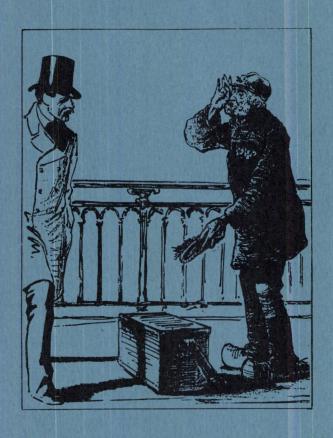
Plat Amsterdams in its social context:

A sociolinguistic study of the dialect of Amsterdam



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P.J. Meertens-Instituut voor Dialectologie, Volkskunde en Naamkunde Keizersgracht 569-571, 1017 DR Amsterdam

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Abstract

The goal of the present study is to investigate the nature and the social context of the speech of Amsterdam (*Plat Amsterdams*), on the basis of descriptive language date, subjective evaluation data, and naturalistic language data collected from speakers in the city. Apart from defining the linguistic differences between Standard Dutch and *Plat Amsterdams* and determining how Amsterdam speech variants are evaluated subjectively in the speech community, the study explores whether social, stylistic, age, and sex variation exists in the speech of Amsterdam.

On the basis of recorded language data, literature, and observations in actual speech settings, practically no other than phonological differences between Standard Dutch and *Plat Amsterdams* were found. From the subjective evaluations of the 24 respondents an inventory of possible socially diagnostic phonological variables in Amsterdam speech was drawn up. Five of these variables were subsequently selected to determine quantitatively whether their usage varied according to social status, speech style, age, and sex of the speaker. The data on which this quantitative investigation was carried out consisted of the recorded speech of 40 randomly selected speakers from Amsterdam. The sample included two age groups (20-25 and 50-55), two social strata (high and low socioeconomic status), two styles (formal and informal) and both sexes.

The general conclusions drawn from the quantitative investigation of the five phonological variables are the following. As has been hypothesized on the basis of similar research, the use of stigmatized variants is significantly affected by sex: women use fewer non-standard variants than men. In addition, some variables turn out to have separate Plat Amsterdams variants used chiefly by men and others used chiefly by women. This occurrence of 'men's variants' and 'women's variants' may be interpreted as a halfway successful attempt by women to achieve a pronunciation closer to the Standard Dutch norm. Contrary to what had been hypothesized in connection with possible disappearance of the dialect, Plat Amsterdams turns out to show the normal age grading pattern: younger speakers use more stigmatized forms than older ones. The hypothesis that the use of all Plat Amsterdams variants is significantly affected by socio-economic status is confirmed by the data: low status speakers use the stigmatized variants more than high status speakers. Contrary to the hypothesis, significant stylistic differences have not been found in this study of Amsterdam speech. The fact that informal style did not produce a greater use of stigmatized variants may be due to the use of only naturalistic speech data in this study, instead of also offering reading passages for the definition of formal style. On the other hand, the relative prestige in the Netherlands of *Plat Amsterdams* may also contribute to the lack of stylistic variation in this dialect.

For Harold, who made me study

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Chapter I

The Study of Urban Dialect in the Netherlands

1.0 Introduction

Holland is a country of cities", writes Brugmans (1930/1972: 14) in his six-volume history of the city of Amsterdam. As in Greece, Lombardy, and Flanders, historical development in the Netherlands has always been more than only agrarian. Dutch cities have been cultural centers of importance throughout the centuries, whose 'burghers' have influenced the country's history as much as royalty, aristocracy, or the military have shaped the history of many other nations.

Among all the Dutch cities, Amsterdam has always taken up a special position, from its foundation in the Middle Ages to the present day. Holland's most famous poet. Joost van den Vondel, sums up the Amsterdammer's view of the city's special role in the Netherlands when he writes in the inaugural play for the city's municipal theatre in 1673: Thus the entire world seems built around Amsterdam.' In view of this ethnocentric attitude, which is by no means rare among citizens of Amsterdam, it is all the more surprising that the language of the city has not been the subject of extensive investigation. In this respect, Amsterdam does not differ from other cities, though, either inside or outside the Netherlands, because, until recently, city language was not generallty viewed as an interesting object of study. The first scholarly interest in dialect was a product of the early 19th Century Romantic period. Artists, writers, and composers were looking for the natural, the unspoilt, the spontaneous, and in their eyes life in the country represented all that was natural. Citified language scholars, similarly inclined to break away from the harsh reality of everyday life and thus sentimentally longing for friendly, picturesque country atmosphere, idealized the language of the farmers. They searched for the unspoilt language of the 'real people' and assiduously studied lists of old words and expressions in the dialects that typefied this atmosphere to them.

In the second half of the 19th Century, a more scientific approach to dialect study replaced these romantic notions. Dialects were discovered

¹ 'Dus schijnt heel de wereld om Amsterdam gebouwt'. In: Gijsbrecht van Aemstel, cit. in Brugmans, H., 1972:9, Vol. I.

as a means to explain old and new sound changes and semantic developments. As a result, dialect monographs and other studies began to appear, written by scholars with a thorough knowledge of a particular dialect, or even by native speakers of the dialect in question. Another motive for dialect study also became more prominent by the end of the 19th Century. Until then, country folk had generally felt inferior to city people and this sense of inferiority had prompted a tendency to imitate city habits. At the turn of the century, a reassessment of country values and a new sense of country pride led people from rural areas to the realization that their own language was equally well -- if not better -- suited for expressing their emotions as the language of the cities. This new regionalism resulted in a steady stream of novels, plays, magazines, and other readings in dialect, as well as a heightened interest in dialect study.

Study of urban dialect was neither favored by such regionalism, nor by scientific interest in picturesque atmosphere. Urban dialect speakers generally had low social status, or else they would be speaking the standard language of the upper classes, instead of their city dialect. Obviously, such 'lower class' speakers possessed none of the picturesque properties generally attributed to dialect speakers, so they were of no particular interest to the dialect scholars of the romantic period. Besides, there was little chance that such a city dialect speaker would go on to become a language scholar in those days.

When, through this new sense of regionalism, it became acceptable to write in and about dialect, this new attitude also passed the urban dialects by. The dialect speakers in the cities lacked the education and the social status to attest to the inherent value of their dialect, because people of higher social status in the cities showed their higher status partly through their use of the standard language. Urban dialects remained inferior in the view of the speakers as well as for those who heard them spoken, because they remained linked to an inferior social status. Mittelmeyer (1959:4) sums up this attitude in the introduction to one of the very few monographs on the speech of Amsterdam: 'The city vernacular always arouses a certain disgust among civilized people and the man who takes an interest in it dangerously resembles the physician who takes an interest in feces.' It is clear from quotes such as this one that love for an urban dialect was not a feeling that could find expression in the dialect's

I 'Het "plat" wekt altijd enige huiver op bij beschaafde mensen en de man die zich hiervoor interesseert lijkt vervaarlijk veel op de arts die belangstelling heeft voor faecaliën.'

continuous use and encouragement. Its use reflected poorly on the user, who had to take great pains to conform to the standard and stamp out traces of city dialect, in order to become socially acceptable. This is clearly illustrated by the Amsterdam phoneticial Faddegon (1951:28) when he describes his early student days at the University of Amsterdam and writes: 'For social and cultural reasons it is, of course, not desirable for a University student to keep following Amsterdam sound patterns. (...) My conclusion was, therefore: fight the sound pattern at its roots and then the rest will follow without further effort.' Given this general attitude, it is no wonder that, for a long time, urban language was not considered a desirable object of study for dialectologists, a situation that did not change substantially until, eventually, dialectology began to concern itself not only with regional, but also with social boundaries.

In traditional dialectology, the object of study has been defined as those language varieties which are related to a particular standard language and which are spoken in the geographical area where that standard language is the language of culture (Goossens, 1972:23). For the purpose of such dialect studies, dialects are viewed as bundles of isoglosses, which can be related to factors of an intralinguistic or extralinguistic nature. Studying the isoglosses of a dialect intralinguistically may, for example, reveal a causal or implicational relationship between the occurrence of one dialect feature and another. Extralinguistic study of isoglosses, on the other hand, may point up relationships between dialect features and other, nonlinguistic phenomena. In dialectology, the most typical of such relationships has always been found to be the coincidence of isoglossbundles and geographical boundaries. Other, non-geographical boundaries have always been considered more or less incidental. Systematic dialect atlases and monographs on individual dialects began to appear at the end of the 19th Century and were designed to identify geographical areas in which particular varieties of a langue were used. These regions were identified by means of extensive fieldwork, involving the collection of massive amounts of actual language data obtained through questionnaires and interviews.

Methodologically, dialectology has produced fundamental work on linguisitic variation. Although the speakers to be studied by dialectologists were generally representative only of their region, they were selected according to fairly strict criteria. The necessity to employ

I 'Nu is het voor een Amsterdamse student om maatschappelijke en culturele redenen niet wenselijk dat hij een Amsterdamse klankwet blijft volgen . (...) Mijn conclusie derhalve was: bestrijd de klankwet in haar haard en dan volgt de rest zonder inspanning.'

standard principles to select representative samples of speakers and linguistic utterances made dialectologists aware of the need to include empirical methods from the social sciences in their work. In particular, they were alert to the influence of the interview situation on the quality of speech data, the importance of systematic speaker and corpus selection, and the advantages of using questionnaires and interviews. In this way, traditional dialectologists have been a source for enormous amounts of invaluable linguistic material, collected chiefly for research of dialect phonology, grammar, and lexicon.

Recently, dialectologists have increasingly become aware of the limitations of their approach to speech variation, finding that linguistic variation is not only conditioned by geographical constraints, but more likely by the interaction of a variety of processes, involving — apart from linguistic conditions — geographical, social, economic, and other non-linguistic factors.

Because of the limitations in its approach, traditional dialectology has been unable to develop a theory to acount for linguistic variation in a comprehensive way, but its methodology has left substantial traces on more recent approaches to linguistic theory.

Sociolinguistics especially has profitably used some of the empirical methods of traditional dialectology (Shuy, Wolfram and Riley, 1968). In sociolinguistic research, however, the study of dialect no longer revolves around the technical notion of the isogloss-bundles in relation to geographical boundaries. Language — as a form of social behavior — is a natural instrument to manifest social differences which are apparent also in non-linguistic behavior. Therefore, non-geographical phenomena, such as differences in social position, different sex-roles, or age differences, may also be expressed in linguistic variation.

The need for the study of language in the social context in which it is spoken was expressed by a variety of language scholars, starting as early as the first half of the 19th Century. However, interest in the empirical study of the covariation of linguistic phenomena and social parameters did not arise until the late nineteen fifties in the United States. At that time, social concern among language scholars prompted them to investigate causal relationships between linguistic and social differences, 'returning in one sense to the sound empirical base which formed the methodology of linguistics before a split had developed into dialectology on the one hand, and structuralism on the other' (Labov, 1966:14).

This new attitude towards linguistic variation created a much better climate for the study of urban dialects, because their investigation could be tied in to the need for a socially more realistic study of language variation, as well as the need for research relevant to social issues. In a programmatic article on the then newly emerged discipline of sociolinguistics, Hymes (1974:204) sums up this second motive for the investigation of language in its social context when he writes: 'If linguistic research is to help as it could in transcending the many inequalities in language and competence in the world today, it must be able to analyze these inequalities. In particular, a practical linguistics so motivated would have to go beyond means of speech and types of speech community to a concern with persons and social structure (.....). Beyond the structure of ways of speaking, then, is the question of explanation, and beyond that, the question of liberation.'

As a result of this attitude-change, urban dialects became a new focus for study. Starting in the late fifties, studies on urban dialects began to appear in regular succession, first in the United States and later in Great Britain.

The example with the most far-reaching consequences is probably the study of English in New York City, by William Labov (1966), followed shortly by studies of Detroit speech (Wolfram, 1969) and the city dialect of Washington, D.C. (Fasold, 1972). The study of speech in Norwich (Trudgill,1974) was the trend-setting example of urban dialect research in the United Kingdom, later followed by numerous other research projects.

In the Netherlands, the study of urban dialects lagged behind the American and British examples. The first Dutch publication on urban dialect in its social context was a small-scale sociolinguistic study of the stigmatized dialect of The Hague, as opposed to its prestigious counterpart (Elias, 1977). It was followed by work on the city dialect of Leiden (de Vries et al, 1974) and the speech of Nijmegen (van Hout, 1979, 1981), but it has not been until recently that large-scale sociolinguistic research into the dialects of large urban centers has come of age in the Netherlands. Amsterdam, the nation's capital and — for better or for worse — a focus of attention for much of the country's population, seems a natural subject for research on Dutch urban speech.

2.0 The development of Amsterdam city dialect

In the Netherlands, native speakers of Dutch clearly hear a difference between Standard Dutch and the type of speech that is generally called *Plat Amsterdams*, roughly translatable as 'broad Amsterdam speech'. Imitations of *Plat Amsterdams* are frequently heard in the theater or on radio and television and they are generally recognized in most places in Holland. In this context, the adjective plat conveys that this speech variety is generally considered stigmatized, but the speech of Amsterdam has a somewhat different position than other urban dialects have in the Netherlands. Urban dialects, in the Netherlands as well as elsewhere, are frequently diagnostic for the social position of the speaker of the dialect. In other words, they are social as well as regional dialects. Apart from the stigmatized character of Amsterdam speech, though, the dialect also has a certain degree of prestige all over the Netherlands. This prestige has its basis in the historical position of Amsterdam in the Netherlands and the role the city has played in the development of the Standard Dutch language.

Daan (1975:17), for example, writes that the Amsterdam city dialect has an exceptional position, 'because Amsterdam has been an important city for centuries, rich, powerful, and self-assured, as many Amsterdammers are and have been self-assured, often despite poverty and economic dependence.' She continues to explain the city's special role by saying that, other than Amsterdam, 'no city in the Netherlands has attracted as many foreigners from within and from outside the Netherlands, ever since the end of the 16th Century,' and 'no city has had as great an influence on the development of Standard Dutch as we speak and write it today.'1

In the 16th and 17th Century, the attitudes of the higher classes toward vernacular speech were not much different from what they are today. It is clear from plays written at the time that there was a difference in language use between people of different social status, even then. A speaker's social status could be determined by listening to the language variety being used. How clearly that distinction between plat and 'proper' speech in Amsterdam was already perceived in the 17th Century is shown by a quote from Vondel, the famous poet from Amsterdam's 'golden age'. He clearly shows a negative attitude towards Plat Amsterdams when he writes that in Amsterdam, 'the most powerful merchant-city in the world', cultured Dutch is 'most perfectly' spoken by 'people of good breeding'. He dismisses 'the old Amsterdam language', calling it 'too

I 'Omdat Amsterdam eeuwen lang een belangrijke stad geweest is, rijk, machtig, en zelfverzekerd, zoals veel Amsterdammers zelfverzekerd zijn en waren, vaak ondanks armoede en economische afhankelijkheid. Geen stad in Nederland heeft sedert het einde van de 16e eeuw zoveel vreemdelingen uit binnen- en buitenland aangetrokken, geen stad heeft zo'n grote invloed gehad op het ontstaan van het Nederlands zoals we het nu spreken en schrijven.'

foolish' and argues that 'for this reason such speech must be tempered, mixed, and judiciously limited.'1

However, the great difference between the attitude toward vernacular speech in Amsterdam and in other cities was the fact that 'the Amsterdammer was perhaps the only city dweller in the Netherlands who was not ashamed of his dialect' (Daan, 1975:18).² This was the case in the past and is in fact still the case today. It is illustrated most vividly by the tendency among the more radical trade-unionists and university students to show their identification with the working class by the adoption of *Plat Amsterdams*, or an imitation of it, even if their native dialect is of a completely different regional origin.

Between 1306, when the town received its urban charter (Brugmans, 1972, I:71), and the middle of the 16th Century, Amsterdam developed from a small fishing village on the banks of the Amstel river to a prosperous commercial center. During these 250 years, the city's development was hampered to some degree by a number of smaller and greater power-struggles between the various Dukes, Counts, and Bishops in the Low Countries, but in 1543 the seventeen provinces of the Netherlands were eventually unified under the Hapsburg Emperor, Charles V. A period of unprecedented prosperity set in and the city's commercial activities flourished. By the time Charles V abdicated in favor of his son, Philip II, in 1555, Amsterdam's leading position in the Northern Netherlands had been firmly established. The city's only serious competitor was Antwerp, the most important commercial center in the Southern part of the Netherlands.

Inclusion of the Low countries within the Hapsburg dominion had openend important new markets to the Amsterdam merchants, not only in the Mediterranean and the Levant, but also in the Spanish colonial territories. Dutch shipping thrived, since it formed the greater part of the Spanish carrying fleet for colonial products and, as such, it was an

I 'onze beschaafde moedertaal wordt tegenwoordigh in 's Gravenhage, de Raetkamer der Heeren Staten, en het hof van hunnen Stedehouder en 't Amsterdam, de maghtighste koopstadt der weerelt, allervolmaecktst gesproken, bij lieden van goede opvoedinge, indien men der hovelingen en pleiteren en kooplieden onduitsche termen uitsluite: want out Amsterdamsch is te mal, en plat Antwerpsch te walgelijck en niet onderscheidelijck genoegh. Hierom moeten wij deze tongen matigen en mengen en met kennisse besnoeien.'

From: Joost van den Vondel's introduction to the new edition of his Nederduitsche Dichtkunste, published in 1650.

² 'de Amsterdammer misschien de enige stadsbewoner in Nederland was die zich niet schaamde voor zijn dialect.'

important source of revenue for Spain. Philip II increasingly levied extra taxes, using Amsterdam's commercial success solely for the benefit of Spain. Added to this financial burden, the new monarch introduced repressive religious measures, which met with resistance, especially in Amsterdam, because they totally disregarded the tradition of tolerance that had been established in the Netherlands. No wonder that the bitter religious differences between Catholic Spain and the increasingly Protestant Netherlands culminated in the Protestant iconoclast riots of 1566, known as the *Beeldenstorm*.

