to construct a study with the appropriate attention to social detail while also taking internal constraints into account (apart from categorical constraints, which must obviously be observed). In Chapter 3, I will discuss the reasons why it is important to use spontaneously produced speech in studies such as this. This makes it impossible to control for phonological

	p	%	N
every/anything	1.00	99	90
derived nominal	.74	25	12
monomorphemics	.70	25	20
gerunds			
accusative-in			
NP complements	.21	6	124
appositive			
reduced relative clauses			
verb phrase complements	.18	6	72
progressives			
quasi-progressives			
periphrastic future			
modifiers (+ part)	.09	2	326
some/nothing	.03	1	102
West Texas	.76	19	157
Atlanta, Georgia	.24	15	589
Input probability	.22	16	746

Knock out categories– 0% *-ing*: proper names, prepositions, modifiers (+ ger).

Table 2.2: Probability and percentage of -ing in U.S. Southern speech, by grammatical category. Reproduced from Table 4.37 from Houston (1985:152).

and grammatical environments perfectly, particularly in the case of (ING) which is a relatively rare variant compared to, say, vowels.

Even when read speech is used, as in the pilot, it is difficult to tease out the influence of internal constraints. Tokens which occur with different sounds around them must necessarily be occurring with different words. As we will see later in the chapter (and beyond), factors such as word choice and message content (what the person says) have a huge impact on listener evaluations of utterances and even the role of (ING) within them. For these reasons, this study will neglect the influence of internal constraints, while acknowledging that these must be addressed at a later time.

Most common social correlates

The social correlates of (ING) in the production literature represent the best information available about what the meanings of (ING) are or might be. Because (ING) has been studied in so many contexts by different researchers, there is a great deal of knowledge about its behavior, but it can be difficult to integrate this knowledge. The most thoroughly documented social aspects of the variable are socioeconomic status and context of speaking, particularly with respect to formality. I will discuss these first, then turn to the less commonly treated correlates.

Socioeconomic status

Different researchers have carved up class in different ways. But of those who have looked at class at all, all have found a strong positive correlation between proportion of *-ing* use and socioeconomic status (Labov 1966; Cofer 1972; Woods 1979). The exception to this is Fischer (1958), who found only the barest suggestion of a class-based pattern. He notes, however, that his work was centered in a very small, relatively homogenous community without strong class lines.

In the larger studies, class is a key feature of the distribution of (ING). Although the exact formula used to calculate class division differs from study to study, class is typically measured along multi-index scales, including occupation type, income, kind of housing, neighborhood and father's occupation (see, for example Trudgill (1974)). By combining multiple indicators, researchers create a measure of the complex construct of class, for example capturing the fact that while class is commonly linked to income level, some relatively high-paying professions may be ideologically connected to the working class (i.e. plumbers, electricians), while some professions carry more status than their income level might predict (i.e. teachers). This process is can be challenging and necessarily erases certain aspects of the social structures under study. Nonetheless, it provides a useful overall picture of the relationship of income, occupation and education to linguistic behavior. Using these measures, multiple studies have shown that the *-in* form increases in frequency in the speech of people lower on the class hierarchies while the *-ing* form increases in the speech of those higher up.
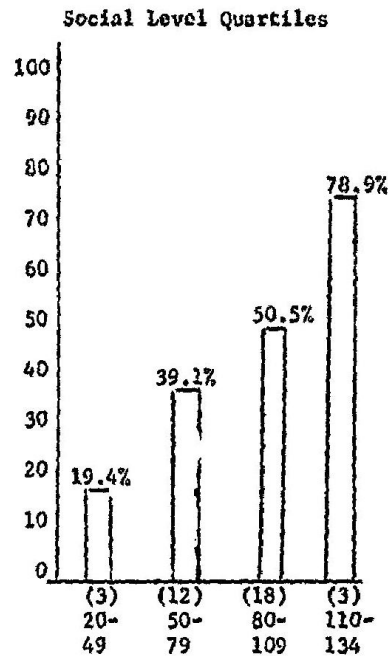
Figure 2.1: Percent -in by social level in Detroit. Reproduced from Figure 11, Shuy et al. (1967:69)

Shuy *et al.* (1967) have a simple graph demonstrating this pattern, giving the percent of the *-in* use for their informants by "Social level" quartiles and reproduced in Figure 2.1. Note that the top and bottom quartiles have only three members each. In addition to this main effect, they report an interaction such that the other differences (gender, race and age) are smaller among informants below the median "social level".

Reid (1978) also shows a simple correlation between socioeconomic status, in this case indicated by the occupations held by the fathers of the speakers, who were all preadolescent boys. Reid found that *-in* use increased as the prestige of the father's occupation decrease, as shown in Table 2.3.

In some of the studies more complex findings were reported. Anshen (1969) has argued that in his data the correlation with occupation type is a result of a link with education, which is the true correlate. It is difficult to generalize from his results

Occupational group	(ING) index
Professionals, managers (A)	18
Foreman, skilled manual workers (C)	66
Semi-skilled and unskilled manual workers (D)	74

Table 2.3: Percentage of -in in Edinburgh preadolescent boys, by father's occupation. Reproduced from Table 8 from Reid (1978:167).

though, as his data concerns a small Black community in the South in the 1960s, in which both the educational and occupational opportunities for his informants were limited. In addition, because it was a small community, social interactions were not as influenced by occupation as might be the case in a more populated area (Anshen 1969:62). Labov (2001) also reports different behavior for occupation and education. In careful speech, (ING) use among his Philadelphia informants is heavily influenced by both their occupation and level of education. In casual speech, only occupation has an effect (Labov 2001:118). Douglas-Cowie (1978) highlighted the social nature of linguistic indexes of class by demonstrating that (ING) use among her informants tracked with their social ambitions as evaluated by their peers, rather than their actual educational achievements.

While it is clear that (ING) is linked to both education and occupation, it is not certain if it is more closely linked with one of them or if so, how. Indeed, the techniques for calculating class in large scale sociolinguistic studies make it difficult to determine what individual factors, if any, are involved in the use of a given variable.

Situational formality

The other stable correlate of (ING) has been most frequently termed style, generally in Labov's sense, referring to the formality of conversational context which influences the amount of "attention paid to speech". When people are reading aloud, for example, they are likely to be more conscious of their speech and make an effort to make their language more standard, while in casual conversation they are more focused on the content of their words than the form and allow their more natural vernacular to emerge. This image of style has been critiqued by a number of sociolinguists

(see Rickford and McNair-Knox (1994) for a thorough discussion) as unnecessarily compressing a number of distinct dimensions into one. For example, a reading style involves both increased attention to the processes of speech and the introduction of the written form of the language which is generally considered to require more formal linguistic behavior than the spoken. Wolfson (1976) provides a thorough discussion of the issues involved, with a particular attention to critiquing the premise of the vernacular as natural speech on which this model is founded.