The riots broke out originally in South-West Flanders, but they spread quickly via Antwerp through the rest of the Netherlands. Philip responded by sending the Duke of Alva to restore order in the Low Countries. Alva added serious religious persecution to punitive fiscal measures, but the seventeen Dutch provinces continued to resist the strict Spanish rule. In 1568, they formally rebelled, but in a diplomatic offensive, Spain successfully divided the seventeen unified provinces and by 1587 the Southern provinces were once again firmly in Spanish hands. The Northern provinces managed to escape the grip of Spanish domination and, although eighty years of war were the result, they never again came under Spanish rule.

The fall of Antwerp to the Spaniards in 1585 sealed the fate of Amsterdam's chief competitor in overseas trade, especially when the Schelde river was formally closed for shipping in 1648. Antwerp disappeared from the scene, while Amsterdam emerged from the conflict with enhanced self-assurance. Amsterdam became a haven for religious and political refugees from the South. These refugees belonged to Antwerps's cultural and economic elite and they were frequently wealthy, highly skilled, and educated. As a result, they brought many material and cultural benefits to Amsterdam, as they more and more began to occupy important positions in the city's economic and cultural life.

Describing the great Southern influx in his article on the demographic development of Amsterdam, van Dillen (1954:5) writes: 'It is striking to see how the Belgian percentage of the Amsterdam population jumped after the fall of Antwerp in 1585; it goes up from 13.3% in 1580-1584 to 44.2% in 1585-1589.'

These percentages become even more impressive when the population explosion in Amsterdam between 1585 and 1589 is described in sheer numbers: the number of inhabitants grew from 70,000 to 130,000 during this period, despite the fact that more

¹ 'Het is treffend te zien welk een sprong het Belgische percentage maakte na de val van Antwerpen in 1585; het klimt dan van 13,3% in 1580-84 tot 44,2% in 1585-89.

deaths than births were recorded in the city's registers. At the same time, the population of Antwerp dropped from 150,000 to 80,000 inhabitants.

The most important reason, though, for the enormous changes brought about in the cultural fabric of Amsterdam by the Southern immigration was the fact that the immigrants formed a new and highly prestigious elite. By 1611, half of the 310 most important merchants in Amsterdam was of Southern origin and, according to Van Dillen (1954:6), 11 of the 23 directors of the Dutch East India Company were originally from the area of Antwerp, while Southerners were also the chief investors in this company. Some of the most important Amsterdam writers (e.g. Vondel, Van Mander) and scholars (e.g. Stevin, Lipsius, Dodonaeus) (cf. Geerts, 1979:84) were of Southern extraction, while, again according to Van Dillen (1954:6), the majority of schoolteachers (24 out of 31) who became citizens of Amsterdam between 1575 and 1606 originated from the South.

In view of these figures, it is no wonder that the cultural and intellectual climate of the city changed considerably after the massive immigration of prestigious new burghers from the South. With the growing cultural importance of the Southern segment of the Amsterdam population, the tendency grew among the educated classes to adopt in their language many of the speech patterns of the Southern elite. As a result, the influence of the Brabantic dialects on the city's educated speech became unmistakable.

The development of an Amsterdam urban vernacular is closely linked to the city's prestigious position in the 17th Century Netherlands. At the time, there was a general tendency among the more educated citizens of the cities to refine their language into a more cultured variety, in order to distinguish their speech from the rural and urban vernaculars. At first, these prestige varieties differed from city to city, although the speech of well-to-do Amsterdammers automatically gained more prestige in other parts of the Netherlands, because of the economic supremacy of Amsterdam, with its wealthy and important burghers.

In view of Amsterdam's prestigious position in the Netherlands, it is no wonder that the city's cultured speech left clear traces on the emerging Standard Dutch language. However, Amsterdam was not the only trendsetter in the development of a more standardized form of cultured speech. In general, speech from the economically powerful Western provinces of the Netherlands became indicative for high social status. As a result, it became a linguistic norm to aspire to for speakers from other dialect areas in the Netherlands. As more and more people began to use it and as the

influence of the written language, with its long-standing Southern character, became more pronounced, the gap between the prestige variety and the vernacular in Amsterdam widened. The language varieties spoken in less prestigious circles in the cities developed into urban vernaculars and gradually lost social status, particularly because they were not used — except by playwrights in burlesque popular scenes — in any written form. The prestige language, as it began to be spoken and written by the elite in Amsterdam as well as in other cities, eventually developed into Standard Dutch.

3.0 The development of the Dutch Standard Language

The Dutch Language, like many other languages in the world, currently has a formal standard, which is primarily used in written form. It is not codified by a Language Academy or by some other official government agency. Its standardization was achieved by gradual adoption of a set of linguistic norms and conventions. These norms and conventions have over the years been codified by means of dictionaries, grammars, and books on proper usage and are, by now, the components of the prestige variety of Dutch.

The emergence of a Standard Dutch language occurred relatively recently. From the Thirteenth until the Fifteenth Century, Dutch was a collection of spoken and written vernaculars which are generally subsumed under the scholarly label Middle Dutch.

Standardization of Middle Dutch did not really become an issue until writings began to appear in print, around the middle of the Fifteenth Century. Of course, it was in the interest of printers and distributors of printed materials to reach as wide an audience as possible with their products. In order to give printed materials a wider circulation, a certain degree of standardization became more and more necessary, at least for the written language. As a result, an intra-regional written language evolved which showed clear traits of Flemish and Brabantic speech. This Southern bias in the written language was not at all surprising, since many of the printed materials were written and produced in the Southern part of the Netherlands. As time went on, the written language began to tend more towards the Brabantic, with an admixture of the language used in the economically important province of Holland, in the North, where also quite a number of early printers were located. Still, it was not until

the Sixteenth Century that the process of standardization of Dutch really got underway substantially.

In the course of this process of standardization the emphasis shifted more and more from the Southern provinces to the coastal province of Holland, in the North, as a result of political, economic, and cultural factors. Eventually, the language of Holland gradually developed into the language of culture because of the province's prestige in the rest of the Netherlands. Nevertheless, this language variety incorporated a great deal of Southern characteristics, particularly in its written form, not only because of the role of the printed press in the standardization process, but also as a result of the influx of the Southern elite in Holland after the fall of Antwerp to the Spaniards.

By the end of the Seventeenth Century, the Southern characteristics which had been retained in the written language of culture had become institutionalized. This was the case to such a degree that in the province of Holland a movement to bring the Brabantic-colored written language more in line with the Hollandic-colored spoken language was unsuccessful.

As time went on, the written language with its Southern remnants began to have a somewhat archaic flavor in comparison with the spoken language of the educated classes. On the other hand, this written variety also exerted a stabilizing and conservative influence on the spoken language. When the need for a more disciplined form of educated speech began to be felt in the major urban centers of Holland, the elite turned away from the urban vernaculars in favor of the varieties of speech which resembled the more standardized written form of Dutch. Educated groups with a relatively high prestige began to develop these more 'refined' forms of spoken language distinct from the dialects which were used locally by the uneducated lower classes. This was the beginning of the development of specific sociolects used by the educated and prestigious social groups.

Over the years, the various high-prestige sociolects underwent the unifying influence exerted by the province of Holland, the center of economic and cultural power. Linguistically speaking, as well as in other areas of life, the urban centers in this Western part of the Netherlands set the tone. The language varieties spoken by the prestigious elite had gradually evolved from a set of intra-regional variants to one supra-regional linguistic entity which served a wide range of purposes. Naturally, this linguistic entity developed a range of registers to serve its various purposes adequately.

Education, religion, literature, and government were the areas of expansion for this new, more unified language of culture. This incipient Standard language could thus develop from a variety used primarily in writing into a variety used both in written and in spoken form, in church, in art and science, and in industry. It became a socially acceptable means of expression under any circumstances, felt to be adequate for all the purposes of cultured use, and eventually evolving into a variety with substantial prestige.

Upper class varieties of speech in other regions of the Netherlands, which originally had their own regional coloring, began to converge towards the variety originating in the province of Holland, precisely because of its prestige. Of course, this change did not take place overnight, but was part of an ongoing development over a period of several hundred years. By the Nineteenth Century, the cultured variety of spoken Dutch had grown to be more or less the Standard spoken language in all of the Netherlands. This development continued to be supported by the written language, which, by that time had more or less acquired the standardized form which is in use today.

In this process of standardization, city dialects were relegated to second place on the social scale. They occupied a position with less prestige because the higher classes in urban society had begun to use the Standard language which consequently became a symbol of prestige. Those who continued to use the less prestigious urban vernaculars did so because they were not 'upwardly mobile' and did not aspire to belong to the cultured upper classes. Thus the use of urban vernacular came to be synonymous with lower social status and a less cultured background, making the vernaculars themselves symbols of social stigmatization.

4.0 Development of the linguistic situation in Amsterdam

As has been shown in the previous sections, the emergence of the Dutch Standard language and the gradual social differentiation in urban speech are closely related processes. In this respect, Amsterdam is no exception, because, from the Seventeenth Century on, the social differentiation within the city is increasingly reflected in the linguistic variation.

Halbertsma (1845:37), who discusses the linguistic situation in Amsterdam in the early part of the Nineteenth Century, already shows how clearly socially marked the linguistic differences are between the speakers of urban vernaculars and the cultured classes with their more

generalized usage. In Halbertsma's time, when the Dutch Standard language had barely been formed and the study of dialects was still in its infancy, the supra-regional and conventional form of eductated speech already distinguished itself clearly from the local vernaculars. As a language scholar he was already aware of the fact that 'for the scholar of old language and usage (....) the people are in fact the lower classes, because they speak as they were born to speak and they are not in the least used to taking notice of the example of strangers.' Halbertsma also clearly understands what distinguishes speakers of vernacular from their Standard-speaking counterparts when he writes: 'The prestigious part of society, on the other hand, follows in this matter [i.e. the use of spoken language, HFS] something about which an agreement has been reached in the so-called "Bonne Societé", a conventional language, which is devoid of any interest for language scholars.'2 For studying the dialect of Amsterdam, he consequently recommends studying the language of 'those burghers who utter the accent of the nation's capital in the oldest and coarsest tone.'3

Halbertsma's remarks make it abundantly clear that, by the middle of the Nineteenth Century, the social differences between the economic and cultural elite of the city and the city inhabitants without such prestige had become associated with the differences between higher and lower social class. The forms of speech which each of these groups employed thus came to be associated with class: vernacular, on the one hand, with lower class and Standard Dutch, on the other hand, with higher class. This situation is a result of a social as well as a linguistic development in Amsterdam which seems to have begun a number of centuries earlier.

By the middle of the Sixteenth Century, when Amsterdam had developed into a prosperous and close-knit commercial center, the city comprised a number of different neighborhoods, which often contained the remnants of the original fishing settlements on the banks of the river Amstel. All of these neighborhoods had their own social character, defined by the social status of the people who lived there. Sixteenth and Seventeenth Century Amsterdam did not differ much from modern cities

¹ 'Bij den navorscher van oude talen en gebruiken (...) is het gemeen eigenlijk het volk, omdat het zingt gelijk het gebekt is, en zich aan den voorgang van vreemden in het minste niet gewoon is te storen.'

² 'Het aanzienlijke deel der maatschappij daarentegen volgt in dezen iets, waarover ment in de zoogenaamde *bonne Societé* is overeengekomen, eene conventionele taal, die van alle belang voor de taalvorschers ontbloot is.'

³'burgerluidjes, die den tongval der hoofdstad op den oudsten en allerplatsten toon uitbrengen.'

in this respect, since occupation, wealth, and the place where one lives were an important instrument to assess social status in a community. These factors still serve to differentiate among city dwellers today and neighborhoods in modern cities still reflect the social differentiation of a city's inhabitants.

In the Seventeenth Century, the area covered by the city of Amsterdam comprised all the neighborhoods within the four oldest canals around the original dam in the river Amstel. Two outlying areas on the Northwestern and on the Southeastern side also formed part of the city.

Originally, each of the settlements making up the city of Amsterdam must, to some degree, have had its own specific dialect, similar to most other small towns in the Netherlands. This notion is supported by a remark from Halbertsma (1845:10), who writes: 'there does not remain any doubt in my mind that those first hamlets of Amsterdam, though separated from one another only by half-hour distances, have characterized themselves by noticeable differences in their speech: differences which a fusion over a period of six centuries still has not been able to erase completely...'¹

Some of these dialect differences undoubtedly were carried over into the speech used in each neighborhood, but as these neighborhoods began to form part of a larger urban area, a certain amount of linguistic levelling must have taken place. Nevertheless, Winkler (1874) reports that around the turn of the Eighteenth Century, nineteen different dialects were still spoken in Amsterdam, although he does not do much justice to the linguistic differences in these various dialects. Winkler distinguishes between dialects spoken in two streets on either side of the central square in the city — Nieuwendijks and Kalverstraats — without mentioning in what respects the two dialects actually differ. He makes up for his lack of linguistic detail, though, by perhaps unwittingly providing information of a sociolinguistic nature. Many of his short characterizations of the various Amsterdam dialects revolve around the city's social stratification, giving the modern scholar an insight in the social value placed on many of the individual dialects and their relative prestige at the time.

It turns out that the majority of Winkler's descriptions are in fact characterizations of the speech of specific social groups, mostly couched in terms of social judgements of the group members and their speech.

¹ 'dan blijft er bij mij geen twijfel over, of de eerste gehuchtjes van Amsterdam, schoon door tusschenruimten slechts van halfuren van elkander gescheiden, hebben zich door merkbare verscheidenheden in hunnen tongval onderling gekenmerkt; verscheidenheden welke een versmelting van zes eeuwen nog niet geheel heeft kunnen vereffenen...'

For example, the lowest form of dialect in Amsterdam was, in Winkler's terms, the speech of a specific location called the Duvelshoek, or 'Devil's Corner', an area of ill repute and the domicile of the lowest classes in Amsterdam. Winkler calls the Duvelshoek dialect a mishmash of language used by beggars, thieves, and vagabonds, itinerant peddlers, German quacks, French magicians, Italian chimney-sweeps, and footloose German and Brabantic students, to name but a few of the unflattering epithets he bestows on the socially stigmatized inhabitants of this neighborhood. In current terms, such a speech variety would be characterized primarily on a social scale and would thus more likely be called a low-prestige sociolect. This low prestige was, of course, particularly determined in relationship to the more or less standardized spoken language of the higher classes, which was the high-prestige sociolect at the time. In any case, it is clear from Winkler's descriptions that, in the past, Amsterdam speech was also differentiated, not only on a geographical, but also on a social dimension.

5.0 Amsterdam dialect in the literature

Although *Plat Amsterdams* was used over the years by quite a few playwrights for comic relief, it does not differ much from other urban dialects as far as the scholarly dialectological literature is concerned. Despite the relative prestige of this variety in comparison with other urban dialects, little has been written about Amsterdam vernacular speech.

Probably the first scholarly publication on Amsterdam speech was written by Van Lennep and Halbertsma (1845). It contains a sketch for five working-class speakers from two areas in Amsterdam, written by Van Lennep, and a description by Halbertsma of sounds and expressions which are characteristic for these two areas, in an attempt to distinguish two different Amsterdam vernaculars. The issue of more than one distinct Amsterdam urban dialect was taken up again by Winkler (1874) in his well-know Dutch Dialecticon. He writes (Winkler, 1874:86): 'The scholar J. Ter Gouw¹, a real Amsterdammer and a man who knows Amsterdam and the Amsterdammers through and through perhaps second to none, a real man of the people, has given me no less than nineteen

¹ J. Ter Gouw (1814-1894) was a schoolteacher and one of the liveliest and most prolific historians of Amsterdam. In 1885 the city awarded him the rare honor of receiving a yearly endowment of Dfl. 800 to encourage his work.

different Amsterdam accents.' Winkler believes that these nineteen distinct neighborhood dialects were clearly discernible in the latter part of the 18th Century, up until the Napoleonic occupation of the Netherlands, 'when most people of lower class, but also most of the respected burghers, lived and died in Amsterdam in the same neighborhood where they were born.' (1875:85)²

At the time of writing, however, Winkler reports that the distinct neighborhood dialects are clearly falling away, even though many of the characteristic differences are still heard at times.

In a more recent publication about Amsterdam vernacular speech, the well-known Dutch dialectologist Kloeke (1934:36) complains that Winkler gives so little detail about the differences between the various Amsterdam dialects. Kloeke concentrates on the history of Amsterdam dialect characteristics in his article, giving a number of examples from the vowel-system, but he does not provide a systematic description of Amsterdam vernacular speech. Shortly after World War II. Daan (1948) published a popular collection of typical Amsterdam words and expressions, prefaced by a short review of Amsterdam's linguistic history, and a brief description of Amsterdam sounds. Attempting to document Amsterdam speech as it was before and during World War II. Daan pays particular attention to the influence of the Jewish segment of the population on the vernacular of the city. Apart from historical material quoted from earlier sources, the booklet is full of anecdotes about the humor, originality, and independence of the Amsterdammers. The bibliography is exhaustive, containing practically everything, both fictional and scholarly, that was written about Amsterdam speech up until then.

Peeters (n.d., c.a. 1949)³ is the first — unpublished — systematic description of the differences between Standard Dutch and Amsterdam dialect. He describes the language that was spoken in the rather picturesque *Jordaan* neighborhood, discussing the sound system in considerable detail. Nowadays, *Jordaans* is almost synonymous with

^{1 &#}x27;De geleerde J. Ter Gouw, een echte Amsterdammer en een man die Amsterdam door en door kent, zoals wellicht geen tweede, een echte man des volks, heeft mij niet minder dan negentien verschillende Amsterdamse tongvallen opgegeven.'

² toen nog de meeste lieden van geringen stand, maar ook de meeste gezetene burgers te Amsterdam leefden en stierven in dezelfde buurt waarin ze geboren waren.'

³ This unpublished manuscript is undated, but must be from 1949. According to the spelling, it should be from 1949 or before. Daan (1948) does not mention it in her bibliography yet, although she is exhaustive and bases her references on the material in the library of the Insitute for Dialectology where the Peeters manuscript is kept.

Plat Amsterdams, since the 17th Century neighborhood where Jordaans was spoken is frequently the object of theatrical imitations and stereotyping. The Jordaan was extensively refurbished after World War II and turned from a slum into a more or less fashionable area. The consequent population change has obliterated whatever was left of the distinct Jordaan dialect, because much of the original population was moved to other parts of the city.