Despite its limitations, this definition of style has the advantage of being relatively easy to the manipulate and it is the model used by many of the researchers studying (ING), beginning with Labov's own 1966 work, which identifies four main styles: casual speech (A), formal speech (B), reading (C) and word list (D). Across these categories, the variable has shown relatively consistent behavior with respect to style, with greater *-ing* use shown in those contexts with more formality or more of a focus on careful speech and greater *-in* use in those which are more casual, with less of a premium on standard speech. Because class and formality each influence (ING), many studies report both together in a single graph. Figure 2.2 shows class, formality and (ING) from Labov (1966). Later work in Philadelphia issued a similar pattern, as shown in Figure 2.3.

The earliest work discussing (ING), Fischer (1958), gathered data from children in a rural New England town. The style differentiation in his work is also formal interview vs. casual speech, although in his case both styles are within the larger context of speaking with a known adult (the researcher). Fischer's data also showed greater use of *-in* in the more casual interview setting than in the formally administered interview.

In some cases, the influence of style on (ING) use is mediated by class, as in Trudgill (1974). In his data, the middle class had similar rates of *-in* use in their reading passage, word list and formal speech styles. In contrast, the formal speech of the working class speakers was closer to their casual speech and less similar to their reading and word list contexts (Trudgill 1974:92). Figure 2.4 shows this pattern.

Working with similar categories, Reid (1978) found that his adolescent informants in Edinburgh as a group increased their *-in* use as the speaking situation became less
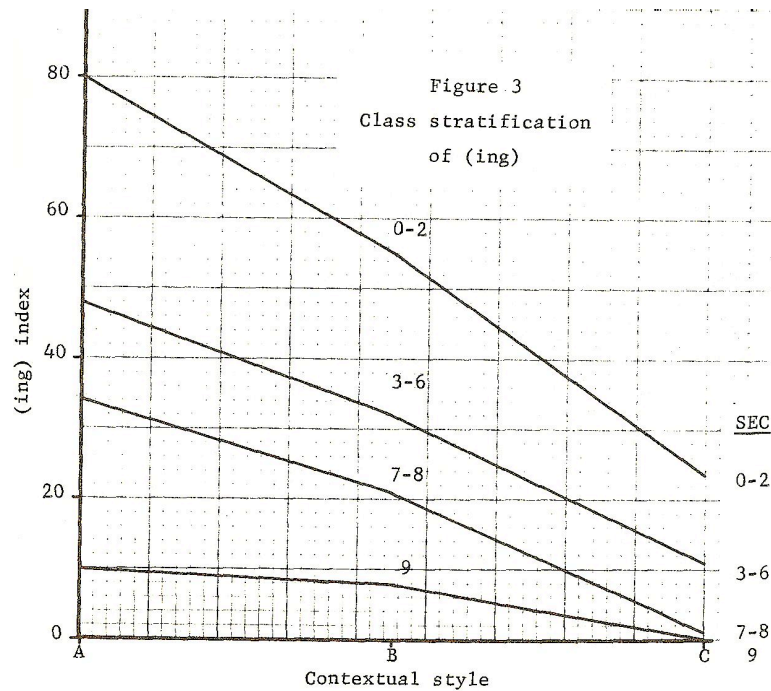
Figure 2.2: Percent of -in by class and situational formality in New York City. Reproduced from Figure 3, Labov (1966:398).
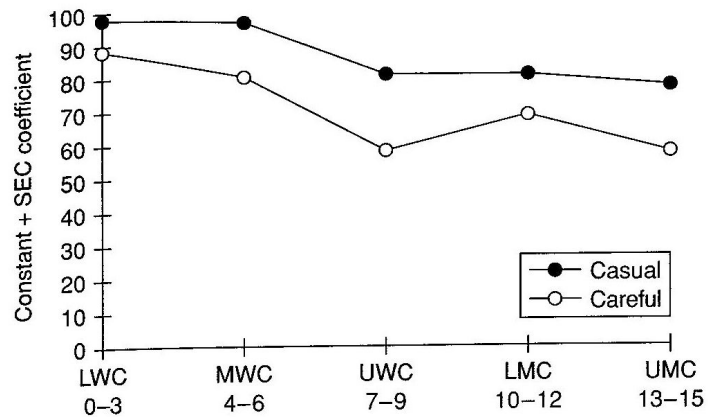

Figure 2.3: Expected values of -in by class and situational formality in Philadelphia. From regression analysis using age, gender, neighborhood and ethnic categories. Reproduced from Figure 13.1, Labov (2001:419).
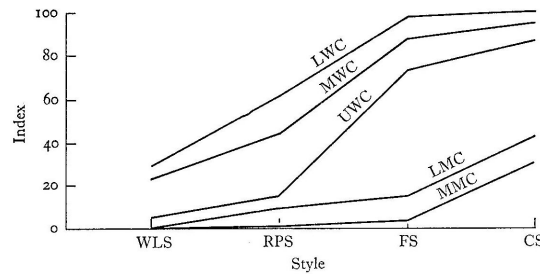
Figure 2.4: Percent of -in in Norwich by class and situational formality (Word List, Reading Passage, Formal and Casual Styles). Reproduced from Figure 14, Trudgill (1974:92).

focused on language and less oriented around adult agendas. Thus, the lowest use of *-in* was found in the reading passage, with much more in a formal interview, then a peer conversation in the presence of an adult and finally with playground usage having even slightly more instances of *-in* than the other peer situation. Reid also gives the indices in each situation for different speakers and notes the variation in patterns from speaker to speaker. Going further, he notes that a variety of linguistic and other cues indicated that different boys approached the interview differently, with some seeing it as clearly a very formal event while others displayed it confident and relaxed stance. This provides a useful reminder that despite our own evaluations of the formality of the given situation, participants may have different interpretations.

Situation	(ING) index
Reading Passage (RP)	14
Interview (IV)	45
Peer session (GP)	54
Playground (PG)	59

Table 2.4: Percentage of -in in Edinburgh adolescents, by situation. Reproduced from Table 6 from Reid (1978:163).

Douglas-Cowie (1978), working in rural Northern Ireland, used a very different techniques for manipulating the formality of the situation. The two different levels were recorded in separate sessions. In one case, in formants conversed in small groups with the investigator, who was herself and native of the small village and familiar to

all of them. In the second session, informants met one-on-one with a colleague of the investigators, who was unfamiliar to them and spoke with an educated RP accent. Although the 10 informants showed a wide range of (ING) usage, they consistently used less and *-in* in the presence of the unknown interviewer.

Cofer (1972) deliberately manipulated the ordering of the topics such that three sections of the interview are distinguishable. The early portion was formal by timing (assuming that informants start out more nervous and formal and relax later in the interview) and formal by topic, in this case background information and questions about lexical preferences. The middle portion of the interview was informal by timing and informal by topic, dealing with childhood games and stories of fights or great danger. The final section was informal by timing and relatively formal by topic, where interviewees were asked to describe how to tie a shoelace and to define common sense and a successful man. The results, shown in Table 2.5, differ by class, but in a different pattern from those of Trudgill. All of the speakers show relatively high *-ing* use in the first formal section and higher *-in* use with the middle informal section, but for the third section, the middle class speakers return to higher *-ing* use while the working class speakers remain with greater *-in* use (Cofer 1972:206).

Social Classes	(1)	(2)	(3)
Black working	54	72	66
White working	40	67	64
Middle-class	34	50	38

(1) = background-lexicon
(2) = games-fights-danger of death
(3) = common sense-shoelace-successful man

Table 2.5: *Percentage of -in in Philadelphia, by class, race and formality. Reproduced from Table 4 from Cofer (1972:205).*

The stylistic influence on (ING) in Woods (1979) (Figure 2.5) is also class-dependent and differs from the usual stratified pattern in that his most formal context, minimal pairs, causes a spread of (ING) rates by class, such that the class differences in this context are much greater than in any of the others.

Wald and Shopen (1985) stand out in the literature as the only work which uses
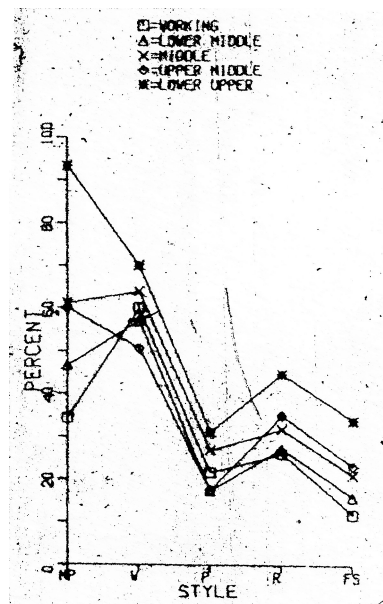
Figure 2.5: Percent of -ing by class and situational formality in Ottawa. Reproduced from Figure 5.3.a, Woods (1979:104).

naturally occurring speech rather than interview data. Although this provides important insight into the behavior of (ING) in other situations, their data were collected via notetaking, a process which is more susceptible to researcher bias than methods which involve recording. The stylistic contexts that they record are based on the speaker/addressee relationship (family, friend and other). Their Canberra data shows higher *-in* use among friends than with either family or others, as Table 2.6 shows. Their L.A. data has a subset limited to family conversation, within which they note a stylistic division between joking and arguing. Table 2.7 gives the (gendered) effect of this.

Relationship	% *-in*
Friend	22
Family	14
Other	14

Table 2.6: Percentage of -in in Canberra, Australia, by speaker/addressee relationship. Adapted from Table 3 from Wald and Shopen (1985:534).

Speaker	Joking Style	Arguing Style
Male	46	24
Female	28	21

Table 2.7: Percentage of -in in Los Angeles, California, by conversational context. Reproduced from Table 6 from Wald and Shopen (1985:539).

Overall, the existing knowledge suggests that *-in* is associated with contexts in which speakers are more comfortable, more familiar with their interlocutors, less focused on their speech and discussing less formal topics. This trend is further borne out by a vocabulary constraint in which *-in* forms occur more commonly with shorter, more common "everyday" words, while *-ing* is favored by longer, more ornate words (Fischer 1958; Wald and Shopen 1985).

Between these two axes of social variation, formality and class, we can derive a number of related concepts that might be relevant for teasing out the meaning of (ING). Based on the correlation with educational background and also with situations which emphasize care and attention to language, we see that (ING) may have some relation to education in general and educated language in particular. Because of the interplay between the concepts of education and intelligence, it would be inappropriate to look at one without the other. Studying evaluations of intelligence is a complex proposition, given that different people may orient to different types of intelligence, or may have different associations with words like *intelligent* vs. *smart*. The socioeconomic status correlate itself also invokes concepts like wealth, occupation, neighborhood or consumption patterns. From the relationship of (ING) to situational formality, we might want to examine contextual and emotional concepts related to formality, for example comfort, being tense or relaxed, politeness, respect and formality itself.

Other social correlates

While socioeconomic status and situational formality are the most consistently documented social correlates of (ING), they are by no means the only ones. Another

is gender, specifically a link between *-in* pronunciation and masculinity. In addition, researchers have linked (ING) use to race, region and age. I will go over these correlates and discuss the findings about them in the different studies. Lastly, I will discuss interview data from the literature which provide insight into speakers' overt beliefs regarding (ING).

Gender

There is a general trend in the literature for higher levels of *-in* to be associated with men and higher levels of *-ing* with women. Table 2.8 summarizes this trend across an handful of studies. This pattern does not hold in all cases, but it is common, while a difference in the other direction is uncommon.

Study	Location	Men	Women	Both
Labov (1966)	New York	36	-	31
Shuy *et al.* (1967)	Detroit	62	21	-
Shopen (1978)	Canberra	24	16	-
Houston (1985), <35yo	Britain	88	72	-
Houston (1985), >35yo	Britain	78	76	-
Wald and Shopen (1985)	Canberra	23	24	-

Table 2.8: Percentage of -in in men's and women's speech across studies.