The fact that *Plat Amsterdams* is clearly viewed by many as a stigmatized dialect, is made obvious in a small article by Faddegon (1951), who describes the process of palatalization in Amsterdam speech (for this typical Amsterdam sound feature, see Discussion in Chapter III). He shows a glimpse of early sociolinguistic insight, when he recognizes that there may be social motives, such as group solidarity, for maintaining a stigmatized speech pattern, but for those who want to lose their Amsterdam accent, he offers a number of tongue-twisting rhymes to learn Standard Dutch pronunciation.

A review of the Amsterdam dialects in the past is given in Daan (1954), mostly on the basis of earlier literature. Daan (1954:21) reaches the conclusion that 'geographically, there are no differences to be found in our city, though there are more or less social ones' 1, because sound patterns change slowly and 'spellings from the past can be clarified by pronunciations in the present' 2 (Daan, 1954:22).

The most recent study of Amsterdam speech is Mittelmeijer (1959), an unpublished thesis of 56 typewritten pages. It is the first study of Amsterdam dialect on the basis of tape recordings, in which Mittelmeijer used small groups of schoolchildren from various parts of Amsterdam as informants. He motivates (1959:13) his choice of children by observing that 'As the child begins to "control" the school situation better and becomes more detached, it begins to speak more dialect (and also more plat).' Another motive for using children as informants is their lack of inhibitions: 'children show less fear and repulsion towards the equipment than adults. They forget quickly that a microphone is recording them

¹ 'Geografisch zijn er geen verschillen meer in onze stad te vinden, wel min of meer sociaal.'

² 'spellingen uit het verleden kunnen duidelijk worden door uitspraken uit het heden.'

³ 'Naarmate het kind de schoolstituatie meer gaat "beheersen" en er zich los van maakt, gaat het ook dialectischer (en ook platter) spreken.'

when they are engaged in a play of fantasy and imagination.'
Mittelmeijer also emphasizes the use of spontaneous speech as opposed to reading dialect text, because he feels that the written word inhibits spontaneous dialect pronunciation to the point that 'purposely created dialect scenes are indeed usually doomed to fail.'2

Mittelmeijers research is particularly interesting, because he observes a number of fieldwork principles that have now become commonplace in sociolinguistic research. Apart from his choice of informants, he discusses the ethics of surreptitiously recording speakers, the attitudes of the fieldworker towards speaking the dialect himself, and methods for eliciting spontaneous speech. In his linguistic observations, he systematically treats the Amsterdam sound system, partly supported by the earlier observations of Peeters (c.a. 1949) and Faddegon (1951). He also notices the social character of certain Amsterdam pronunciations and gives a few examples of this sociolinguistic variation, but, of course, his sociolinguistic observations are in many ways naive to the present-day sociolinguist and are in no way systematic.

6.0 The Problem

It is clear from the review of the literature that no systematic study of Amsterdam speech in its social context has ever been undertaken. The study presented here was inspired by the frequent remarks, questions, and opinions that are expressed about *Plat Amsterdams* and its social role in the city of Amsterdam, both by linguists and by the general public, as well as by the lack of systematic socio-dialectological studies to corroborate or refute some of these claims. The specific goal of the study was to explore the nature and the social context of Amsterdam speech on the basis of naturalistic language date collected in the city.

The data investigated for this purpose was the taperecorded naturalistic speech of 40 randomly selected speakers that were born and raised in Amsterdam. These speakers were classified in two age groups, one between twenty and twenty-five and one between fifty and fifty-five. The speakers were also classified according to socio-economic status, on the

^{1 &#}x27;kinderen tonen minder angst en afkeer voor het apparaat als volwassenen. Zij zijn vrij snel vergeten, dat er een microfoon hen afluistert wanneer men hen meesleept in een spel van fantasie en verbeelding.'

² 'Opzettelijk in elkaar gezette dialectscènetjes zijn inderdaad veelal tot mislukken gedoemd.'

basis of educational and occupational criteria, dividing the sample into high and low socio-economic class. Both sexes were represented equally in the sample, while the recordings were made in formal and informal conversational style.

The object of using samples of speech collected in this way was to show whether a relationship existed between linguistic, stylistic, age and sex variation in Amsterdam speech. In order to reveal such a relationship, it had to be defined operationally by formulating a number of problems and research questions.

The first question was whether in Amsterdam the use of nonstandard speech characteristics on all linguistic levels may be geographically defined. Then the question arose on which levels of language the linguistic differences between Standard Dutch and Amsterdam speech were to be found. Another question that needed to be answered was whether phonological differences between Standard Dutch and Amsterdam speech concerned a fairly limited number of sounds, and in particular to which sounds they apply. Apart from the geographical conditioning of differences between Standard Dutch and Amsterdam speech, the question was raised whether these differences are also socially conditioned. The final problem was whether there a relationship exists between the specifically defined social parameters and the occurrence of a selected number of Amsterdam speech characteristics and what kind of relationship this is.

Apart from yielding descriptive data on the speech of Amsterdammers in its social context, the general goal of this study was to provide further insight into the nature of urban dialects in the Western part of the Netherlands. The urban corridor in the Western part of the country is an extremely interesting area for detailed study of urban dialects, since the urban centers are situated close together and are densely populated, while they are at the same time interspersed with rural dialect enclaves. Detailed studies of the urban dialects of the other major cities in this area, such as Rotterdam, Leiden, The Hague¹, and Haarlem, would complete the overall picture of the dialect situation in this area and would contribute to an understanding of a unique social and linguistic situation.

Except for the exploratory study by Elias (1977) no study of the urban dialects in the Western part of the Netherlands has ever been carried out.

Chapter II

Description of the Data Collection

1.0. Data collected at the Institute for Dialectology

1.1. The independent variables

This research is based on a corpus of spoken language data, collected in 1975 and 1976 by the Royal Netherlands Academy for Arts and Sciences' Institute for Dialectology¹ in Amsterdam. The primary purpose of the corpus was to collect data on word frequencies in spoken Dutch, taking into account variation according to sex, social class², conversational style, and age. In order to control for regional variation as much as possible, the choice was made to consider the speech from one locale only, but one that would fit the criteria of relatively large size and varied population. Cities fit these qualifications more easily than rural areas, and since the Institute was located in the city of Amsterdam, it was a natural choice to pick Amsterdam over other cities.

Studying the distribution of variants in language over sex, class, age, or style, requires representative groups of men, as well as women, who fit into discrete categories for social class and age, while they have to be tape-recorded in more than one conversational style. For this purpose, the speakers were distributed over four groups of women and four groups of men. Both men and women belonged to two different social classes and two age-brackets, while recordings of their speech were made in two conversational styles. The following sections will elaborate on how the different variables have been controlled in this study.

1.2. Origin and selection of the speakers

Since the choice was made to include only speakers from the city of Amsterdam in the corpus, this category of speakers had to be defined in some traceable way.

Assistance and encouragement given me by the Institute during all stages of this research is gratefully acknowledged here. See for a more elaborate description of the corpus, particularly for those aspects not immediately pertaining to the research reported here, Heikens (1978), De Jong (1979), and Gerritsen (1980).

² The notion 'class' is to be taken strictly as a technical term in this context.

All citizens of the Netherlands must be registered in the registers of the municipality where they live and they have to report any change of address to the authorities. When they move out of one town into another, their names are purged from the registers of the first municipality and inscribed in the register of their new domicile. For this study, all the speakers whose speech was taken into consideration were 'natives' of Amsterdam. They were born within the city limits and had been registered there all their lives, without interruption.

The municipal authorities of Amsterdam provided a random sample from the city registers, comprising 5000 men and women between 20 and 25 and between 50 and 55 years old. The information about the respondents which became available in this way included family name, maiden name (for women), christian names, address, date of birth, and sex. No information on education or occupation could be culled from the city registers, so it had to be obtained from the individuals who eventually were part of the study.

Approximately 1700 individuals from the sample were sent a letter, requesting their cooperation in a survey about 'differences relating to education and occupation in the population of Amsterdam. The survey was said to be limited to two groups, differing distinctly in terms of education and occupation. The respondents were asked to write on an accompanying form what kind of education they had received and what their occupation was and to sign a release form, allowing an interviewer to come and see them for two consecutive interviews. Those who gave written permission for the interviews and who turned out, according to the data supplied on the form, to belong to one of the two social classes under consideration, were scheduled for the first interview. The others were notified that their cooperation was no longer needed, since they did not form part of the two survey groups. Approximately 800 of the 1700 addressees responded, of which 136 individuals were eventually chosen as informants. No attempts were made to follow up on those individuals who did not respond to the request letter.

1.3. Age of the speakers

Age-brackets generally result from arbitrary decisions to divide up a given population in a number of groups according to age. This study is no exception in this respect, and the fact that only two age-groups were chosen is mainly a matter of limited time and resources. Presupposing that extreme values for the independent variables will show the interesting linguistic variation in a more extreme way, the decision was made to form

a high age-group of informants 50 to 55 years old, and a low one, consisting of speakers of between 20 and 25 years of age.

1.4. Sex of the speaker

Most of the recent sociolinguistic literature, particularly that on the language of urban communities, has included sex as a parameter which might point up interesting linguistic phenomena. Labov (1966:312), for example, remarks in his study of speech in New York City: 'The progression of the numbers of informants in each category shows that men and women follow the same stylistic variation, but that the total shift of the woman speakers is much greater (...). The tendency of women to follow an extreme pattern of stylistic variation, which we may call hypercorrection, is an important aspect of the structure of New York City English.'

Introducing the variable sex into sociolinguistic research has raised new problems that have so far only partially been solved. The most important problem in using sex as a variable in such research is how women and men should be stratified socially in an independent, but comparable way. Generally, sociolinguists rely on the work of sociologists for the stratification models they use in their research, and rightly so. Most of these models are heavily oriented towards the male part of the population, and they do not always adequately represent the social position of women. This defect is partly due to the 'housewife-problem', a problem that occurs because occupation and economic status in most stratification models are considered to be the clearest indicator of social status. On the whole, women are still predominantly housewives, a fact that makes them either unclassifiable on the occupational-economic scale, or gives them a very low social status. One generally accepted way to solve this problem is to classify women with the male head of the household in which they live, in most cases the woman's husband or father. This concept of the 'normal' nuclear family, in which all the members are classified socially. according to the social position of its head, is not nearly as normal any more as appears from its frequent use in stratification models. Brouwer en Gerritsen (1980:55) report that in 1960 no more than 60% of the American households was headed by a male, while in England that percentage was as low as 42% in 1966. The 'standard' family in the Netherlands comprised only half of all households in 1960 and staticians estimate that the number of 'standard' Dutch households will have dropped to 35% in 1980.

Apart from the question whether households may still be considered representative for the way in which the majority of women live, some reservations are in order about classifying women with their husbands. Not only have women been known to 'marry down' socially, they may also have an occupation of their own, and even one that needs to be classified higher than that of her husband.

For the moment, none of the available stratification models has offered a completely satisfactory way to reflect all the social facts about women. Sociologists as well as others who use stratification models have made it clear that better ones are needed, but until they have been constructed, sociolinguists will have to make do with the ones they have. All they can do is use the current models, point out their weaknesses, and apply them to women as individuals, rather than as part of a household.

1.5. Social status of the speakers

The presupposition that extremes may show more interesting variation, which motivated the choice to include only two age groups in this research, also holds for forming no more than two social strata: high social class and low social class. Trudgill (1974:33) has reported that in his research the motivating factors for a two-way division in social classes had much to do with the way social classes are made up in England. He remarks: 'It is, of course, an open question to what extent the class continuum (...) is in fact a continuum (...), at least one fairly large barrier seems to remain. This is the gap between what are usually referred to as the "middle class" and the "working class". Unfortunately, such a two-way division in the Netherlands cannot be motivated so clearly, since no data are available to substantiate whether, for example in Amsterdam, the gap between low and high social class is greater than between other social classes. It does seem likely that a similar rift also exists in the Netherlands, which should be another argument in favor of a two-way class division.

The stratification model that was used for the selection in this study is based on the model devised by the Institute for Applied Sociology of the University of Nijmegen (ITS), which is the most recent, though not the only model available in the Netherlands. In the introduction, the authors remark that someone's place in the social structure, in other words his or her social position or milieu, is indicated, among other things, by data on his or her occupation (ITS, 1972:14). The classification method for different occupations is guided by six factors, each helping to place a person in one of six different occupational classes. These factors are:

- a What type of work does the person do, manual or white collar work?
- b. What is the level of education needed for the job?¹
- c. Is the person self-employed or employed by others?
- d. (for employees only) Does he or she head a business or company?
- e. (for employees only) Does he or she supervise others?
- f. (for self-employed) How much personnel does his or her business have?

By combining these factors as illustrated in figure 1 the person in question is placed in one of the occupational classes:

- 1. unskilled labor
- 2. skilled labor
- 3. lower level employees
- 4. self-employed (in small business)
- 5. middle level employees
- 6. high level employees or professionals.

For the classification of the informants in this study, the single factor of occupation was, of course, not a good criterion for people whose occupation did not fit the classification model, such as students or housewives. People who had temporary jobs, volunteer-workers, and married women who had taken a job after many years of not being employed did not have an 'occupational history' and were difficult to classify. For this reason, actual level of education was also considered for each informant, and for those who could not be stratified occupationally, it was the only factor taken into account.

The two social strata for the study were originally defined as follows. The lower class of informants included those whose occupation belonged to class 1 or 2 and who had, at the most, completed their primary education and had a diploma for lower vocational training. The higher class included those whose occupation belonged to class 5 or 6 and who had at least a diploma from a secondary school preparing for university.

When a number of the informants had been approached, it turned out that among the 50 to 55 years olds only few had a diploma from a secondary school preparing for university. Heikens' (1978:40) explanation for this proportionately low number of well-educated older 'natives' of Amsterdam is their greater mobility, causing them to move out of the city limits and into the suburbs more readily than their poorly educated

¹ The actual level of education of the respondent is not taken into consideration here, only the level of education necessary for the job.

counterparts. In order to still have an adequate number of informants in each class, the cutoff-point for educational level in the high class was lowered to include also those with a secondary education not preparing for university. A further justification for this decision was the notion that, before World War II, the social importance of this type of education was similar to that of a diploma from a school preparing for university after the war. Unfortunately, this decision made the educational margin between the high and the low social class quite small. This became a problem with the classification of older women, who were generally not employed and had to be classified according to education only. Consequently, the upper limit of the educational level for lower class women was lowered to include only those women with no more than primary education and a few years' vocational school without diploma.

1.6. The conversational styles

It has been pointed out by Trudgill (1974:45), as well as by others (e.g. Labov, 1966) before him, that 'the co-variation of linguistic and social phenomena can be thought of as taking place along two main dimensions'. One is the dimension of social differentiation, comprising social class, age, and sex of the individual, the other is the dimension of the social context, in other words the social situation in which the individual is involved in social interaction. Different social situations provoke the use of different linguistic styles, and it is clear from the work of Labov that in many instances stylistic variation correlates with linguistic variables (Labov, 1972:71).

For this reason, it has been attempted in the present study to create more than one speech style, in the hope that these speech styles would reveal a relationship between linguistic variation and stylistic variation, as well as variation according to age, social class, or sex. It was thought that the extremes might reveal the most interesting information, so the choice was made to take only two styles: formal and informal. Very formal styles of speech may be achieved by having informants read a formal piece of text or a word-list, but the drawback of obtaining data in this way is that the types of speech elicited by such reading methods are not really comparable to spontaneous speech. The object of study in this project was precisely the spontaneous speech of speakers from Amsterdam, so the decision was taken to make the most formal situation an interview with a previously unknown fieldworker, and the least formal situation a free conversation between two friends.

1.7. The recordings

In preparation for the recordings, each informant was visited by a research assistant for a short 'information session'. The research assistant gave information regarding the two recording sessions, asked the informant for permission to record them and answered the questions the informant might raise. He told them that both recordings would be made at the informant's home, the first one being an interview with a fieldworker and the second one a conversation with a friend or relative of the same sex. This person should not be part of the informant's household, but had to be someone the informant could talk to easily and comfortably. Each informant was asked to select his or her own partner for the conversation, so the partners were not controlled for social class and age, although data on these variables was recorded on special forms for possible future reference. About the object of the study, the informants were told that the research was directed at 'differences relating to educational and occupational opportunities in Amsterdam'.

In order not to bias the result by giving specific language-directed information which might motivate the informants to monitor their language-use to a greater extent than they normally would, more precise information about the nature of the research was not given until after the end of the second recording session. If, during the recordings, informants insistently requested more information than the fieldworker was, at that moment, willing to give, he promised that all further questions would be answered later, after finishing all the recording. To justify this delay, the fieldworker would argue along the line of "we want all the recordings to be exactly comparable, so they must all be made under the same circumstances. That is why I do not want to tell you more at this point than I told the other people, so let me explain afterwards what exactly we are going to do with the data we are collecting here".

1.8. The interview

In the first session, each informant was interviewed by the fieldworker. ¹ The interview comprised a selection from ten questions in the area of education and occupation. A new question was asked whenever the fieldworker felt that the informant was 'running dry'. Sometimes a short follow-up question was asked to help the informant along when it looked like the answer was not quite finished, but the fieldworker did not really participate in a conversation, other than as a prompter making the appropriate sounds to 'keep the channels open' (Schegloff, 1872:380). Sometimes all ten questions were asked, when the answers were not very elaborate, other times enough material was gathered long before all the questions had been asked. The length of the interview was approximately half an hour. The ten questions are given in Appendix A.

1.9. The informants

By the time all the recordings had been completed, a total of 246 tapes were available, either with formal interviews, or with informal conversations between peers. The original aim of the word-frequency study for which the recorded data was collected was to have eleven different recordings for each cell of the sixteen-cell grid of independent variables, yielding a total of 176 tapes. The higher number of actual recordings is due to several problems that cropped up during the taping sessions.