However, the influence of gender interacts with class and context and it is rare for a study to show higher levels for men in all subgroups (i.e. within each intersection of class and style). Labov's data showed more *-in* use for men within the lower class speakers but also showed that in the middle class group men used slightly **less** *-in* than did their female counterparts. In Anshen's study, there was no significant difference in (ING) use between men and women, but there was an interaction between gender of the speaker and the race of the (male) interviewer. The subjects, all Black, used more *-in* with a Black interviewer than a White interviewer and this effect was larger among the men than the women. This pattern was the reverse of another variable in his study, /r/ use, suggesting that the behavior reflects something specific to the variables themselves.
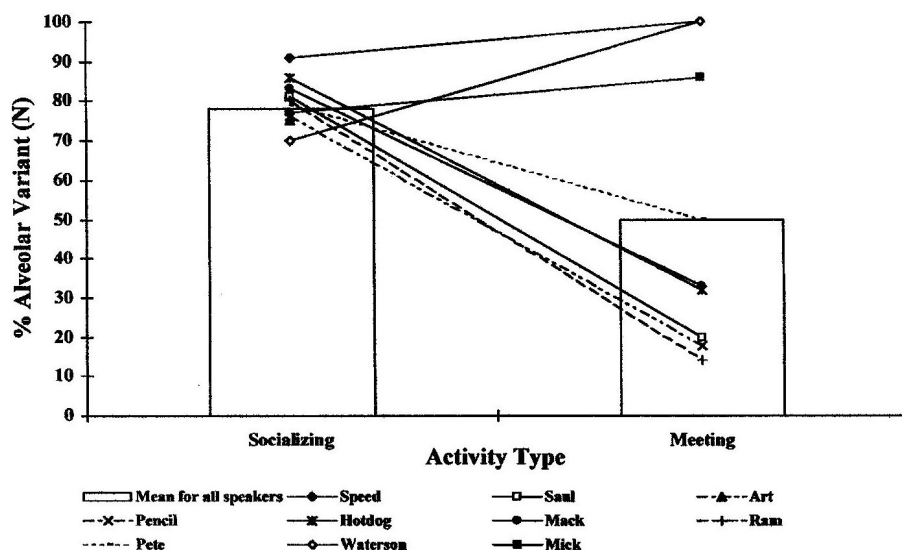
Figure 2.6: Percent -in for individual fraternity members across activity types. Reproduced from Figure 8, Kiesling (1998:85)

Trudgill looked at (ING) rates by gender within the cells broken down by class and context and found that in a majority of the cells (17 out of 20) the women led in *-ing* use. He suggests that this may be due to a combined effect of increased status consciousness on the part of the female speakers. He suggested that speakers associated the working class with masculinity, causing men to favor this class-linked form. This connection between (ING), the working class and masculinity (or a particular type of masculinity) is addressed in more depth by Kiesling (1998), who studied (ING) use within a college fraternity in Virginia. In Kiesling's data, some members maintained or increased their use of *-in* during fraternity meetings as compared to social times. These men also showed an allegiance to a particular type of physical masculinity which valued a working-class background, although not all of them had such a background. This use of *-in* as a masculine signifier does not contrast in his analysis with female patterns of speech, but with the masculinities (Connell 1995) displayed by other members, who use *-in* in social situations but favor *-ing* in meetings. Figure 2.6 shows the remarkable divergence of these three members.

Kiesling's findings are reminiscent of Fischer's anecdotal evidence that one boy in

his New England data who favored *-ing* almost exclusively was a "model" boy, who "did his school work well, was popular among his peers, reputed to be thoughtful and considerate" (Fischer 1958:49) while another boy who used both variants was a "typical" boy, described as "physically strong, dominating, full of mischief but disarmingly frank about his transgressions" (Fischer 1958:49). Table 2.9 gives the number of each variant used by the two boys in their TAT responses (most formal style). More generally, Fischer's data linked *-in* use with boys over girls, although

	-ing	*-in*
"Model" boy	38	1
"Typical" boy	10	12

Table 2.9: *Tokens of (ING) in two New England boys. Reproduced from Table 2, in Fischer (1958:49). Chi squared: 19.67; p < .001*

his breakdown showed that the "model boy" described was not alone in bucking this gendered split—there were two girls (out of nine) who used more *-in* than *-ing* and five boys (out of fifteen) who favored *-ing* over *-in*.

	-ing<-in	*-ing≥-in*
Boys	5	7
Girls	10	2

Table 2.10: *(ING) preferences among New England children, by gender. Reproduced from Table 1, in Fischer (1958:48). Chi squared: 2.84; .05 < p < .1 (by 2-tailed test).*

Gender differences are not always about men and women using different overall amounts of a variant. Wald and Shopen (1985) report a gender difference with respect to how men and women treat different kinds of addressees. In their Canberra data, the use of (ING) was similar for both men and women talking to family members and others and for women talking to their friends, while the remaining category, that of men talking to their friends, showed twice the rate of *-in* use. The gender of interlocuters also had an effect, in that both men and women used more *-in* when talking to men than women. This pattern contrasts with their Los Angeles data, in which women talking to their female friends used more *-in* than those talking to their

male friends. As in Canberra, having a female addressee favored *-ing* in all other contexts.

Race

Only a few studies so far have addressed race. Those which do have only contrasted Black and White speakers and, for the most part, report higher *-in* use among Black speakers than White. Shuy *et al.* (1967) found a rate of 55.8% *-in* use among their Black speakers overall, contrasted with 37.6% for White speakers (Shuy *et al.* 1967:67). Both Labov and Cofer found that Black speakers used *-in* more frequently than White speakers. Cofer noted that in his data this difference was within the larger differences based on class. In contrast, Anshen compared his work in North Carolina in a Black community with that of Levine and Crockett (1966) in a nearby White community and found that the race-based differences in (ING) use were much larger than those of education. This suggests that the relative weight of race and education or class may be regionally or otherwise variable. As mentioned above, Anshen's informants were significantly influenced by the race of their interviewer.

Labov, in New York, observed that his Black informants used more *-in* than the White ones, but that Black out-of-towners used the most of all, while White out-of-towners did not differ significantly from White New Yorkers, shown in Table 2.11. It is not clear whether this is a finding regarding the regional distribution of (ING) among Black vs. White speakers, or the distribution of regional origins among Black vs. White newcomers in New York City at the time.

	Style B (interview)	Style C (reading)
White New Yorkers	31	13
White out-of-towners	37	8
Black New Yorkers	62	18
Black out-of-towners	77	42

Table 2.11: *Percent of -in used by native New Yorkers and out-of-towners, by race and situational formality. Reproduced from Labov (1966:397).*

Region

There is little solid data concerning the regional variation of (ING), apart from this interaction with race observed by Labov. Work on (ING) has largely come from studies of local communities. It is not straightforward to compare (ING) rates across studies, given that the contexts of speaking differ. Wald and Shopen's data, collected by students from overheard conversations in Los Angeles and Canberra, shows some differences between the two cities. Their overall rates differed (24.8% *-in* for Los Angeles, 19.8% in Canberra), in addition to the difference in gendered patterns described previously. This suggests that there are, indeed, a real regional differences at least on a global level.