Sometimes when the interviewer showed up with the taperecorder, informants turned out to have speech or hearing defects, so that the recordings had to be rejected. Other times, informants were incapable of finding a friend for the informal session, making it necessary to reject their formal recording for lack of an informal counterpart. There were also the usual cases of disturbing background noises, occasional

The interviewer who recorded all the tape-recorded data from all the informants in the sample was a white male of approximately 45 years old. Brouwer (1981:13) has shown that both men and women are generally more formal when speaking to men than to women. This could imply that in sociolinguistic research a female interviewer is preferable over a male, because she is the most suitable to elicit spontaneous language. In any case, though, it is clear that the sex of the interviewer may also introduce variables into sociolinguistic research that need to be controlled.

malfunctions of the recording equipment¹, mistakes by the fieldworker, and other mishaps disqualifying some recordings for future use.

2.0. Data collected for the present study

2.1. Selection of the sample

The eventual corpus of 176 tapes collected for word-frequency study turned out to be far too large for a sociolinguistic study of speech in the city of Amsterdam, at least within the time-constraints and financial limitations of a dissertation project. Consequently, only part of the corpus of 176 tapes was used for the present study.

The problem, of course, was to decide how small a number of informants would remain manageable within the constraints of the project and still yield significant and satisfactory results. A survey of the available literature on this type of sociolinguistic research, in particular of the sample-sizes that had been considered satisfactory, showed that the number of informants in each cell differs widely among sociolinguistic studies, depending on the type of variables under consideration, as well as on practical an logistic considerations.

Labov's (1966) famous study of New York City speech was carried out with 122 informants, the Wolfram-Christian (1976) study of Appalachian English comprised 129 individuals, and the Detroit Dialect Study by Wolfram, Shuy, and Riley (1968) surveyed a sample of 702 persons. The Detroit Dialect Study was, of course, conducted by a team of twelve interviewers who visited the homes of 250 families, while the results were processed by six investigators. Labov was also able to mobilize a fair amount of logistic and technical support, as were Wolfram and Christian. Individual investigators have generally studied smaller groups of informants, as in the case of Wolfram (1969) in Detroit and MacCaulay (1977) in Glasgow, with 48 informants each, as well as

The recordings were made on a Nagra one-track recorder with a large hand-held microphone held by the interviewer and directed at the informant during the formal interviews and with an Uher stereo recorder for the informal conversation. The speech of the two speakers was recorded on a separate track by means of a small microphone around the neck of each speaker. This facilitated transcription of the informal tapes, when more than one speaker was speaking at the same time, because each track could be played back separately. The small microphone around the neck of the speakers was quickly forgotten, since the speakers were not bothered during their conversations by having to take care to speak into a microphone, contributing to a spontaneous and loose conversational style.

Trudgill (1974), whose Norwich study comprised 60 respondents, and Anshen (1969), who studied 87 speakers in the American South.

On the whole, though, the question as to what constitutes an adequate sample of speakers yielding interesting results for sociolinguistic research has not been clearly answered. In traditional regional dialectology, the speech of one informant was viewed as sufficient to represent a linguistic system, while a linguist could also legitimately serve as his or her own informant. In sociolinguistic research, methodologies from the social sciences have been widely adopted, but often without the statistical precision attached to them in the social sciences for which they were originally designed, partly because of the highly specialized linguistic and other requirements which must generally be met.

Because of the compromises that must often be made in this area, the justification for specific sample sizes in various sociolinguistic studies have frequently been left rather unclear, or have the character of post hoc justifications. Anshen (1978:39), for example, remarks that the answer to the question of sample size cannot really be clearly given until a study has actually been finished, adding that 'for extreme differences in behavior a relatively small sample may suffice and that 'the number of individuals in the sample will be dictated by the time and money the investigator is able to devote to the study'. Labov (1966:180) states in his famous study on speech in New York City that linguistic behavior is 'far more general and compelling than many social attitudes or survey responses', in this way justifying the use of much smaller samples of informants in sociolinguistic research than in sociological studies. He concludes (1966:368) that 'the structure of social and stylistic variation of language can be studied through samples considerably smaller than those required for the study of other forms of social behavior'.

Although numerous successfull analyses have been carried out on the basis of small samples, neither Anshen's vague remarks, nor Labov's justification for the use of relatively few informants are of much help in setting a minimum for sample size in sociolinguistic research by uniform criteria. The great variety in sample sizes among the various sociolinguistic studies only confirms how unclear this notion really is and it does not provide much insight into the issue. Romaine (1980:172) has argued that 'we should recognize the difference between sociolinguistic and other kinds of data' and that 'we should not justify the results and methods of sampling that we do use by statistical standards which cannot be applied in their strictest and intended sense to sociolinguistic data'.

However, even this recognition is of little practical consequence when it comes to deciding on a number of informants for a sociolinguistic study.

The present study has an exploratory character, since no previous research of this kind has ever been done in Amsterdam. For this reason, a comparatively small sample of respondents was judged sufficient, since the sample could be extended in case the results proved inconclusive or not significant. The study is directed at finding clear differences between the speech found in the city of Amsterdam and Standard Dutch and at finding the social correlates of such differences. It was expected, partly on the basis of other sociolinguistic research, that clearly patterned variation is robust enough to show up in even a relatively small sample, particularly when the linguistic variables are carefully chosen.

Eventually, forty informants were selected from the original sample, yielding a total of eighty tape-recordings and providing five recordings per cell of the grid of independent variables.

2.2. Selection of the taped fragments

Depending on the type of linguistic variable under consideration, it is necessary to listen to shorter or longer stretches of recorded speech, in order to encounter a sufficient number of instances of a given linguistic feature. This study is concerned with phonological variables only (see ch. III, 2.3. for a motivation of this choice) and in particular with phonological variables which are very frequent in the speech of Amsterdam. In addition, some of the variables were chosen expressly because they were expected to be the most easily identified as 'typical' for Amsterdam speech in an informal subjective evalutation test (see 2.4.). To find a large number of occurrences of such variables, it was not necessary to transcribe each recording completely, so a five-minute stretch was transcribed from each tape-recording.1 In the case of the formal interview, the transcription was made of the first five-minute stretch, because it was expected to be the most formal. From the informal conversation, a fragment was selected in which the informant was clearly the most important speaker and appeared thoroughly engrossed in the subject of the discussion, on the assumption that the more enthusiastically an informant would be involved in the topic, the less monitored his or her speech would be. In such cases the style was expected to be the least formal.

The transcriptions were all made by the same transcriber, using a Revox two-track recorder and TEAC headphones.

Once the stretches of tape had been picked, an exact transcription was made of the informant's words. For the first twenty-five tapes an additional phonetic rendering of the entire transcript was written underneath the regular transcript. Any remarks on interesting or unusual aspects of the informant's speech were noted on a separate sheet of paper. These phonetic transcripts were later used for a number of purposes. For example, they were used to determine the nature of linguistic variation in Amsterdam speech (see ch. III, 2) and to determine the frequency of certain phonological features in order to decide which linguistic variables would eventually be chosen for the study. They further served to gain a general insight in the phonological character of Amsterdam speech and as a kind of 'pilot corpus' for informally testing ideas about the city's dialect which could not be verified on the basis of the scant literature on the speech of Amsterdam.

2.3. Selection of the phonological variables

Five phonological variables were selected as the dependent variables for this part of the study. A range of phonological variables (see ch. III, 1) has been defined on the basis of observations, review of the literature, and a detailed analysis of the tape-recordings in the corpus of Amsterdam speech data (described in ch. II, 1). Out of this range, the five variables were chosen, according to two criteria: frequency in a relatively short stretch of speech and subjective evaluation to establish the social significance of the different variants.

The fact that frequency was used as a criterion for selection does not imply that the five variables in question are necessarily the only ones that could yield interesting results. In longer stretches of speech, other variables on the phonological level, as well as morphological, syntactic, or lexical variables might also have produced interesting findings. As Paardekooper (1955:IX) phrased it in his book on Dutch syntax and grammar: 'A somewhat complete linguistic description must also provide data on less frequent combinations as extensively as possible'.¹

However, practical constraints make it impossible to go through the hours of recorded data necessary to investigate less frequently occurring phenomena. Some linguists have attempted to design special elicitation techniques to extend the corpus of data on a particular linguistic feature in order to solve the problem of lack of occurrences. These techniques are,

¹'Een enigszins volledige taalbeschrijving moet ook over minder frequente combinaties zo uitvoerig mogelijk gegevens verschaffen'.

of course, not an alternative or a substitute for naturalistic data, but a means to supplement such data.

According to Shuy et al. (1978:45) 'one hour of free speech, per informant could consitute an adequate corpus for most types of phonological analyses'. All of the phenomena that should be investigated for a full phonological analysis, as well as the full range of phonological environments can safely be assumed to be represented in a speech sample of this size. But the situation may be different for other linguistic phenomena. Shuy et al. (ibid.) also point out that 'when investigating syntactic phenomena, the speech sample will have to be considerably larger since some syntactic structures occur only rarely in ordinary conversation'. Therefore, there should, ideally, be a symbiotic relationship between the use of naturalistic data and data collected by means of corpus extension instruments, in particular when using a limited body of naturalistic data for each informant.

Unfortunately, in this case corpus extension techniques could not be used, for the simple practical reason that the informants were no longer available for interviewing. Without the availability of an elicitation instrument and the original informants to use it on, the corpus of occurrences of a given variable could not be extended to a size that lends itself to somewhat reasonable quantitative analysis. At least, this was not the case within the time constraints of this dissertation project. As a result, it was possible to reach substantive conclusions about many of the possible variables for lack of quantitative data gathered from long stretches of recording.

Eventually, fifteen occurrences of each variable in the transcribed text were taken as the minimum for a credible exploratory investigation. To make the data more reliable, the choice of variables was further constrained by a subjective evaluation test for all the possible variables, based on the assumption that it shows up a variable's social significance within the speech community. If different variants of a linguistic variable are distributed according to social class, such a variable is viewed as socially diagnostic, a neutral term that is applicable to socially prestigious as well as socially stigmatized variants. But, perhaps more important than the objective diagnosticity of a particular linguistic variable is the way in which it is subjectively evaluated in the speech community. Labov (1964:102) has distinguished three basic types of socially diagnostic variables on the basis of subjective evaluations: social indicators, social markers, and social sterotypes. The definition of these three hinges on four criteria. First of all, how does a variable correlate with social class,

in other words, what is its social diagnosticity in the speech community? Secondly, what is its effect on a listener's judgement of a speaker's social status, in other words, what is its social significance? Thirdly, how does it vary stylistically, in other words, to what degree are the speakers in the speech community aware of its social significance? And finally, is the variable the subject of overt social comment in the speech community, in other words, is the speech community aware of a variable's social significance to the point of having overt judgements about it?

Indicators are defined as clearly correlated with social class, but without much effect on a listener's judgement of the speaker's social status. The general unawareness of an indicator's social diagnosticity is viewed as the cause for its lack of stylistic variation and clearly does not make it a candidate for social comment. While correlating with social class, markers are seen as variables affecting a listener's judgements of the speaker, but more importantly, as subject to stylistic variation, or style shift, because of the speaker's conscious or unconscious awareness of their social diagnosticity, without actually becoming a topic for social comment in the speech community.

Studies of subjective evaluation of speech (e.g. Shuy, Baratz and Wolfram, 1968) indicate that the speech community is quite uniform in its overt assessment of a variant as stigmatized or prestigious. The informal subjective evaluation test carried out for this study was expected to show similar results.

2.4. Informal subjective evaluation test

Greenbaum and Quirk (1970:2) have summed up the reasons for using attitude tests and subjective evaluations to elicit judgements about linguistic forms which are habitually used in the speech community. They state that 'if elicited behaviour is different from the "actual" behaviour casually observed and (if one is lucky) collected in a corpus, it is at least equally important to distinguish elicited usage from attitudes of usage'. In constructing an attitude or subjective evaluation test, one should be sure to structure the environment in a way that allows the subjects to perform tasks which will reveal information about their tacit knowledge of the language or dialect. At the same time, the subjects must be blinded to the exact phenomena that are being investigated, to avoid the risk of the subjects consciously biasing the test results.

In this study, the specific object of the subjective evaluation test was to formulate and test hypotheses about socially diagnostic variables in the speech of Amsterdam. In order to do this successfully, a population was

needed which could be expected to have neither strong, nor particularly weak judgements about speakers using stigmatized forms of speech. Upper middle class speakers were expected to be the best category of speakers to elicit such judgements from, since they do not suffer too much from aspirations to upward mobility, which might unduly influence their judgements. Also, they generally are not speakers of a stigmatized dialect themselves.

All respondents had at least completed secondary education, while many had a university degree. They all lived within a few blocks of each other and all owned houses in a relatively expensive neighborhood of the city of Amsterdam. According to the criteria of dwelling area and education level, the respondents could definitely be considered upper middle class, even though the sample was not strictly controlled for social class by the kind of formal standards normally used in the selection of socially stratified samples of respondents. The sample consisted of twenty-four respondents and was not randomly selected. It contained an equal number of male and female respondents, who were all informally recruited within the same neighborhood through word of mouth.

The respondents were all between 30 and 40 years old and most of them had children. This age group was picked on purpose, because young parents and people who are still part of the work force were expected to be more aware of and attentive to differences in the social diagnosticity of various linguistic forms. In order for the respondents to be able to have judgements about Amsterdam speech at all, they were required to have lived in the city for at least ten years. In this way they could be considered reasonably competent in recognizing and discussing the characteristic features of Amsterdam speech, thus being capable of revealing their tacit knowledge about the dialect.

The subjective evaluation test (see Appendix B) was expected to show the difference between indicators, markers and stereotypes in Amsterdam speech. In order to do this successfully, the respondents were asked, first of all, whether they thought that speakers from Amsterdam sounded different from speakers in other parts of the country. This introductory question was given partly to 'blind' the subjects to the specific object of investigation — by focusing their attention on dialect differences rather than on differences within a dialect — and partly to find out if the respondents had any awareness of Amsterdam speech at all. If the response to the first question was positive, the subjects were then asked to reproduce what they thought were typical sounds of Amsterdam speech. This technique was expected to elicit the existing stereotypes

about the speech of Amsterdam, since stereotypes first come to mind when a question is asked about 'typical' speech. When the subjects ran out of examples, they were given the next question, designed to elicit markers of Amsterdam speech. In order to do this, the subjects were asked to reproduce the typical Amsterdam-sounding variant of a number of sounds, using example-words as prompts. The sounds had been selected on the basis of the soundinventory of Amsterdam speech, compiled for this study (see ch. III). All sounds that were judged different from Standard Dutch by the subjects were viewed as markers, while those that were judged the same were considered indicators. This distinction was made on the assumption that markers are phenomena of which subjects show a conscious awareness, while indicators are below the subject's awareness-level and will, therefore, not be noticed in a subjective evaluation.

The subjective evaluation test will be discussed in more detail in chapter IV, after a full presentation, in the next chapter, of the sounds of Standard and Amsterdam Dutch.

Chapter III

The Sounds of Standard and Amsterdam Dutch

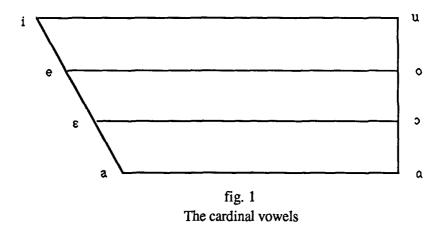
1.1.The sounds of Standard Dutch

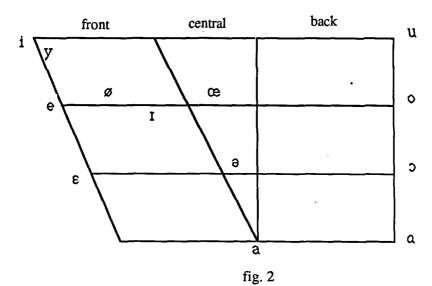
Algemeen Beschaafd Nederlands, generally referred to as ABN, is the educated speech of the Netherlands. It is the variety viewed as the standard language by most of the country's population, taught in the schools, used in official situations, and considered by many to be the prestige variety of Dutch. Besides Standard Dutch, or ABN, a substantial number of both rural and urban dialects are spoken in the Netherlands, many of which show substantially different sound systems compared to ABN.

In order to provide some insight into the sound system of Standard Dutch and the ways in which speech in Amsterdam differs from this standard, it is necessary to give a short description of the sounds of Dutch. This description relies heavily on work by Van den Berg (1974, 1978), Ten Brink (1970), Zonneveld and Trommelen (1979), and most of all Booij (1981), and will not be very detailed. Treatment of the various problems of Dutch phonology is outside the scope of this study, so only issues which are of immediate relevance to the study of the speech of Amsterdam will be discussed in greater detail.

1.2. The Standard Dutch vowels

In relation to the cardinal vowels represented in fig. 1 as they have been distinguished by the International Phonetic Association (Principles of the I.P.A., 1949, 1974), the Standard Dutch vowel system may be characterized as in fig. 2.



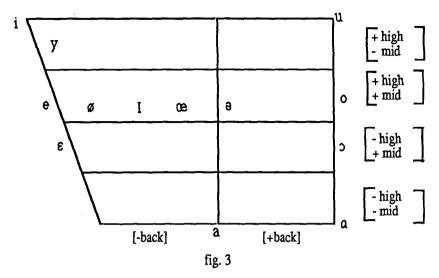


The Standard Dutch vowels

On the basis of phonological characteristics, Dutch vowels are traditionally divided into two classes, one class labeled as long vowels and the other one as short vowels. Several other terms have also been applied to name these two classes. Cohen et al. (1961), for example, use the qualifications tense and lax, analogous to Chomsky and Halle's (1968) two-way distinction for English yowels. Moulton (1962:299) calls them checked and unchecked vowels and finds it 'a striking fact that, even though the structural classes "short" and "long" cannot be justified in terms of (...) traditional phonetic labels, scholars have nevertheless refused to abandon the classes as such'. In addition he remarks: 'It is as if they felt the classification to be intuitively correct; and, not being able to justify it on the basis of vowel length, they have tried to find some other theoretical basis for maintaining it'. After extensive analysis of the Dutch vowel system, Moulton (1962;307) eventually concludes that 'if we use distributional rather than phonetic criteria, it is quite possible to find objective data which support the traditional intuitive assumption'.