Many linguists and nonlinguists alike have a sense that speakers in the American South use more *-in* than the rest of the country. Labov (2001) says that in the Southern states, along with the North of England and Scotland, "the /in/ form is used almost exclusively in speech, even of the most formal kind" (p. 90). Cofer references a comment by Mencken (1963) than the *-in* variant is more common among educated Southerners that among their Northern or Eastern counterparts. Wolfram and Christian (1976) report that Appalachian speakers show higher rates of *-in* use that most other White speakers, including those in the non-Appalachian South, and that while class and stylistic variation is present to some extent in their data, it is signficantly less prevalent than that reported elsewhere. It is certain that regional differences exist, both in terms of overall use and the structuring of social and internal factors. What these differences are, however, remains somewhat uncertain. It seems likely that Southern speakers do use more *-in*, but regardless of the facts, the belief exists. This belief and its ideological effects will be discussed in Chapter 5.

Age

Age is the last social category discussed in the literature on (ING). Both Labov and Woods (1979) find that younger speakers use more *-in* than older speakers do. Table 2.12 gives the age variation in Labov (1966), broken down by linguistic style and class, while Table 2.13 shows age findings from Woods (1979), by formality. These

studies are snapshot (conducted at one point in time), as opposed to longitudinal
(follows speakers over time). So we do not know for sure whether this age difference
is one of "apparent time" due to older forms being preserved in the speech of older
speakers (Labov 1966:318) or of age-grading, speakers changing their speech as they
age. Given the stable nature of (ING), the latter is more likely.

	Class							
	Style A (casual)				Style B (interview)			
	1	2	3	4	1	2	3	4
20-39 years old	90	60	43	0	75	45	50	2
40 + years old	85	48	21	23	50	27	12	2

Table 2.12: *Percent of -in used among New Yorkers, by age, formality and class. Adapted from Table 8, in Labov (1966:397).*

Age	Minimal Pairs	Word List	Pictures	Reading	Free Speech
>40	63.0	63.9	30.9	36.3	25.5
<40	54.0	57.7	21.7	29.1	16.8

Table 2.13: *Percent of -ing among Ottawa speakers, by age and formality. Adapted from Woods (1979:196).*

Both of these studies show only two age categories, however. Different patterns
emerged in two other studies which provide a finer grained age breakdown. The
British data from Houston's study is shown in Table 2.14 while Shuy *et al.*'s Detroit
data is shown in Table 2.15.

Language ideologies

In addition to tracking the rates of (ING) use in different settings and by different
people, Wald and Shopen also looked into attitudes towards the variants, through
interviews and self-reports. They confirmed that their speakers considered the *-ing*
form to be the standard variant. They also found that women were more likely than

	Age			
	10-17	18-34	34-55	56 +
"inside" dialects	32	22	21	42
"outside" dialects	9	5	23	12

Table 2.14: Percent of -ing for different age groups in Britain, by region. Reproduced from Houston (1985:147).

Age	% -in
Child (9-12)	43.9
Teen (13-17)	52.9
Adults (30-50)	42.3

Table 2.15: Percent of -in in Detroit, by age. Adapted from Figure 11, in Shuy et al. (1967:69)

men to state a preference for *-ing* over *-in*. When asked to describe the sort of people who use the *-in* variant, respondents gave a range of descriptions. Wald and Shopen grouped these into three types: personally negative (e.g. *uneducated*, *lazy*, *careless*, *drunk*) which covered nearly half the response, socially lower (*working class*, *blue collar*) which made up about a quarter of them and neutral descriptions (*everyone says it sometimes*, *depends on origin* or *average Australian*), also about a quarter. These responses are revealing, but provide a particular slant on the views held by the interviewees, as the question asked focused on the personal qualities of people who use *-in* frequently and not on other aspects, for example in what situations most people might be expected to use *-in*.

2.2 Preliminary research

As a first step, I carried out a small, simple matched guise experiment on (ING) and /t/ release, although ultimately the main study investigated (ING) only. My goals were to test the effectiveness of the methodology and to get a better sense of the general meanings that listeners attach to the variables. Listeners rated speakers based on short recordings (one sentence long) and no contextual information. The results

showed clearly that listeners respond to the variables and that the aspects of behavior that were influenced by the variables fell within the arena of meaning sketched out by the production studies. (ING) influenced perceptions of the speakers' status, namely ratings on *wealthy*, *educated* and *smart* and also impressions of mood, including *casual*, *formal*, *relaxed* and *careful*. (ING) also was involved with two interaction effects related to regional origin and ratings of politeness which I will discuss in more detail below. /t/ release influenced some of the same qualities as (ING) did, but fewer of them, specifically *smart*, *casual*, *formal* and *relaxed*.

Methods

To make the recordings used in the experiment, I had four speakers (two male and two female) record a number of sentences, reading them in dialogue form to encourage a conversational tone. They were instructed at first to read the dialogue as naturally as possible and then the variables were described to them and several more recordings were taken using each (ING) or /t/ variant in turn. The most natural sounding version of each sentence was selected for each speaker and then a copy was digitally manipulated to splice in the alternate variant (each sentence has a token of only one of the variables under study). In this way, 19 pairs of recordings were created (due to technical problems, useful results were only collected for 17 of these pairs and only three of the speakers).

The study was conducted using 34 undergraduate students as listeners, running each one individually at a computer with noise-canceling headphones. Each respondent heard 10 pairs of recordings (except for the first few who heard 7). The recordings were presented in randomized order, adjusted slightly to ensure that paired recordings were never heard back to back. Of the 17 pairs used, 6 tested responses to /t/ and 11 to (ING). The disparity in numbers was due to a division between (ING) in verbal gerunds and the word *something*. Originally these were prepared as independent variables, but the data on them showed no difference and so in the analysis they were collapsed into one.

As each recording played, listeners were presented with a screen of questions to

fill out. The screen included a button to play the recording again at any time as they answered the questions. Listeners were asked to rate the speaker on a list of ten adjectives (*casual, formal, nervous, relaxed, careful, confident, wealthy, educated, smart, polite*), saying whether the speaker was *very casual* or *not at all casual* on a 5 point scale. Then they were asked to give an estimate as to the speaker's age and region of origin and were given a chance to enter further comments before proceeding to the next recording. The comment section was described in the instructions as a place for any other comments with the example "if the speaker sounds like they work in a particular profession or if they remind you of someone".