Impressionistically, native speakers of Dutch indeed still tend to distinguish the two groups of vowel sounds on the basis of their length and recent findings by Nooteboom (1972) support this distinction, since he has measured differences in duration between the various Dutch vowels, corresponding to the two vowel classes. A classification on the basis of length, therefore, seems to have some basis in phonetic reality, a fact which has not been conclusively attested for the tense-lax distinction. Since the theoretical and practical implications of adopting vowel length as a classifying feature are not really at issue here, length will be taken as one of the distinctive features for Dutch vowels.

Other features necessary to distinguish the Dutch vowels from each other are lip-rounding, expressed by the feature [round], vowel height, expressed by the feature [high] and [mid], and tongue position, expressed by the feature [back]. All Dutch vowels are non-consonantal [-cons], syllabic [+syll], while they are also non-nasal [-nas], voiced [+voice], and continuant [+cont]. Figure 3 shows how the Dutch vowels may be distinguished from one another by means of these distinctive features.



The distinctive features for Dutch vowels

1.3. The standard Dutch diphthongs

According to Booij (1981), there are psycholinguistic, historical, distributional and acoustic reasons to view the Dutch diphthongs phonologically as single segments, belonging in the same class as long vowels. The diphthongs are not homogeneous in the features [high] and [mid], though, and Booij has suggested a further division for the diphthongs with respect to these two features. Adopting his suggestion here, the following matrix of distinctive features gives the characteristics for all Dutch vowels and diphthongs.

1.4. The Standard Dutch consonants

Apart from most of the features specifying the Dutch vowels and diphthongs, a number of additional distinctive features are needed to specify the consonants of Dutch. Consonants are either voiced [+voice] or voiceless [-voice] and either nasal [+nas] or non-nasal [-nas]. All voiceless consonants are also tense [+tnse] and voiced consonants are lax

| | i | I | у | u | ę | ε | Ø | œ | ə | 0 | \$ | а | a | ei | au | æy |
|-------|---|---|---|---|---|---|---|---|---|---|-----------|---|---|----|----|----|
| cons | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| syll | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| son | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| high | + | + | + | + | + | - | + | + | + | + | - | - | - | -+ | -+ | -+ |
| mid | - | + | - | - | + | + | + | + | + | + | + | - | - | +- | +- | +- |
| back | - | - | - | + | - | - | - | - | + | + | + | + | + | - | + | - |
| round | - | - | + | + | - | - | + | + | - | + | + | - | - | - | + | + |
| long | + | ~ | + | + | + | - | + | - | - | + | - | + | - | + | + | + |
| voice | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| nas | - | - | - | - | - | - | ~ | - | - | - | - | - | - | - | - | - |
| cont | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

fig. 4

The matrix of distinctive features for Dutch vowels and diphthongs

[-tense].¹ Additional features relating to manner and place of articulation are continuant [cont], lateral [lat], anterior [ant], coronal [cor], and back [back], as they have been proposed by Chomsky and Halle (1968). The feature continuant distinguishes plosives and nasals (both [-cont]) from the other consonants, lateral is the feature used to distinguish /l/. The feature coronal includes consonants articulated with the tip as well as with the blade of the tongue. The difference between apical and laminal consonants is not distinctive because in Dutch, apicals have a different place of articulation than laminals. Therefore, the feature distributed [dist], proposed by Chomsky and Halle (1968) to distinguish laminals [+dist] and apicals [-dist] need not to be used here to specify the difference between apicals and laminals.

The diagram in figure 5 (cf. Booij, 1981:36) summarizes the characterization of Dutch consonants and glides, while the matrix in figure 6 shows all their distinctive features.

The distinction between tense and lax is redundant for Dutch consonants, except in whispered speech.

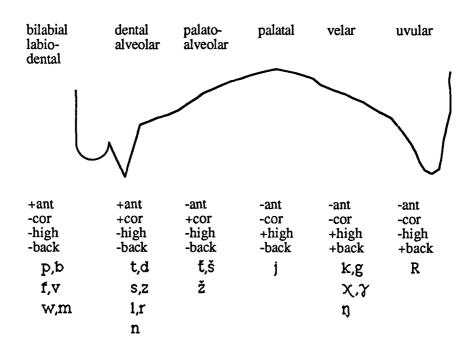


fig. 5

Places of articulation for Dutch consonants and glides

| | p | b | t | d | ŧ | k | g | f | V | s | z | š | ž | χ | γ | m | ŋ | 1 | r | R | w | j | ħ |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|------------|---|---|---|---|---|---|---|---|---|
| cons | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | - | - | + |
| syll | - | - | - | - | - | - | - | - | - | - | - | - | - | - | _ | - | - | - | - | - | - | - | - |
| son | - | - | - | - | - | - | - | - | - | - | _ | - | - | - | - | + | + | + | + | + | + | + | + |
| high | - | - | - | - | + | + | + | - | - | - | - | + | + | + | + | - | + | - | - | - | - | + | - |
| mid | + | + | + | + | - | - | _ | + | + | + | + | - | - | - | - | + | ~ | + | + | + | + | - | - |
| back | - | - | - | - | - | + | + | - | - | - | - | - | - | + | + | - | + | - | _ | + | - | - | + |
| round | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | + | - | - |
| tense | + | - | + | - | + | + | - | + | - | + | - | + | - | + | - | - | - | _ | - | _ | - | - | - |
| voice | - | + | - | + | - | - | + | - | + | - | + | - | + | - | + | + | + | + | + | + | + | + | + |
| cont | - | - | - | - | - | - | - | + | + | + | + | + | + | + | + | - | - | + | + | + | + | + | + |
| nas | - | _ | - | - | - | - | - | - | - | _ | - | - | - | - | - | + | + | - | - | - | - | - | - |
| ant | + | + | + | + | - | - | - | + | + | + | + | - | - | - | - | + | _ | + | + | - | + | - | - |
| cor | - | - | + | + | + | - | - | - | - | + | + | + | + | · - | - | - | - | + | + | - | - | - | - |
| lat | - | - | _ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | + | _ | - | - | - | - |
| dist | + | + | - | _ | + | - | - | - | - | - | - | + | + | - | _ | + | - | - | _ | - | - | - | - |

fig. 6

The matrix of distinctive features for Dutch consonants and glides

1.5. Differences between Amsterdam speech and Standard Dutch

Little information on the difference between the sounds of Standard Dutch and the speech of Amsterdam can be found in the literature. Mittelmeyer (1959) — in his research on the speech of high school students from the Jordaan neighborhood — and Peeters (c.a. 1949) — in his thesis on speech differences between the Jordaan dialect and Standard Dutch — make some observations that are also valid for the differences existing between Standard Dutch and present-day Amsterdam speech. However, no systematic and complete description of the differences between the two varieties has been given anywhere. Whether or not the characteristic

Amsterdam variants occur variably and what factors — linguistic or social — condition their occurrence has not been studied at all. An occasional remark by Mittelmeyer (1959:36,37) about the substandard character of some sound variants heard in Amsterdam hints at social conditioning, but no previous research was available to serve as a basis for identifying the full range of phonological variants in Amsterdam speech.

For the purpose of identifying these variants in other ways than through the literature, several methods were used in this study. First of all, general observations were made of speech in Amsterdam in as many spontaneous speech situations as could be found. Particularly helpful in this respect were the — strictly illegal — amateur television broadcasts beamed at the aereals of the local Amsterdam cable TV network. The extremely low-budget commercials from local merchants formed an especially rich source of spontaneous Amsterdam speech and their constant repetition made careful observation and note-taking relatively easy.

Other places for observing natural speech were street-markets, local stores, and bars, in which the interactions between patrons and salespeople or patrons among themselves could be observed inobtrusively. Notes were taken on variants from the standard language that were typical for Amsterdam and these observations were later verified in samples of recorded spontaneous speech.

The source for this recorded speech were the audio-tapes made up for the word-frequency project of the Royal Netherlands Academy of Sciences' Institute for Dialectology, part of which has also been used for the quantitative aspects of this study. All of the tapes, including approximately 250 hours of Amsterdam native speech, in both formal and informal situations, were played back and notes were taken on variants that differed notably from Standard Dutch usage. In this way, an attempt was made to draw up an inventory of the variants typical for speech in Amsterdam.

The differences between the Amsterdam and the Standard Dutch sound system, in as much detail as is necessary for this study, will be given in the next sections. Since there are a great many features on the phonological level which the two varieties of Dutch have in common, the discussion will be rather limited. Books on Dutch phonology, such as Van den Berg (1974), Zonneveld and Trommelen (1979), Ten Brink (1970) and especially Booij (1981) are more exhaustive in their treatment of the sound system of Standard Dutch and some of its regional variation.

2.1. Characteristics of the Amsterdam sound system

It should be noted, first of all, that no characteristic Amsterdam sound features occur categorically all of the time in the speech of Amsterdammers. The appearance of Amsterdam sounds is variable and this variability is conditioned by extralinguistic factors as well as by linguistic constraints. The extralinguistic factors are the most striking and some of them will be discussed in Chapter V, while some of the linguistic conditions are discussed in this section.

A number of processes cause the sounds of Amsterdam to differ characteristically from that of Standard Dutch. Vowels are frequently subject to raising, nasalization, diphthongization, or lengthening. Diphthongs undergo monophthongization, while consonants are often palatalized, velarized, nasalized, devoiced, or — in the case of /r/ — flapped. In the following paragraphs these sound differences between Standard Dutch and Amsterdam speech will be dealt with systematically. The processes concerned will also be presented in the form of informal correspondence rules and will be illustrated with examples for greater clarity.

2.2. Consonants

The most pervasive feature in Amsterdam speech is *devoicing* (1) of /v/ and /z/ in all environments and of /g/ between vowels. This phenomenon is not limited to speech in the geographical area of Amsterdam. It also occurs in other places in the western part of the Netherlands, and even in places in the east, such as the city of Nijmegen. However, the feature is characteristic for *Plat Amsterdams*, because it is the subject of a great deal of stereotyping with respect to the city's dialect. Devoicing /v/ and /z/ is one of the first phenomena that is imitated in attempts to affect a socially stigmatized Amsterdam accent, but despite its stereotypically stigmatized character, the phenomenon occurs in all social strata in the city.

(1)
$$\frac{\text{St.Du.}}{\text{V/} \Rightarrow \text{/f/[va:Re]}}$$
 to sail [fa: $^{\circ}\text{re}$] $\frac{\text{Zl.}}{\text{Zl.}} \Rightarrow \text{/s/[ze:ker]}$ sure [se: ^{i}ker] $\frac{\text{Jl.}}{\text{Jl.}} \Rightarrow \frac{\text{Jl.}}{\text{Jl.}} = \frac{\text{Il.}}{\text{Jl.}}$

Deletion (2) of /n/ and consequent nasalization (cf. (7)) of the preceding vowel in environments where the /n/ is followed by a voiceless dental stop is also typical for Amsterdam speech.

St.Du. Pl.A.

(2)
$$V/n/ \Rightarrow \tilde{V} \emptyset /$$
 /t/ [kanta] sides [kata]

Palatalization (3) (4) (5) — sometimes unconstrained and other times only in certain linguistic evironments — applies to a number of consonants in Amsterdam speech. /l/ is velarized or palatalized, regardless of linguistic environment, while /r/ is frequently either palatalized or realized as an apicodental flapped [r].

(3)
$$/1/\Rightarrow/4/$$
 [1a:tə] to let [4 \tilde{a} :tə] $/R/\Rightarrow/r/$ [Ra:pə] to pick up [ra:pə]

Before a word boundary or morpheme boundary /n/, /t/, and /s/ are palatalized when they are preceded by the short vowels $/\alpha/$, $/\epsilon/$, /3/, or /1/.

Word-initially or morpheme-initially, /s/ is also frequently palatalized in Amsterdam speech.

St.Du. Pl.A. (5)
$$(\#)\#/\$/ \Rightarrow (\#)\#/\$/$$
 [sap] juice [šap]

2.3. Short vowels

The short vowels $/\alpha/$ and $/\epsilon/$ are frequently subject to raising (6) when they are preceded by palatalized /s/ and followed by one or more consonants.

This phenomenon also occurs to some degree under influence of palatalization of the following consonant, as described in (1).

Nasalisation¹ (7) of the short vowels $/\alpha/$, $/\epsilon/$, /ce/, and /I/ often occurs when these vowels are followed by an /n/ and a dental stop or fricative (/t/ or /s/).

| <u>St.Du.</u> | <u>Pl.A.</u> |
|---------------|--|
| [kans] chance | [kãns] |
| [kant] side | [kãnt] |
| [mens] human | [mɛ̃ns] |
| [bent] are | [bɛ̃nt] |
| [kœnst] art | [kænst] |
| [kœnt] can | [kœ̃nt] |
| [RINS] acidic | [Rĩns] |
| [kint] child | [kĩnt] |
| | [kans] chance [kant] side [mens] human [bent] are [kænst] art [kænt] can [RINS] acidic |

2.4. Long vowels

The long vowel /a:/ is often subject to raising (8) with a certain degree of rounding and diphthongization, regardless of linguistic environment.

(8)
$$/a:/ \Rightarrow /a:^2/$$
 St.Du. Pl.A. [ka:s] cheese [ka:^s]

This feature occurs in many other Dutch dialects, but in the speech of Amsterdam it is the object of frequent stereotyping. Alternatively, the /a:/ is often nasalized (9), without being preceded or followed by a nasal consonant. The alternation of these two features does not seem to be constrained by linguistic conditions. Possible conditioning factors for this alternation will be discussed in Chapter V.

Some degree of nasalization of vowels is normal before nasal consonants, but the phenomenon discussed here is in excess of this normal degree of nasalization.

$$\frac{St.Du.}{(9)/a:/\Rightarrow/\tilde{a}://(C_{n(non-nas)})(C_{n(non-nas)})} \frac{St.Du.}{[ka:s] \text{ cheese } [k\tilde{a}:s]}$$

The already long vowels /i:/ and /u:/ are frequently lengthened even further (10) in Amsterdam speech, irrespective of linguistic environment.

$$\begin{array}{ccc} \underline{St.Du.} & \underline{Pl.A.} \\ (10) /i:/ \Rightarrow /i::/ & [zi:n] & to see & [zi::n] \\ /u:/ \Rightarrow /u::/ & [menu:t] minute & [menu::t] \end{array}$$

When these long vowels /i:/ and /u:/ are followed by the consonants /l/ or /r/, they are not only subject to frequent lengthening, as in (10), but in addition an 'epenthetic schwa' (11) is often inserted before the /l/ or the /r/.

Diphthongization (12) often applies to the long vowels /e:/, /o:/, and /ø/, regardless of linguistic environment.

2.5. Diphthongs

In Amsterdam speech, monophthongization (13) of diphthongs is a frequently occurring phenomenon.

$$\begin{array}{ccc} & \underline{St.Du.} & \underline{Pl.A.} \\ (13) / \varepsilon i / \Rightarrow / \varepsilon : / & [p \varepsilon in] & pain & [p \varepsilon : n] \\ / \otimes y / \Rightarrow / \varnothing / & [p \otimes yn] & rubble & [p \varnothing n] \end{array}$$

In addition, the diphthong /ei/ is frequently subject to lowering (14), but neither of these features seem to be constrained by linguistic environment.

| | St.Du. | <u>Pl.A.</u> |
|------------------|-------------|--------------|
| (14) /εi/ ⇒ /a:/ | [pein] pain | [pa:n] |

Chapter IV

The Informal Subjective Evaluation Test

1.0. The use of subjective evaluations

As has been mentioned earlier (cf. I,1), many forms of differentiation in society may be related to linguistic differentiation. Geographical differentiation as it has been studied in traditional dialectology is only one form of linguistic diversity that has provoked the interest of scholars of language. Comparing linguistic data and the social characteristics of the informants producing the data allows the linguist to correlate the two. Such correlations may reveal a clear relationship between the use of a variant and the speaker's membership of a particular social group or class. Generally, this correlation occurs in the form of more-or-less relationships and is not a question of either-or. In other words, it is not a question of some people using one variant and others using the other, but of all, or at least most, people using both variants, be it in different proportions.

In the past years, a great number of studies, particularly studies of urban dialects, have shown clear quantitative correlations between pronunciation or other linguistic features and social parameters. Only a few examples of such studies are Labov (1966), Trudgill (1974), Fasold (1972), Milroy (1976), and Macaulay (1977). Systematic research into their correlation increases the knowledge of the relationship between language and social parameters in an exact and detailed way. But one does not have to be a sociolinguist to be aware of the relationship between language and social parameters. In fact, the general perception of speech differences and the social evaluation of these differences by the members of a society are the basis for the existence of social dialects. People do not react to speech differences with cool detachment. They respond emotionally and evaluate speech on the basis of the social implications the linguistic differences carry for them. When people react subjectively to speech of a particular group, they are in fact venting their attitudes towards that group, using language as the basis of their judgement. In other words, the linguistic differences are representative of the social differences in a society, so a proper description of a social dialect should not only include a quantitative analysis of the more-or-less relationship of usage and social parameters, it should also comprise an examination of the subjective evaluation of distinct speech varieties. For this reason the research in this study comprises two parts. The first part is a test of subjective evaluations of Amsterdam pronunciation variants, unfortunately of limited scope, due to material limitations. The second part is a quantitative analysis of the more-or-less relationship of the usage of certain pronunciation variants and four social parameters.

1.1. Data reduction and analysis

The subjective evaluation of Amsterdam pronunciation variants were made on the basis of three test questions (cf. ch. II, 2.4. and Appendix B), administered to 24 informally selected informants of roughly comparable social status and age, equally representing both sexes. The answers to the test were recorded on paper in IPA-transcription and tabulated by the interviewer.

1.2. Question one

When the 24 respondents were asked whether speakers from Amsterdam sounded different from speakers in other parts of the country, they all answered 'yes' (100%). It was not possible to test with certainty whether or not the respondents were indeed 'blinded' to the exact object of investigation (see ch. II, 2.4.) by question *one*. There was no control group available to test this notion, so the only indication to go by was the way in which the respondents freely gave their answers to the next two questions. From their uninhibited reactions it may be concluded that, on the whole, the respondents felt quite at ease to express possible negative attitudes about speech in Amsterdam (see 1.2. for further elaboration). This might not have been the case if they had felt judged on their attitudes towards stigmatized Amsterdam speech when taking the subjective evaluation test.