Results

The responses from this preliminary experiment were analyzed using Factor Analysis and Analysis of Variance (ANOVA). I will first discuss the results of the Factor Analysis on the adjective ratings, which provides a useful window into the ways in which the listeners relate the various attributes to each other. I will then discuss the direct or main effects of the two linguistic variables, that is, the ways in which using *-ing* or *-in*, or release or non-release of /t/, causes someone to be perceived as more or less *intelligent*, or *casual*, etc. In addition to the adjective ratings, I will also discuss the effect of the linguistic variables on the final questions regarding the region that the speaker seems to be from and the comment section. After the main effects, I will talk about the interactions, specifically the ways in which the linguistic variables combined with the actual message content or the particular speaker to affect the responses. Lastly, I will talk about some of the other effects that were present in the data. For the most part these are "noise", variation which is orthogonal to the issues at hand in the investigation. Nonetheless, some of the patterning of this noise offers important insight into the issues involved in developing experiments of this kind which was useful in the development of the next phase. Finally, I will discuss the shortcomings of this study and how the larger project addresses them.

Factor analysis

Factor analysis is a technique for discovering the co-occurrence patterns in a set of data. In a set of ratings like this, factor analysis can tell us which of the attributes tend to have similar or exactly opposite values across the data. Factor analysis of the data in this study revealed three factors which I am calling Status, Mood and Politeness/Age. The rotated factor matrix in Table 2.16 gives the weighting of each adjective with the factors. In this table, the larger weights (in absolute value) indicate that that adjective is more strongly associated with that factor, while the sign of the weight indicates a positive or negative correlation. If the absolute value of factor weight is greater than 0.5, I assigned the adjective to that factor (indicated in bold). The factor distribution is consistent across the data for both variables.

	Status	Mood	Politeness/Age
educated	**.83266**	.06930	-.02119
wealthy	**.71765**	.03760	-.10127
smart	**.79491**	.02733	.05050
casual	-.24288	**-.79793**	.13539
formal	.41560	**.70214**	.06137
confident	.39519	**-.62631**	-.07453
relaxed	-.05433	**-.81031**	.20748
nervous	-.16996	**.74930**	.04684
careful	.38780	**.57617**	.28381
polite	.17746	.08642	**.86246**
age	.24817	.12819	**-.52650**

Table 2.16: Factor analysis on pooled data from (ING) and /t/

In the rest of the section, I will discuss the analysis on the individual adjectives, but I will approach the discussion in terms of the factor structure, discussing the Status adjectives first, then the Mood adjectives and finally politeness, age and the short-answer questions.

Direct effects of (ING) and /t/ release

The first place to look for answers regarding the meaning of (ING) and /t/ release is in the direct effects that they had on the responses of the listeners. If listeners showed a significant inclination to rate an utterance with one variant as higher on the scale of *casual* than the identical utterance with the other variant, this is a good indication that they consider that variant more *casual* than the other. The two linguistic variables had a direct effect on adjectives in the Status factor, on most of those in the Mood factor and on the responses regarding region and general comments. I will discuss each of these groups in turn.

The first factor consisted of the three status adjectives: *wealthy*, *educated* and *smart*. The most noticeable thing about the status adjectives is the discomfort that listeners had with them. The standard deviations of these three adjectives were markedly narrower than those of the others (.49, .67 and .60 respectively, while the others ranged from .80 to 1.04), as subjects were much less willing to rate anyone away from the central and therefore neutral value of three. Despite this, there was a good deal of agreement in the variation that did occur. The variable effects for (ING) were very strong (shown below in Table 2.17): speakers were rated as more *wealthy*, *educated* and *smart* when using the *-ing* forms as compared with the *-in* forms.

Adjective	*-in* mean	*-ing* mean	p value (one-tailed)	Effect size
wealthy	2.86	**3.09**	.000	.45
educated	2.99	**3.38**	.000	.57
smart	3.03	**3.32**	.000	.47

Table 2.17: Status means for (ING).

Table 2.17 gives the status effects of (ING): the means for each variant, significance of the effect (using the t-test) and effect size. Effect size is the difference between the means relative to the pooled standard deviation. Because different sets of data may involve numbers at different scales, it can be difficult to judge how big the difference between two averages is. Statistical significance can tell us how **confident** to be that a given difference is a real effect and not a fluke but not how large it is, relative to

the overall variability. Calculating effect size is a way of normalizing a difference and as such it is comparable across different scales and different data sets. In general, an effect size of around .20 is considered small, one around .50 is considered medium and one of .70 or more is considered large.[2] Effect size is particularly relevant in this case, given the compressed distribution of the status adjectives compared to the others. The status effects of (ING) showed that although listeners preferred to describe all speakers as of average wealth, education and intelligence, when they deviated from this line they agreed strongly that people using *-in* had less of each than those using *-ing*. In contrast, only one of the three status variables (*smart*) shows a real effect for /t/ release, as shown in Table 2.18.

Adjective	burst mean	no burst mean	p value (one-tailed)	Effect size
wealthy	3.00	3.00	1.000	-
educated	3.23	3.16	.125	-
smart	**3.18**	3.01	.000	.33

Table 2.18: Status means for /t/.

The six mood adjectives: *casual, formal, relaxed, nervous, confident* and *careful*, make up the second factor in the factor analysis. These adjectives all relate to the short-term self-presentation of the speaker. The variable (ING) had a significant impact on the ratings for *casual, formal, relaxed* and *careful*, as shown in Table 2.19.

As Table 2.20 shows, /t/ release influenced ratings of *casual, formal* and *relaxed*, but not *nervous, confident* or *careful*.

These results suggest that both of the variables have an impact on listener perceptions regarding the formality of the situation. In addition, it suggests that the use of the *-in* variant causes speakers to be read as being less *careful*. Both variables have some influence on the perception of the speakers as more or less *relaxed*, although neither influenced ratings of *nervousness*. We can see in the means given in Tables 2.19 and 2.20 that the ratings for *nervous* are lower than the others overall, which

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[2]Although specific tasks may have more specific criteria for what is a small or large effect size, the available statistical knowledge seems to be very much in agreement as to these rough classifications. See, for example, http://www.personal.psu.edu/faculty/k/r/krm10/effectsize1.

Adjective	*-in* mean	*-ing* mean	p value (one-tailed)	Effect size
casual	**3.51**	3.13	.000	.39
formal	2.49	**3.06**	.000	.57
relaxed	**3.32**	3.11	.002	.22
nervous	2.50	2.60	.101	-
confident	3.29	3.31	.363	-
careful	2.87	**3.26**	.000	.47

Table 2.19: Mood means for (ING).

Adjective	burst mean	no burst mean	p value (one-tailed)	Effect size
casual	3.03	**3.33**	.002	.30
formal	**2.92**	2.71	.021	.20
relaxed	2.93	**3.23**	.003	.26
nervous	2.66	2.64	.423	-
confident	3.28	3.26	.409	-
careful	2.94	2.85	.172	-

Table 2.20: Mood means for /t/.

suggests that the recordings overall did not lend themselves to percepts of nervousness. Neither politeness nor age were impacted by the linguistic variables and I will not discuss them here.

For each recording that they heard, in addition to the ratings just discussed, listeners made guesses as to where the speakers were from. The range of granularity was quite broad, as some respondents gave cities, some gave states and others regions. For looking at the data in the aggregate, the responses may usefully be divided

into four categories: West Coast, East Coast, South and Midwest.[3] As Table 2.21
shows, (ING) had a sizable impact on the assignment of region. By far the strongest
relationship in the table is between the *-in* variant and the South, with over three
quarters of the attributions of a Southern origin being in reference to the *-in* variant.
The *-in* form also favored perceptions of a Midwest background to a lesser extent,
while the *-ing* forms favored the coasts. Listeners declining to comment was also more
common with the *-ing* forms, suggesting perhaps that these listeners heard it as the
less marked variant. In the numbers given, the count for each region includes both

Region	*-in*	*-ing*
South	52 (83.9%)	10 (16.1%)
Midwest	20 (62.5%)	12 (37.5%)
East Coast	18 (42.9 %)	24 (57.1%)
West Coast	27 (38.6%)	43 (61.4%)
Other/none	108 (44.3%)	136 (55.7%)

Chi-square = 38.18, p=.000

Table 2.21: Responses for region by (ING) variant.

the responses that named the region overall and those which named a specific location
(usually state) within it. The groupings are thus affected by my own impressions of
which locations fall into these very broad categories, for example listings of Texas
were included in "South" although some residents of both areas would dispute such
an inclusion (cf. Johnstone (1999)). Apart from regions, responses also mentioned
type of neighborhood, i.e. city, rural or suburbs. However, not enough responses
included this information to draw any conclusions about the effect of (ING) on them.

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[3]Locations listed in each group were:

West coast California, "around here", West Coast, Bay Area, San Francisco, Silicon Valley, Nor-
Cal, Palo Alto, western US

East Coast East Coast, Eastern United States, Massachusetts, New Jersey, New York, New Eng-
land, Mid Atlantic, Northeast, DC area, Pennsylvania, Boston, "East or Southeast US",
Connecticut, "coastal North E. suburb"

South The South, Southern state, South Carolina, North Carolina, Louisiana, Kentucky, "South.
Maybe Miss/Ala.", "southern, maybe FL", Arkansas, Arizona, Atlanta, Tennessee, Georgia

Midwest Midwest, Ohio, Illinois, Indiana, Kansas City, Chicago

The last question on each recording was a space for comments. The degree to which listeners responded to this varied from many who entered no comments at all, to one or two who provided detailed and imaginative scenarios for every recording they heard. The two most common types of comment were personality evaluations (e.g. "nice" or reiterating one of the adjectives, most commonly *casual*) and guesses as to the speaker's profession. For the most part these were influenced by the content of the recordings, as with the professional attributions discussed with respect to the status ratings. Individual categories of comments were not common enough to perform statistical tests on, although comments describing the recording as *casual* were made more often regarding *-in* forms than *-ing* forms. One interesting thing to note about the comments regarding profession is that there were four comments that the speaker might have been a secretary and four that she might be a professional/in the business world. Of the eight, most were made regarding the sentence "I'm working downtown now" and all but one were of speaker S (the only speaker who said this sentence). However, all four of the secretary comments were in response to *-ing* recordings and all four of the professional ones in response to *-in* recordings. This suggests that although there is a good deal of agreement in a general sense about which pronunciation is higher status, in specific contexts (such as within the business world) the relative status of people using those variants may shift, based on the degree of engagement of specific roles with the standard language market.

Comments were made for the /t/ release sentences as well as (ING) sentences, but few of them seemed to reflect the variable itself. One possible exception is descriptions of the speaker as tensed or stressed, which occurred only in the versions with bursts, but as only 3 of these comments were made in regards to the /t/ sentences, this is somewhat tenuous.

One question that might be raised is whether this evaluation is taking place at a relatively conscious level or a relatively unconscious one. Clearly, the evaluation of the utterance as a whole is a conscious act. But it is not clear how conscious the influence of specific variables is. This may particularly be of concern given the large number of documented instances of speakers with "incorrect" conscious knowledge about their own speech patterns. It is not uncommon for a speaker underestimate their own usage

of stigmatized variables (Labov 2001:201). It would therefore be possible for a listener who is consciously evaluating a specific variable to respond differently than one who is making relatively unconscious decisions as they move through their day-to-day life.

The structure of this experiment certainly made it possible for some listener responses to be based on conscious consideration. Given that each listener heard a series of minimal pairs of recordings (albeit in scrambled order), they were given the opportunity to discover exactly which variables were under study and to respond based on linguistic ideologies concerning what they think the social weight of the variables ought to be, rather than evaluating the utterances as a whole. In order to check on this possibility, the data was coded for occurring before or after a given judge's first exposure to the second member of a pair— in other words, the first point at which the minimal-pairs structure of the experiment was potentially revealed. The data collected from each judge before that point would be a result of global evaluations made on the utterances overall and weight given to the variables under study likely to be due their own merit. The data past that point would be potentially subject to conscious manipulation based on understanding of the purpose of the study. Analysis which took this coding into account revealed little to no difference in the two sets of data. The only effect was a small tendency for the rating differences from the later data to be slightly smaller than the earlier data, which I interpret as deriving from listener fatigue increasing overall variability.

Interactions between the linguistic variables and other factors

In the previous section, we discussed the ways in which the linguistic variables (ING) and /t/ release influenced listener responses across the board. This kind of data is good evidence for what associations listeners have with the variables overall. As discussed earlier, these associations are only part of the story. In this section I will discuss the results that show interaction effects between the linguistic variables and other factors. Since this experiment was a relatively simple one, there are only two sources for other variables: the speakers' other linguistic and paralinguistic features and the message content, the actual words that they said. There are also listener

related factors which were undoubtedly present in the listening situation, but information was collected on only two of these: gender and region of origin.