1.3. Question two

Answers to the question what kind of sounds constitute a 'typical Amsterdam accent' were given by 20 out of 24 respondents (83%) and were distributed as presented in Table 1. In the first place, question *two* was meant to elicit existing stereotypes about 'typical' sounds of non-standard Amsterdam speech (see ch. II, 2.4.). When a question is asked in order to elicit something 'typical', be it speech or other behavior, the first

notions that come to mind are generally stereotypes, especially when these notions are elicited without prompting.

Stereotypes, as such, are cause for social comment in the community, but many features and patterns stereotypically associated with a certain type of speech are not reliable markers of a dialect or accent. It is difficult to define the concept of 'social comment' operationally for the purpose of a test, and where the precise points of discrepancy between speech stereotypes and speech markers lie exactly is also difficult to define. However, preconceptions about speech are often significantly at odds with actual speech differences. In order to be able to differentiate stereotypical preconceptions about Amsterdam speech from markers and indicators for the purpose of this study, the concept of 'social comment' was defined operationally by taking the scores for spontaneously elicited 'typical' variants to be stereotypes. The scores for the prompted variants were taken to be indicators and markers (see 1.3.).

| n = 24 | W | % | M | % | Tot. | % |
|----------------------------------|---|-----|----|-----|------|-----|
| /z/ ⇒ /s/ | 6 | 50% | 8 | 66% | 14 | 58% |
| /a:/ ⇒ /a:°/ | 6 | 50% | 8 | 66% | 14 | 58% |
| $/\epsilon^{i}/\Rightarrow /a:/$ | 4 | 33% | 10 | 83% | 14 | 58% |
| /#s/ ⇒ /#š/ | 4 | 33% | 2 | 16% | 6 | 25% |
| /o:/⇒/o:u/ | 4 | 33% | 0 | 0% | 4 | 16% |

Table 1

Percentages of respondents by sex, reporting five features 'typical' for an Amsterdam accent

From Table 1 it appears that women are somewhat less able than men to come up with stigmatized variants spontaneously. This becomes even clearer when the 4 respondents are considered who were not able to indicate differences between stigmatized Amsterdam speech and Standard Dutch at all, at least not without prompts. All of these respondents were women. From the way a lack of ability to indicate typical stigmatized features of Amsterdam speech was often motivated, it seemed that

especially the women had trouble admitting to being able to produce stigmatized speech spontaneously. Three of the four non-responding women even made explicit comments to this effect. One said that she knew 'they speak differently in Amsterdam' but that she could not 'speak like that' herself. The second one stated that she did not 'speak badly like they do in Amsterdam', while a third woman remarked: 'I don't want to speak like that in front of my daughter, she might pick up bad speaking habits'. Apparently, these three women felt so negatively about spontaneously producing stigmatized speech that they could not even bring themselves to admitting that they themselves might be able to do so in a test situation. They clearly felt that spontaneously produced stigmatized speech might 'rub off' on their reputation or status, a notion that seems all the more likely when their answers to question three are considered in relation to their answers to the previous question. The same three women were able to identify stigmatized features without any trouble when it was clear that they were not the ones who had to initiate the use of stigmatized speech; in other words, when they were prompted with example-words. In that context they were very willing to imitate the Amsterdam variants, despite their stigmatized character. The one respondent who produced negative responses on both parts of the test probably did so for different reasons: she was extremely shy and answered 'I don't know' to almost every question posed to her, regardless whether or not it was part of the test. It seems that she falls into a different category of non-respondents.

Despite the informal way in which these subjective evaluations of Amsterdam speech were obtained and the relatively insignificant number of respondents taking part in the test, the figures in Table 1 show an interesting tendency which should be explored further, under better controlled conditions. The result may be taken as an indication that women, who are generally more linguistically insecure and more sensitive to prestige norms than men, extend their linguistic insecurity not only to the use of stigmatized features of speech, but also to expressing evaluations about stigmatized speech. They are apparently more aware of a need to protect their social status by protecting their speech (and that of their children) against stigmatizing influences. As Wolfram and Fasold (1974:94) put it, women feel 'credited with the primary responsibility for perpetuating the prestige norms of language to the next generation', while it is clear, on the other hand, that 'for females there do not appear to be positive values associated with working-class speech which are analogous to those operating for males'.

| n = 24 | w | % | M | % | Tot. | % |
|--------------------------------------|----|------|----|------|------|------|
| /#s/ ⇒ /#š/ | 12 | 100% | 12 | 100% | 24 | 100% |
| $/V/ \Rightarrow /f/$ | 12 | 100% | 12 | 100% | 24 | 100% |
| /2/ ⇒ /\$/ | 12 | 100% | 12 | 100% | 24 | 100% |
| * /εi/ ⇒ /ε:/ /a:/ | 12 | 100% | 10 | 83% | 22 | 91% |
| /1/ ⇒/4/ | 12 | 100% | 10 | 83% | 22 | 91% |
| /ε/ ⇒ /I/ | 12 | 100% | 8 | 66% | 20 | 83% |
| /a:/ ⇒ /a: ⁵ / | 10 | 83% | 10 | 83% | 20 | 83% |
| /o:/ ⇒ /o: ^u / | 10 | 83% | 10 | 83% | 20 | 83% |
| * /œy/ ⇒ /ɛ:/ /o:/ | 10 | 83% | 10 | 83% | 20 | 83% |
| $/n#/ \Rightarrow /\overline{n}#/$ | 10 | 83% | 10 | 83% | 20 | 83% |
| * /t#/ ⇒ /₹#/ /ts#/ | 10 | 83% | 10 | 83% | 20 | 83% |
| * /s#/ ⇒/š#/ /s ^s #/ | 10 | 83% | 10 | 83% | 20 | 83% |
| /ø/ ⇒ /œy/ | 9 | 75% | 9 | 75% | 18 | 75% |
| /e:/ ⇒ /e:¹/ | 8 | 66% | 8 | 66% | 16 | 66% |
| /r/ ⇒ /r/ | 8 | 66% | 8 | 66% | 16 | 66% |
| $/\alpha/\Rightarrow/\epsilon/$ | 8 | 66% | 6 | 50% | 14 | 58% |
| $/$ 3/ \Rightarrow / \emptyset / | 5 | 41% | 5 | 41% | 10 | 41% |
| /i/ ⇒/i: ⁹ / | 6 | 50% | 4 | 33% | 10 | 41% |
| /u:/ ⇒/u::ª/ | 4 | 33% | 4 | 33% | 8 | 33% |
| /I/ ⇒ /E/ | 5 | 41% | 0 | 0% | 5 | 20% |

* two Amsterdam variants summed

Table 2

Percentages of respondents by sex, producing 'typical' Amsterdam features in example-words

The answers to question two were expected to comprise a number of the variants from the inventory of Amsterdam sounds compiled for this study (see ch. II). From the inventory it was not clear, though, which of the Amsterdam sound variants were candidates for the status of stereotype and which ones would turn out to be indicators or markers. In an attempt to diminish the effect of chance and to obtain a clearer idea of how pervasive a preconceived notion of Amsterdam speech actually is, only variants mentioned by more than two respondents were taken into account. This ensured, within the limited scope of this subjective evaluation test, a reasonable representation of stereotyped notions about Amsterdam sounds. Studies of subjective evaluations of speech (e.g. Shuy, Baratz, and Wolfram, 1968) have shown that the speech community is quite uniform in its overt assessment of a variant as stigmatized or prestigious. The speech variety of a socially stigmatized group will generally be viewed as stigmatized, while the speech of socially prestigious groups will carry high prestige.

Both question two and three of this informal subjective evaluation test show similar uniform results. As becomes clear from Table 1, the percentages for the elicited variants in question two generally hover around 50%, a rather low score. It might be argued that they are too low to use them credibly as a basis for assigning a variant the status of stereotype. On the other hand, these results were elicited spontaneously, without stimuli, and as such they are quite substantial, especially when they are compared with the figures in Table 2. It is clear from Table 2 that prompted elicitations show much higher percentages for the same variants, implying that a substantial number of informants agree on the stigmatized character of the five variants taken here as stereotypes.

1.4. Question three

Question three, requiring the respondents to produce Amsterdam sounds in example-words, was answered by all 24 respondents, according to the distribution figures given in Table 2 and Table 3. In the question (cf. ch. II Appendix B) the sound under consideration was first named and then followed by a series of stimulus words pronounced in Standard Dutch. Separate stimuli were given for vowels preceding /n/ followed by dental stop. On the basis of the sound inventory (cf. ch. III) this environment was expected to yield different results, since the vowel sounds preceding /n/ followed by dental stop are generally pronounced differently in Amsterdam. The other stimuli for vowels were all of the CVC-type. In the stimuli for consonants, word-initial or word-final position was

specified, except for /l/ and /r/, for which sounds stimuli were given in word-initial, word-internal as well as word-final position. On the basis of the sound inventory, the environments for these sounds were not expected to influence the results of the subjective evaluation test, since they do not noticeably seem to influence the pronunciation of /l/ and /r/ in the speech of Amsterdam.

| n = 24 | W | % | M | % | Tot. | % |
|-------------------------|---|-----|---|-----|------|-----|
| /I/ ⇒ /Ĩ [∂] / | 4 | 33% | 8 | 66% | 12 | 50% |
| /ε/ ⇒/ _€ 3/ | 6 | 50% | 4 | 33% | 10 | 41% |
| /a/ ⇒ /ã/ | 4 | 33% | 2 | 16% | 6 | 25% |
| /ɔ/ ⇒/ɔ̃/ | 0 | 0% | 4 | 33% | 4 | 16% |

Table 3

Percentages of respondents by sex, producing 'typical' Amsterdam features before /n/ + dental stop in example-words

The results for question three (Table 2 and 3) were interpreted as follows. If sounds were viewed as differing in Standard Dutch and Amsterdam speech by more than 50% of the respondents (12 out of 24, or 6 per group), they were considered markers. All other sounds were taken to be perceived the same in Amsterdam speech and Standard Dutch by the respondents. The decision to take 50% as a cutoff-point was taken, because then at least 50% of the respondents apparently did not perceive the typical Amsterdam pronunciation variants consciously, even when they were prompted by means of stimulus words. For this reason, these Amsterdam variants were assumed to be below the conscious awareness-level of at least half of the respondents. In a sample as small as this one (n=24), half of the respondents may seem a small number to make judgements on, but any cutoff-point in tests such as these is arbitrary.

Taking 50% as a cutoff-point, Table 2 shows the first 15 variables to be markers, while the rest may be considered indicators. When the

respondents mentioned two different Amsterdam variants for the same sound which, according to the inventory of Amsterdam sounds, has two Amsterdam variants, the two variants were tabulated together, since the subjective evaluation test was only concerned with judgements of 'the same'.

For the purpose of correlating the data from the subjective evaluations with those from the tape-recorded examples (cf. ch. V), the following five variables of Amsterdam speech were studied specifically, based on their frequency (cf. ch. V, 3.1.) and on the subjective evaluation test.

/a:/
$$\Rightarrow$$
/a: $^{\circ}$ / and /a:/ \Rightarrow /ã://#\$/ \Rightarrow /#\$/
/1/ \Rightarrow / 4 /
/r/ \Rightarrow /r/ \Rightarrow /r/ \Rightarrow /e:/ \Rightarrow / $^{\circ}$ /

The variables /a:/ and /#s/ were taken to be stereotypes, on the basis of the scores of the subjective evaluations (Table 1). With a cutoff-point of 50% for the scores in Table 2, the variables /l/, /r/, and /e:/ may all be considered markers, while a cutoff-point of 75% for the score in Table 2 would define /l/ as a marker and /r/ and /e:/ as indicators. Unfortunately, the limited scope of the subjective evaluation test made it impossible to use the test for properly discriminating stereotypes, markers, and indicators. A better controlled, more formal test, carried out on a larger group of respondents, should distinguish these three types of socially diagnostic variables more clearly. However, the present informal test gives an indication as to how these five linguistic variables tend to be subjectively evaluated in the Amsterdam speech community.

Chapter V

The Phonological Data: Analysis and Conclusions

1.0. The research questions

As has been elaborated in chapter II, 2.0., people in the Netherlands differentiate between those who speak Standard Dutch and those who speak Plat Amsterdams. The term Plat refers to a stigmatized variety of speech, while Amsterdam indicates that this language variety is geographically defined by being the urban dialect of the city of Amsterdam. Given the scant literature that is available about this variety of Dutch (cf. ch. I, 2.0.), a number of hypotheses were formulated and tested in this study, in order to gain a better insight in the linguistic and social structure of Plat Amsterdams.

In the first place, it was hypothesized that there are geographically determined differences between Standard Dutch and Plat Amsterdams at all linguistic levels: the lexical, the syntactic, the morphological, as well as the phonological level. This notion was tested informally in three different ways. First the scanty literature on the dialects of Amsterdam was studied to obtain a provisional description of the characteristic features of Amsterdam speech. Because of the limited amount of available literature, this information was then checked by consulting other linguists knowledgeable on the subject, and, finally, by observations both in naturalistic settings and in the 245 tape-recordings of Amsterdam speech (cf. ch. II) that were in part used as data for this study. It turned out to be difficult to detect any other than phonological differences by using these three methods. This does not imply that no such differences exist, but it clearly shows that lexical, syntactic, and morphological Amsterdam speech phenomena are quite infrequent, especially in comparison to phonological features. Recovering enough examples of other than phonological differences apparently requires even larger amounts of data than the total of 245 tapes of approximately 45 minutes each that were examined for this purpose. While listening to the tape-recordings, representing all 8 cells distinguished in this study, notes were taken on any syntactic, morphological, or lexical peculiarity that seemed to indicate a difference, compared to Standard Dutch usage.

Contrary to what had been expected, the lexical differences turned out to be far less typical and picturesque than the frequently heard stereotypes about the *Plat Amsterdams* vocabulary would have it. Only a limited number of lexical items were recorded that differed clearly from Standard Dutch usage, and these items occurred only in the speech of a limited number of the informants. As far as the syntactic phenomena are concerned, the scores were even more disappointing, since no more than a handful of differences could be recovered from the 245 tapes. Morphological differences were mainly restricted to a few verb forms, particularly of auxiliary verbs, but even of these forms it is questionable whether they should be considered typical for Amsterdam speech. Many of these forms may also be viewed as general nonstandard Dutch and are not clearly characteristic for their use in the geographical area of Amsterdam.

However informal the method may have been by which these conclusions were reached, it provided clear indications about the extent to which *Plat Amsterdams* is similar to Standard Dutch. On the basis of this comparison, it was hypothesized that phonological differences are the most distinctive for *Plat Amsterdams* and that they are expressed by different pronunciations of a fairly limited number of sounds. This notion was tested by again reviewing the literature, listening to the taperecordings, and by observation in natural settings. It resulted in the description of the *Plat Amsterdams* sound inventory presented in ch. III.

Since Plat Amsterdams is generally viewed as a stigmatized speech variety, its use was expected to be socially as well as geographically determined. To test the notion of social dialect, the social component of a dialect must be defined operationally by breaking it down into a number of social parameters. The method by which such parameters were defined for this study is described in ch. II. It resulted in the creation of eight groups of informants on the basis of social status, age, sex, and speech style. Once the eight groups had been defined, more precise hypotheses about the relationship between social parameters and phonological features of Amsterdam speech could be formulated. The five phonological variables selected for this purpose on the basis of informal subjective evaluations and frequency in a brief fragment of transcribed text (cf. ch. II, 2.3. and IV) were hypothesized to correlate with the four social parameters. The use of the stigmatized variants for each of the variables was expected to have a positive relationship with lower social status, higher age, male sex, and informal speech style.

2.0. Data reduction

In order to test a number of more specific hypotheses concerning the relationship between the social and linguistic variables, the data were prepared for quantitative analysis. Fifteen occurrences of each phonological variable on the taped fragments were scored to see how frequently each possible variant had been used. Tabulating frequent types without restriction was expected to bias the results, so no more than two tokens of each type were tabulated. For each token, the context and the token itself were written down on a file-card, with a phonetic (IPA) transcription. A different color card was used to distinguish each phonological variable and each card was coded for sex, socio-economic status, style, and age. Each variant of a variable was counted and the total number for each variant was tabulated. Statistical analysis of these quantitative data was expected to show significant correlations between speech style, age, sex, and socio-economic status and the occurrence of stigmatized or non-stigmatized phonological variants.

3.0. The specific phonological variables

3.1. The variable /a:/

The first variable selected for quantitative investigation was /a:/. In a five-minute stretch of speech it occurred an average of 40 times, so the sound was frequent enough to be investigated in more detail. According to the subjective evaluation test (ch. IV, 1.4), /a:/ was a stereotype, making it a candidate for further investigation. On closer inspection, this variable proved to be particularly interesting, because it turned out to have three variants, instead of only the expected stigmatized and non-stigmatized pronunciation. Listening closely to the recorded data, combined with actual observations of speakers in the city, made it clear that two non-standard variants could be distinguished. The standard rendering is the pronunciation [a:], the first Amsterdam stigmatized variant is the raised and somewhat rounded and diphthongized pronunciation [a:] while the second Amsterdam stigmatized variant is the nasalized pronunciation [a:].

Responses on the subjective evaluation test for /a:/ (see ch. IV, Table 2) indicated that the respondents tended to mention [a:3] as the only stigmatized variant they were aware of. They did not seem to be aware of the existence of [a:], although imitators of Amsterdam speech frequently incorporate this pronunciation in speech that is used to characterize the city's typical accent. It is clear that [a:] is not a pronunciation variant of

which speakers in the city are consciously aware. This even applies to actors who actually do use the variant consciously in their imitations, but when they are asked to describe what they do, they cannot pinpoint their pronunciation, although they are able to do so with other Amsterdam sounds. When it is pointed out to them that they in fact use the [ã:] pronunciation, they express surprise and disbelief until they hear a recording of their own voice using this particular pronunciation.¹

3.2. The variable /e:/

The second phonological variable in Amsterdam speech which is given particular attention in this study is the variable /e:/. It occurred an average of 30 times in a five-minute stretch of speech, providing enough occurrences to use it for quantitative analysis. In the subjective evaluation test (ch. IV, 1.4.) the variable showed up as an indicator, making it an interesting candidate for further investigation. The variable /e:/ has two variants, [e:] being the non-stigmatized Standard Dutch pronunciation, and [ei:] being the stigmatized diphthongized Amsterdam pronunciation.

3.3. The variable /(#)#s/

The third phonological variable that was investigated quantitatively in this study is word or syllable-initial /s/. It is a reasonably frequent sound, occurring an average of 35 times in a five-minute stretch of speech, while the informal subjective evaluation test (ch. IV, 1.4.) indicated that it may be viewed as a stereotype for Amsterdam speech. The Standard Dutch, non-stigmatized pronunciation of the sound is [s], while the stigmatized rendering, characteristic for the speech of Amsterdam is the palatalized variant [š].

3.4. The variable /\!

The fourth variable that was considered in greater detail for this study is the variable /l/, which has two renderings. The non-stigmatized pronunciation is [1], while the stigmatized Amsterdam pronunciation is a velarized [4]. As far as the variable's social diagnosticity is concerned, the informal subjective evaluation test indicated it as a marker (ch. IV,

This notion was tested informally on a number of Amsterdam actors, who are known specifically for their imitations of Amsterdam speech. The women used the nasalized pronunciation very frequently, while the two male actors were also heard using it, be it less frequently.

1.4.), which made it an all the more interesting variable to study, while its frequency of an average of 40 occurrences in a five-minute stretch of speech, make it suitable for quantitative treatment within the context of this study.

3.5. The variable /r/

The fifth and final phonological variable under investigation in this study is the variable /r/. As with the /a:/, its character is somewhat less straightforward than that of the other three variables discussed here. None of the available literature refers to any particular stigmatized variant of /r/ in Amsterdam speech. Discussing the possible existence of such a variant with other linguists provided only negative comments and reactions. On the other hand, testing this notion by asking people to imitate the typical speech of Amsterdam inevitably made them change their pronunciation of /r/ to a flapped variant /f/, although they were not consciously aware of doing so. When they were questioned about the pronunciation of /r/ in typical Amsterdam speech, they never came up with the flapped pronunciation which they did almost automatically produce in spontaneous imitations. Careful observations, both in naturalistic settings and of the tape-recorded data clearly revealed the existence of the stigmatized variant of /r/ in actual speech. Consequently, the variable /r/ was incorporated in the study on the basis of an 'educated hunch', slightly substantiated by observational data, but not supported by linguistic experts or the literature.

As to the perceived diagnosticity of /r/ as it appeared from the informal subjective evaluation test (ch. IV, 1.4.), the results show /r/ to be a social indicator, which makes it a particularly interesting variable to investigate, given the general lack of awareness of its social diagnosticity. Since it occurs an average of 40 times in a five-minute stretch of speech, it is frequent enough to study in a quantitative way. The two variants of /r/ are an uvular rolled variant [R], which is the non-stigmatized pronunciation, and a flapped apico-dental pronunciation [r], which is the stigmatized Amsterdam variant.

One of the reasons why the occurrence of stigmatized [f] pronunciation is so clearly below conscious awareness, even for trained linguists, is possibly the confusion with the pronunciation propagated for 'Broadcast Dutch'. This standard variant of /r/ in its trilled, apico-alveolar pronunciation [r] is frequently taught to those who are required to speak in public, since it is thought to sound better and project more clearly. Apparently, the knowledge about this trilled apico-alveolar pronunciation

being 'proper' blinds even trained observers to the fact that there is also a stigmatized flapped apico-alveolar variant of /r/ in Amsterdam speech.

4.0. Hypotheses for the quantitative data

In the following sections, the specific hypotheses applied to the quantitative data and the way in which they were tested statistically will be discussed in more detail.

On the basis of the literature, personal observations, and the informal subjective evaluation test, a number of specific hypotheses was formulated on the effect of the indepentent variables sex, age, style, and socio-economic status on differences in the use of stigmatized and non-stigmatized phonological variants in Amsterdam speech.

As far as the variable sex is concerned, recent sociolinguistic studies, both in the United States and in Great Britain (Labov, 1966; Shuy, Wolfram and Riley, 1968; Wolfram, 1969, Trudgill, 1972, 1974; MacCaulay, 1977) concerning the degree to which stigmatized speech is used by women and by men has shown conclusively that women have a greater tendency towards the use of the standard language variety than men. Although no research was available to show a similar tendency for women in Amsterdam, on the basis of personal observations they were not expected to differ substantially from their Anglo-saxon counterparts, in terms of their tendency towards greater use of the standard language variety.

The independent variable age has also been shown in sociolinguistic literature (Fasold, 1972; Trudgill, 1974; Wolfram and Christian, 1976) to covary with the occurrence of certain linguistic phenomena. In the case of *Plat Amsterdams*, the observation has often been made, both by linguists and by the general public, that this urban dialect is fast disappearing. If that is the case, it is to be expected that older speakers show a greater use of *Plat Amsterdams* speech features than younger speakers. The age differences between the two groups would then, in fact, point up a linguistic development in the urban speech of Amsterdam.

The factor socio-economic status, however problematic it is to define, especially in the case of non-working women, has been shown in recent American and Britain studies of urban dialects (Labov, 1966; Shuy, Wolfram and Riley, 1968; Wolfram, 1969, Trudgill, 1974; MacCaulay, 1977) to have a clear relationship with the occurrence of certain linguistic phenomena. It has been shown that speakers of lower socio-economic status tend to use more stigmatized forms of speech than speakers of higher socio-economic status in the same speech community. In the

Netherlands, Elias (1977) has shown that low socio-economic status also seems to determine the use of certain stigmatized linguistic variants in The Hague. There is no particular reason to suppose that the situation in Amsterdam would differ widely from the pattern shown in The Hague: Amsterdam speakers of low socio-economic status were, therefore, expected to show a greater use of stigmatized speech forms than Amsterdam speakers of high socio-economic status.

With respect to the independent variable style, the work of Labov (1966, 1972a, 1972b) has shown most conclusively that the use of formal speech style increases a speaker's monitoring of speech to suppress as many stigmatized linguistic variants as the speaker is capable of suppressing. Amsterdam speakers were fully expected to conform to this pattern, so their speech was expected to show clear stylistic differences. Formal style was thought to elicit less stigmatized speech than informal style, both in men and women, regardless of age and socioeconomic status.

In view of these considerations concerning the independent variables used in this study, the following four hypotheses about their effect on the speech of Amsterdam speakers were tested by the quantitavive data.

- I Stigmatized variants occur more in the speech of men than in the speech of women.
- II Stigmatized variants occur more in the speech of older than of younger speakers.
- III Stigmatized variants occur more in the speech of men and women of lower socio-economic status than of higher socio-economic status.
- IV Stigmatized variants occur more in informal than in formal speech style.

5.0. Data analysis

An initial look at the raw scores for the phonological variables (cf. Appendix D, Table 1 and 2) for each individual informant already revealed some interesting patterns. It was apparent, even from the raw scores, that sex and socio-economic status are distinctly associated with the occurrence of specific phonological variants, while age and style did not seem to affect the use of specific variants in the same way. This first

rough approach to the data was followed by a statistical analysis of these quantitative results, in order to test the specific hypotheses mentioned in 4.0. Such statistical procedures are not only necessary to compare the obtained results with chance expectations, but also to aid in making reliable inferences from the results.

5.1. The scores for the stigmatized variants

For further quantitative analysis, the means for all stigmatized variables combined by status, age, sex, and style were computed as presented in Table 1. Then the means of the individual stigmatized variables were calculated by status, age, sex, and style, as shown in Table 2. Subsequently, the mean and the standard deviation was computed in each cell, both for formal and informal speech style and for all the stigmatized variants. These scores are presented in Table 3. All means in Table 1, 2, and 3 are based in fifteen occurrences per informant.

5.2. Point biserial correlations

The results shown in Tables 1 through 3 only concern the existence of a relationship between the occurrence of stigmatized phonological variants and the social parameters. Whether or not these scores are significant was then determined by a number of statistical tests.

First, the Point Biserial correlation coefficients for each speech style were calculated. Since the data for formal and informal style were gathered from the same group of informants, the data for style were different from the data for the other social parameters. For the parameters status, age, and sex the investigation was carried out on 'between-group' data, while for the parameter style the investigation concerned 'within group' data. For this reason the data for these two styles were not collapsed and are given in two separate tables. Point Biserial correlation coefficients measure the relationship between a dichotomous variable and a continuous variable. They may be used when a variable is truly dichotomous, as is the case with the variable sex, or age, or when an artificial dichotomy is imposed on a truly continuous variable, such as socio-economic status (Huck et al., 1974:35). The result of these computations are presented in Table 4, which shows that there are significant relations between the variables marked with one asterisk (p < 0.05) and highly significant correlations between the variables marked with two asterisks (p < 0.001).

| STYLE | SEX | A | GE | SI | CATUS |
|--------|---------|---|------|--------|--------------|
| | M 5.11 | L | 4.92 | L H | 8.57 1.27 |
| F 4.44 | WI 3.11 | Н | 5.30 | L H | 8.83 1.77 |
| F 4.44 | W 3.77 | L | 4.37 | L H | 7.80 0.93 |
| | W 3 | Н | 3.14 | L H | 5.50 0.83 |
| | | | | | |
| | | L | 4.45 | L H | 8.20 0.70 |
| | M 4.75 | Н | 5.04 | L H | 3.40 1.67 |
| I 4.15 | W 255 | L | 3.97 | L H | 6.97 0.97 |
| | W 3.55 | Н | 3.12 | L H | 5.30 0.93 |

Table 1

Means for all stigmatized variables combined by status, age, sex, and style (n = 80)

Grand mean 4.30

The figures presented in Table 4 show that in informal style, the variable sex (hypothesis I) yields significant positive correlations with the use of raised /a:/, nasalized /a:/, and palatalized /s/ and highly significant positive correlations with the use of diphthongized /e:/. Going back to the figures in Tables 1 through 3, it becomes clear that raised /a:/, palatalized /s/, and diphthongized /e:/ are used more by men. Formal style shows equally significant positive correlations with the use of raised /a:/ and diphthongized /e:/, but the existing greater use of nasalized /a:/ by women and of diphthongized /e:/ by men is not significant for formal speech style.

| | | raised /a:/ | nas. /a:/ | palat. /s/ | vel. /\/ | flap /r/ | dipht. /e/ |
|--------------|-----------|----------------|--------------|---------------|-------------|-------------|---------------|
| GCM 4 FTV 10 | L | 5.60 | 4.45 | 8.75 | 9.53 | 10.95 | 5.40 |
| STATUS | mean H | 0.23 | 0.58 | 1.02 | 1.20 | 3.30 | 0.48 |
| ACE | L | 3.05 | 2.58 | 5.42 | 5.33 | 7.15 | 3.03 |
| AGE mean | | 2.88 | 2.45 | 4.35 | 5.40 | 6.85 | 2.85 |
| SEX | M mean | 4.60 | 1.70 | 6.23 | 5.93 | 6.43 | 4.68 |
| SEA | W | 1.23 | 3.33 | 3.55 | 4.80 | 7.83 | 1.20 |
| STYLE | F mean | 2.85 | 2.02 | 4.93 | 5.40 | 7.03 | 2.63 |
| STILL | I | 2.98 | 3.00 | 4.85 | 5.33 | 7.23 | 3.25 |

Table 2

Means of the stigmatized variants by status, age, sex and style (n = 80)

The variable age (hypothesis II) does not show any significant association for either speech style with the use of stigmatized variants. In both speech styles, the variable status (hypothesis III) yields highly significant positive correlations with the use of all stigmatized variants, except diphthongized /e:/. According to the figures in Tables 1 through 3, all stigmatized variants, even diphthongized /e:/, are used more by lower class speakers, male as well as female. The fact that the degree of use for diphthongized /e:/ is not significant seems to be mainly due to the fact that

Table 3

Subgroup

2.85

4.42

2.03

2.92

4.93

4.84

STYLE SEX AGE STATUS vel. /1/ flap. /r/ dipht. /e/ palat. /s/ raised /a:/ nas. /a:/ S.D. S.D. S.D. S.D. mean S.D. mean mean S.D. mean mean mean 5.73 4.10 1.79 8.60 8.20 3.11 4.20 2.39 11.00 1.87 9.80 9.60 .89 4.34 .40 .80 1.10 2.60 H .89 1.73 2.40 2.61 .40 1.00 М 5.37 9.60 2.88 10.60 5.94 10.60 9.60 1.79 10.40 2.07 5.41 2.20 3.58 2.19 3.20 4.97 3.80 2.77 1.60 .40 .89 .20 .45 1.40 4.24 2.77 12.60 1.52 4.00 2.91 9.20 L H L 3.80 2.17 8.20 2.77 9.00 .55 5.00 4.30 0.00 0.00 0.00 .40 0.00 0.00 .20 .45 0.00 lwl .80 1.30 1.40 3.13 6.60 6.11 4.20 4.92 8.40 4.89 11.60 2.97 Η 0.00 0.00 2.68 2.00 2.83 0.00 0.00 1.40 3.13 .40 .59 1.20 4.86 4.94 7.23 5.50 3.25 4.93 5.33 2.98 4.38 3.00 3.89 4.85 Subgroup 11.20 1.10 9.00 5.61 6.80 3.70 11.20 2.58 L H 8.80 2.77 2.20 2.17 .45 2.00 3.46 0.00 0.00 0.00 0.00 0.00 0.00 2.00 2.83 .20 M 4.72 3.08 11.40 6.43 7.60 8.80 5.97 2.80 2.59 9.80 1.92 10.00 4.02 Н 3.78 2.40 4.34 1.80 .60 2.24 1.60 2.51 2.60 1.34 1.00 L H 3.58 3.00 4.04 10.40 2.07 11.80 2.28 4.40 3.46 4.80 3.19 7.40 0.00 .89 .60 1.34 4.60 4.28 0.00 .20 .45 0.00 0.00 .40 4.36 .40 .89 1.20 3.74 7.60 6.66 11.00 2.68 4.60 4.77 7.00 .89 4.00 5.34 0.00 0.00 H .45 .80 1.30 0.00 0.00 .60 .20 5.39 7.03 5.81 2.63 3.99 5.40

women use this variant so much less than men, which influences the significance levels when men's and women's usage is collapsed, as is the case in this test.

| | | INFOR | MAL STY | LE | | |
|---------------------------|-----------|-------|---------|------|-------|--------|
| | raised | nas. | palat. | vel. | flap. | dipht. |
| | /a:/ | /a:/ | /s/ | /l/ | /r/ | /e/ |
| SEX | 39* | 29* | 30* | 11 | 11 | 43** |
| AGE | 03 | 10 | 15 | 06 | 04 | 0 |
| * p < 0.05 ** p < 0.00 | 64** 1 | 60** | 78** | 80** | 71** | 57 |

| | | FORM | IAL STYL | E | | |
|-----------------------|----------------|--------------|---------------|-------------|--------------|---------------|
| | raised /a:/ | nas. /a:/ | palat. /s/ | vel. /l/ | flap. /r/ | dipht. /e/ |
| SEX | 39* | 18 | 26 | 11 | 14 | 36** |
| AGE | 03 | 10 | 07 | 04 | 03 | 04 |
| * p < 0.05 * p < 0.00 | | 55** | 82** | 83** | 66** | 55 |

Table 4
Point Biserial Correlation Coefficients

5.3. Pearson Product-Moment correlations

In order to find out whether or not there is a significant relationship among the stigmatized variants themselves, the Pearson Product-Moment correlation coefficient was calculated for all the stigmatized variants in both speech styles. These figures express how likely it is that the association of two variables is due to chance (Huck et al., 1974:31). In Table 5 the correlations marked with one asterisk are significant (p < 0.005), while those marked with two asterisks are highly significant (p < 0.001). Table 5 shows that most of the stigmatized variants are positively correlated with one another, in both speech styles. One notable exception is that the correlation between raised /a:/ and nasalized /a:/ is not significant in either speech style.

5.4 Multivariate analysis of variance

The final statistical test carried out on the data was a Multivariate Analysis of Variance (MANOVA) (Nie et al., 1975). The purpose of such a procedure is to test the differences between group means. This type of test is used to compare groups of data which differ along more than two dimensions. Such groups of scores occur in data with two or more dependent variables. The procedure does not differ substantially from an univariate analysis of variance (ANOVA), but it enables the researcher to analyze the variance of more than one dependent variable at the same time, instead of carrying out a separate ANOVA for each dependent variable (Van Knippenberg et al., 1980:90).

One reason for not using ANOVA in studies with a number of dependent variables is the risk of 'capitalizing on chance': by carrying out a separate ANOVA for each dependent variable with a significance-level of p < 0.05, the chance of finding a significant effect on one of the dependent variables in fact becomes greater than the 5 % suggested by the chosen significance-level. For example (cf. Van Knippenberg et al., 1980:91), for three dependent variables, which do not correlate with one another, the chances of finding at least one significant effect is already greater than 0.14, while for seven dependent variables this chance has increased to 0.30. This phenomenon increases the risk of making unacceptable inferences on the basis of the statistical tests. In MANOVA, capitalizing on chance in testing a number of dependent variables is avoided. The MANOVA procedure is designed to find out if, considering the whole group of dependent variables, certain groups of scores differ significantly from one another, taking into account the number of dependent variables. An additional advantage of the multivariate character of the test is that it

INFORMAL STYLE

| raised /a:/ | nas. /a:/ | palat. /s/ | vel. /l/ | flap /r/ |
|----------------|-------------------------------|---|---|---|
| .09 | | | | |
| .78** | .47** | | | |
| .63** | .69** | .80** | | |
| .39* | .58** | .55** | .56** | |
| .85** | .14 | .72** | .67** | .36* |
| | .09 .78** .63** .39* | .09 .78** .47** .63** .69** .39* .58** | .09 .78** .47** .63** .69** .80** .39* .58** .55** | .09 .78** .47** .63** .69** .80** .39* .58** .55** .56** |

^{*} p < 0.05

FORMAL STYLE

| | raised /a:/ | nas. /a:/ | palat. /s/ | vel. /l/ | flap /r/ |
|------------|----------------|--------------|---------------|-------------|-------------|
| NAS. /a:/ | .16 | | | | |
| PALAT./s/ | .73** | .57** | | | |
| VEL. /1/ | .66** | .68** | .86** | | |
| FLAP. /r/ | .30* | .62** | .57** | .64** | |
| DIPHT. /e/ | .89** | .26* | .70** | .69** | .35* |

^{*} p < 0.05

Table 5
Product-Moment Correlation Coefficients

encourages the researcher, apart from considering the effects of the independent variables on each dependent variable, to also view the effects as they relate to one another.