(ING) showed an interesting interaction in the ratings for *polite*. There was an interaction between speaker and variant in that one of the speakers, speaker H, has the inverse pattern from the expected, being rated as more *polite* on average when she uses an *-in* form than when she used an *-ing* form. Speaker S shows the expected pattern, of being rated more *polite* when using *-ing* than *-in*, while speaker A shows no difference. It is not clear what caused this pattern but I suspect it relates to the fact that speaker H has a more casual, homier style and speaker S tends to be more formal. This pattern, combined with the fact that speaker H is from the South led me to thinking more about region and (ING). As a result, I looked at listeners who were from the South vs. those who were not and found another interaction.

Coding for listener regional origin was a challenge. Although I asked respondents both where they were from and where they grew up, most left the second question blank and put merely "California" for the first. Two who did this mentioned in the comments on one of the recordings that they were from the South, so it is also possible that others were from the South and did not reveal this fact. Using the information available to me, I found that Southern vs. non-Southern regional origin had a significant interaction effect with (ING) variant on the *polite* results (p = .001), shown in Table 2.22. This result is a suggestion only, as only three of the respondents were marked as from the South. It shows Southern listeners may hear *-in* as the more polite form while others think *-ing* is more polite.

Listener region	-in	-ing	difference
South	3.76	3.48	-.28
Other	3.48	3.64	.16

Table 2.22: Means across region and variants: polite.

Thus, in addition to ratings being directly affected by (ING), there were a few patterns in which the effect of (ING) was mediated by other factors: by the content of the message in the case of *wealthy* and *smart* and in the case of *polite*, by both the speaker's other aspects of pronunciation and voice quality and the hearer's regional

origin.

The interactions described here point to areas in which the relationship between the linguistic variable and the social meanings is not constant, but rather is influenced by the other factors in an utterance. Because of the relative simplicity of this experiment, assigning causes to these influences is difficult, but they suggest areas for investigation.

Effects of missing context

Lastly, I will discuss an effect found in the data that did not involve (ING) or /t/ release at all. Throughout the data, there were many instances where the ratings were impacted by either the semantic content of the utterance or the particular speaker reading the line, or an interaction of the two. In terms of the experimental design, this may be regarded as "noise"—variation which does not relate directly to any of the research questions and as a result is something to be minimized. The judges participating in the study and listening to the recordings do not, of course, share this view. All of these effects are direct evidence that something in the wording, meaning, pronunciation or voice quality of the recording carried some kind of meaning, a phenomenon which should not be surprising to sociolinguists.

I would like to highlight one in particular, as it provides a useful example of the richness that accompanies every act of interpretation whether the immediately available information appears sparse or complex. Given the preliminary nature of this phase of the research, as discussed previously, listeners were given no information as to the context of speaking, either with regard to topic, frame or speaker role. As a result of this lack of information, the listeners used clues in the content of the recordings to fill in this contextual information. As mentioned in the discussion of the comments, some of the listeners created elaborate scenarios detailing where the speaker was, who they were talking to and why and the exact mood and reasoning behind it. While these bordered on overkill, they are extreme examples of a process that all of the listeners seemed to engage in to some extent. In particular, a large number of the comments given indicated that the listeners were using the words involved in the recording as a springboard for assigning a profession to the speaker. As a result

of these assignments, the status ratings were higher for the sentences which elicited comments regarding high-status professions and lower for those which triggered lower-status associations. For example, the sentence "Can I get you something to eat?" was graded down in terms of status and comments suggested that the speaker sounded like a waiter or waitress, while "I'm working downtown now." was rated more highly, as was "How have you been feeling?", which also received comments of the speaker sounding like a doctor, therapist or nurse.

The content of the utterances also influenced mood ratings in (ING) data and a range of ratings in the /t/ release data, but the comments were not as helpful in determining the reasons for this effect. As a result, the influence of listener-created contextual information is an unknown. This serves as a useful reminder that while it is impossible to fully control all of the factors, it is important to address the issue of utterance context in a thoughtful way, in order to minimize the range of divergent contextual imaginings contributed by the listeners.

2.3   Summary

Overall, the pilot data links (ING) to formality, with the *-ing* forms seen as more *formal*. Status was also implicated, with higher status ratings going to *-ing* over *-in*, but the comment section suggested that specific contexts are capable of producing images which invert the status assignment. The data from politeness gives a hint as to the more complex interactions that may be involved when this signal of formality is interpreted in context.

The results for /t/ release are not as wide-ranging but still suggestive. Unlike for (ING), listeners associated the release of bursts with being *smart*, but not *educated* or *wealthy*. This may indicate an association of /t/ release with more personal qualities as opposed to (ING) which is also associated with institutionally defined qualities of education and wealth. Like (ING), /t/ release is influential on the *casual/formal/relaxed* axis.

These findings provide support for the production literature on these variables, which linked (ING) to broad notions of class, gender and socioeconomic status. In

contrast, /t/ release has been linked to local style construction. This coincides with the association in this study of /t/ release to more individual qualities only, while (ING) also influences more interactional notions of education, wealth and politeness.

Taken together, the literature on (ING) and the results of the pilot study suggests that (ING) is related to class measures such as wealth and education as well as intelligence and formality. They also suggest that race and especially region are likely to influence these and other associations. Perhaps more importantly, the pilot results show that the specific context of the utterance has a large impact on both perceptions overall and the role of (ING) within them.

While this pilot study revealed useful information, it was limited in several ways. Using read speech limited the believability of the performance and made the context of speaking more difficult to interpret. The study also featured only three speakers, making it difficult to tease apart which speaker-based factors were the relevant ones in any given effect. Lastly, the limited data collected from the listeners made it difficult to understand the reasons for their choices. The comment section opened up fascinating possibilities for the larger social images on which the listeners based the ratings, but did not allow us to confirm these.

All of these limitations have been addressed to a greater or lesser extent in the literature on language attitudes. In the 40 years or so since the Matched Guise Technique has been developed, researchers have come up with a number of refinements and variations to enhance the effectiveness and complexity of the method. Some of these have been incorporated into regular use, while others are only sporadically seen. The following chapter introduces the methods for the main study. It will first review the existing literature on the Matched Guise Technique and its relatives, then it will detail the specific methods used in this study.