^{**} p < 0.001

^{**} p < 0.001

Since hypotheses I through IV pertain to univariate dependent variables and their possible interactions, the univariate effects described by the Point Biserial correlations and the Pearson Product-Moment correlations needed to be supported by a multivariate analysis relating the various effects to each other. Therefore, it was possible only on the basis of the MANOVA results, to reliably accept or reject the hypotheses.

In Table 6, the 'between-group' MANOVA results are given for formal style, and in Table 7 for informal style. On the left, the tables present the main effects of each independent variable on all the dependent variables combined, while on the right the effect on each separate dependent variable is given. Apart from determining the main effect of each independent variables, this makes it possible to determine which of the dependent variables contributes the most to this combined main effect. The selected significance levels are p < 0.05 (significant) and p < 0.001 (highly significant).

From Tables 6 and 7 it is clear that the effect of sex (hypothesis I) on the combined dependent variables is significant, although the results show that only raised /a:/, palatalized /s/, and diphthongized /e:/ contribute to this effect in formal style, while in informal style nasalized /a:/ is also a contributing factor. Returning to the figures in Tables 1 through 3, it is clear that three of the stigmatized variants are used more in the speech of men than in that of women. Notable exceptions are the use of nasalized /a:/ and of flapped /r/ which are used more by women than by men. Other than for nasalized /a:/ and flapped /r/, hypothesis I, which states that stigmatized variants occur more in the speech of men than in that of women, is at least partially confirmed by these results.

The effect of the variable age (hypotheses II) is neither significant for the combined dependent variables, nor for each dependent variable separately. On the basis of these results, hypothesis II, which states that stigmatized variants occur more in the speech of older than of younger speakers, cannot be accepted.

Tables 6 and 7 show that the effect of *status* (hypotheses III) for all dependent variables combined, as well as for the dependent variables palatalized /s/ and velarized /l/ is highly significant, while the effect for raised /a:/, nasalized /a:/, flapped /r/ and diphthongized /e:/ is significant. This is the case in both formal and informal style. On the basis of these data, hypothesis III, which states that stigmatized variants occur more in the speech of speakers of lower than of higher socio-economic status, is reliably confirmed.

| N | Multi-variate | test | | | Uni-variate to | est | |
|--------|---------------|------|-------|---------------|----------------|------|--------|
| source | F | d.f. | p | Dep. variable | F | d.f. | p |
| STATUS | 19.77 | 6.27 | .008* | Raised /a:/ | 33.38 | 1.32 | .01* |
| | | | | Nas. /a:/ | 15.53 | 1.32 | .01* |
| | | | | Palat. /s/ | 88.35 | 1.32 | .001** |
| | | | | Vel. /1/ | 81.10 | 1.32 | .001** |
| | | | | Flap. /r/ | 26.12 | 1.32 | .01* |
| | | | | Dipht /e/ | 32.01 | 1.32 | .01* |
| source | F | d.f. | p | Dep. variable | F | d.f. | p |
| AGE | .40 | 6.27 | .871 | Raised /a:/ | .11 | 1.32 | .74 |
| | | | | Nas. /a:/ | .47 | 1.32 | .50 |
| | | | | Palat. /s/ | .61 | 1.32 | .44 |
| | | | | Vel. /l/ | .17 | 1.32 | .69 |
| | | | | Flap. /r/ | .06 | 1.32 | .81 |
| | | | | Dipht./e/ | .15 | 1.32 | .70 |
| source | F | d.f. | p | Dep. variable | F | d.f. | p |
| SEX | 3.27 | 6.27 | .015* | Raised /a:/ | 14.27 | 1.32 | .01* |
| | | | | Nas. /a:/ | 1.73 | 1.32 | .20 |
| | | | | Palat. /s/ | 8.61 | 1.32 | .01* |
| | | | | Vel. /l/ | 1.51 | 1.32 | .23 |
| | | | | Flap. /r/ | 1.25 | 1.32 | .27 |
| | | | | Dipht. /e/ | 9.88 | 1.32 | .01* |

^{*} p < 0.05

Table 6 'Between-group' MANOVA results for formal style (n = 40)

^{**} p < 0.001

|] | Multi-variate | test | | | Uni-variate to | est | |
|--------|---------------|------|--------|---------------|----------------|------|--------|
| source | F | d.f. | p | Dep. variable | F | d.f. | p |
| STATUS | 20.68 | 6.27 | .001** | Raised /a:/ | 44.72 | 1.32 | .01* |
| | | | | Nas. /a:/ | 25.23 | 1.32 | .01* |
| | | | | Palat. /s/ | 88.18 | 1.32 | .001** |
| | | | | Vel. /1/ | 64.53 | 1.32 | .001** |
| | | | | Flap. /r/ | 36.35 | 1.32 | .01* |
| | | | | Dipht /e/ | 30.37 | 1.32 | .01* |
| source | F | d.f. | p | Dep. variable | F | d.f. | p |
| AGE | 1.60 | 6.27 | .185 | Raised /a:/ | .09 | 1.32 | 0.77 |
| | | | | Nas. /a:/ | .76 | 1.32 | 0.39 |
| | | | | Palat. /s/ | 3.44 | 1.32 | 0.07 |
| | | | | Vel. /l/ | .32 | 1.32 | 0.58 |
| | | | | Flap. /r/ | .12 | 1.32 | 0.73 |
| | | | | Dipht. /e/ | 0.00 | 1.32 | 1.00 |
| source | F | d.f. | p | Dep. variable | F | d.f. | p |
| SEX | 4.89 | 6.27 | .002* | Raised /a:/ | 16.29 | 1.32 | .01* |
| | | | | Nas. /a:/ | 5.77 | 1.32 | .02* |
| | | | | Palat. /s/ | 12.84 | 1.32 | .01* |
| | | | | Vel. /l/ | 1.15 | 1.32 | .29 |
| | | | | Flap. /r/ | .80 | 1.32 | .38 |
| | | | | Dipht. /e/ | 17.04 | 1.32 | .01* |

^{*} p < 0.05 ** p < 0.001

Table 7 'Between-group' MANOVA results for informal style (n = 40)

| Multi-variate test | | | | Uni-variate test | | | |
|--------------------|------|------|------|------------------|------|------|------|
| source | F | d.f. | p | Dep. variable | F | d.f. | p |
| STYLE | 3.31 | 6.27 | .01* | Raised /a:/ | .14 | 1.32 | .71 |
| | | | | Nas. /a:/ | 8.50 | 1.32 | .01* |
| | | | | Palat. /s/ | .06 | 1.32 | .80 |
| | | | | Vel. /l/ | .05 | 1.32 | .83 |
| | | | | Flap. /r/ | .33 | 1.32 | .57 |
| | | | | Dipht. /e/ | 5.61 | 1.32 | .02* |

p < 0.05

Table 8

MANOVA results for style as 'within-group' factor

5.5. The results by style

Concerning the possible effect of *style* (hypothesis IV) on the occurrence of stigmatized variants, it is not possible, on the basis of the 'between-group' statistical analyses presented in Tables 4 through 7, to determine any significance level for the effect of this independent variable. Since, so far, the two styles have consistently been kept separate in the statistical analyses, only the results in Tables 1 through 3 give some insight in the effect of style on the use of stigmatized variants. The tendency that becomes apparent from Table 3 is that the average use of stigmatized variants is lower in formal speech style for raised /a:/, nasalized /a:/, diphthongized /e:/ and flapped /r/, while it is slightly higher in formal speech style for palatalized /s/ and velarized /l/.

In order to gain a better insight in whether or not these stylistic differences are significant, a MANOVA with style as 'within-group' factor was carried out. The results of this test, presented in Table 8, show that the effect of style on the combined dependent variables is significant (p <

0.05), although the results for the separate dependent variables show that only raised /a:/ and diphthongized /e:/ contribute significantly to this effect. From this analysis, it is clear that hypothesis IV, which states that stigmatized variants occur more in informal than in formal style, seems to be confirmed by the data, be it only with nasalized /a:/ and diphthongized /e:/ as contributing factors. For the other dependent variables, the figures are so inclusive that, despite the significant effect of style on the combined variables, hypothesis IV does not seem to be reliably confirmed for all dependent variables.

5.6. Interaction effects

Apart from determining the main effect of the independent variables, the MANOVA procedure was also used to find out if there are significant interactions between them. In other words, the figures generated by this procedure show whether there are significant effects on the dependent variables operating together, as distinguished from the main effect of each separate independent variable. The results of this procedure, presented in Tables 9 and 10, show that there are no significant interactions, except for the variables sex and socio-economic status. The overall interaction effect of sex and status on the combined dependent variables is clearly significant for both speech styles. The contributing factors to this effect are raised /a:/, and diphthongized /e:/ in both formal and informal style, while nasalized /a:/ yields a significant effect only in informal style.

In table 11, the mean scores are given for sex, status, and sex by status, not only for all stigmatized variants combined, but also for the variants for which the interaction effect was shown by the 'between-group' MANOVA tests to be significant, in all cases broken down per style.

In the men's group, the difference between low and high status for the combined stigmatized variants is 7.15, while in the women's group the difference between low and high status for the combined stigmatized variants is 5.47.

The effect of status is more marked for men than it is for women. Low status men generally use the stigmatized variants much more than low status women do. The difference between the use of stigmatized variants by high status men and women is relatively slight. For raised /a:/ the difference between low and high socio-economic status in the men's group is 8.50, while in the women's group it is 2.25. For diphthongized /e:/ the difference for men is 7.45 and for women 2.40, while for nasalized /a:/

| M | ulti-variate t | est | | | Uni-variate te | est | |
|--------|----------------|------|-------|---------------|----------------|------|------|
| source | F | d.f. | p | Dep. variable | F | d.f. | p |
| AGE by | .75 | 6.27 | .626 | Raised /a:/ | .44 | 1.32 | .51 |
| STATUS | | | ı | Nas. /a:/ | .19 | 1.32 | .66 |
| | | | | Palat./s/ | .10 | 1.32 | .78 |
| | | | | Vel./V | 2.68 | 1.32 | .11 |
| | | | | Flap. /t/ | .09 | 1.32 | .76 |
| | | | | Dipht /e/ | 1.90 | 1.32 | .18 |
| source | F | d.f. | p | Dep. variable | F | d.f. | p |
| SEX by | 2.58 | 6.27 | .042* | Raised /a:/ | 13.44 | 1.32 | .01* |
| STATUS | | | | Nas. /a:/ | 2.07 | 1.32 | .16 |
| | | | | Palat. /s/ | 1.04 | 1.32 | .32 |
| | | | | Vel. /l/ | .17 | 1.32 | .69 |
| | | | | Flap. /r/ | .09 | 1.32 | .76 |
| | | | | Dipht. /e/ | 4.62 | 1.32 | .03* |
| source | F | d.f. | p | Dep. variable | F | d.f. | p |
| SEX by | .97 | 6.27 | .462 | Raised /a:/ | .44 | 1.32 | .51 |
| AGE | | | | Nas. /a:/ | .10 | 1.32 | .76 |
| | | | _ | Palat. /s/ | .09 | 1.32 | .77 |
| | | | | Vel. /1/ | 1.05 | 1.32 | .31 |
| | | | | Flap. /r/ | .51 | 1.32 | .48 |
| | | | | Dipht, /e/ | 3.31 | 1.32 | .08 |

^{*} p < 0.05

 $Table \ 9$ $MANOVA \ results \ for \ interaction \ effects \ for \ formal \ style \ (n=40)$

| M | ulti-variate t | est | | Uni-variate test | | | | |
|--------|----------------|------|-------|------------------|-------|------|------|--|
| source | F | d.f. | р | Dep. variable | F | d.f. | p | |
| AGE by | .50 | 6.27 | .802 | Raised /a:/ | .09 | 1.32 | .77 | |
| STATUS | | | | Nas. /a:/ | 1.19 | 1.32 | .28 | |
| | | | | Palat. /s/ | 2.20 | 1.32 | .15 | |
| | | | | Vel. /l/ | 1.15 | 1.32 | .29 | |
| | | | | Flap. /r/ | .12 | 1.32 | .73 | |
| | | | | Dipht /e/ | .37 | 1.32 | .55 | |
| source | F | d.f. | p | Dep. variable | F | d.f. | p | |
| SEX by | 2.73 | 6.27 | .033* | Raised /a:/ | 12.64 | 1.32 | .01* | |
| STATUS | | | | Nas. /a:/ | 4.77 | 1.32 | .04* | |
| | | | | Palat./s/ | 2.20 | 1.32 | .15 | |
| | | | | Vel. /V | .02 | 1.32 | .88 | |
| | | | | Flap. /r/ | .44 | 1.32 | .51 | |
| | | | | Dipht. /e/ | 9.74 | 1.32 | .01* | |
| source | F | d.f. | p | Dep. variable | F | d.f. | p | |
| SEX by | .82 | 6.27 | .565 | Raised /a:/ | 1.31 | 1.32 | .26 | |
| AGE | | | | Nas. /a:/ | .43 | 1.32 | .52 | |
| | | | | Palat./s/ | .75 | 1.32 | .39 | |
| | | | | Vel. /l/ | .32 | 1.32 | .58 | |
| | | | | Flap. /r/ | 1.45 | 1.32 | .24 | |
| | | | | Dipht. /e/ | 2.60 | 1.32 | .12 | |

^{*} p < 0.05

Table 10 $\frac{10}{10}$ MANOVA results for interaction effects for informal style (n = 40)

the difference for men is 2.30 and for women 5.45. There is no significant main effect for nasalized /a:/ in formal style, but there are interaction effects in both styles. In formal style the difference between low and high status men for nasalized /a:/ is 2.00 and for women 4.30, while in informal style the differences are respectively 2.70 for men and 7.40 for women.

| | style | | ib.stig. | raised /a:/ | nas. /a:/ | dipht. /e:/ | |
|-------------|----------|----------|----------|-------------|-----------|-------------|--|
| SEX by | F | LM | 8.30 | 8.80 | 2.50 | 7.20 | |
| STATUS | F | НМ | 1.19 | 0.30 | 0.50 | 0.90 | |
| per | F | LW | 6.14 | 2.10 | 4.70 | 2.40 | |
| STYLE | F | HW | 0.95 | 0.20 | 0.40 | 0.00 | |
| | | | | | | | |
| | I | LM | 8.70 | 8.90 | 3.20 | 9.60 | |
| | I | НМ | 1.52 | 2.40 | 0.50 | 1.00 | |
| | I | LW | 6.65 | 2.60 | 7.40 | 2.00 | |
| | I | HW | 0.88 | 0.00 | 0.00 | 0.00 | |
| | <u> </u> | | | | | | |
| SEX | F | M | 4.74 | 4.55 | 1.50 | 4.05 | |
| per | F | W | 3.55 | 1.15 | 2.55 | 1.20 | |
| STYLE | I | M | 5.11 | 4.65 | 1.90 | 5.30 | |
| | I | w | 3.77 | 1.30 | 4.10 | 1.20 | |
| | | | | | | | |
| STATUS | F | L | 7.22 | 5.45 | 3.60 | 4.80 | |
| per | F | Н | 1.07 | 0.25 | 0.45 | 0.45 | |
| STYLE | I | L | 7.68 | 5.75 | 5.30 | 6.00 | |
| | I | Н | 1.20 | 0.20 | 0.70 | 0.50 | |
| | <u> </u> | <u>L</u> | | | | | |

Table 11 Comparison of main effects and interaction effect of sex by status per style (n = 40)

In order to determine whether there are significant interactions between style and the other three independent variables, a 'within-group' MANOVA was carried out. The figures generated by this procedure show whether there are significant effects on style operating together with one of the other three social parameters, as distinguished from the main effect of style on the use of stigmatized variants. The results of this analysis, presented in Table 12, show that there are no significant interactions, except for the variables sex and style. The overall interaction effect of sex and style is significant, although only diphthongized /e:/ seems to contribute to this result.

5.7. Discussion

Statistical tests are a tool for analysis. In this study, the statistical tests have aided in establishing whether or not the four hypotheses should be rejected or accepted, as the data presented in sections 5.1 through 5.5 indicate.

Hypothesis I, concerning the independent variable sex, is reliably confirmed by the statistical tests, except for the variable /a:/.

In the Pearson correlations, the use of raised /a:/ does not significantly correlate with the use of nasalized /a:/, but this is not at all that surprising when the results are compared with those in Tables 2 and 3. Then it becomes clear that raised /a:/ is used more by men, while nasalized /a:/ is used more by women, though only significantly so in informal style (cf. Table 4). It could, therefore, be argued that raised /a:/ and nasalized /a:/ are interdependent, raised /a:/ being the 'men's' variant and nasalized /a:/ being the 'women's' variant.

Apart from the variants nasalized /a:/ and raised /a:/ in both styles, which may be called interdependent because the one is used mostly by women and the other mostly by men, diphthongized /e:/ is the only other variant that does not show a significant correlation with nasalized /a:/, be it only in formal style. Reviewing the data presented in Tables 2 and 3, it is clear that diphthongized /e:/, like raised /a:/ is chiefly used by men, in fact significantly more so than by women (cf. Table 4). In that respect, the relationship between diphthongized /e:/ and nasalized /a:/ may be viewed as similar to that of raised /a:/ and nasalized /a:/ and could also be called interdependent.

Hypothesis II, concerning the variable age, cannot be accepted on the basis of the data presented in this study. Age apparently does not seem to influence the use of stigmatized variants significantly, although the results

| Multi-variate test | | | | Uni-variate test | | | |
|--------------------|------|------|------|------------------|------|------|------|
| source | F | d.f. | p | Dep. variable | F | d.f. | p |
| STATUS | 2.34 | 6.27 | .06 | Raised /a:/ | .28 | 1.32 | .60 |
| by STYLE | | | | Nas. /a:/ | 4.70 | 1.32 | .04* |
| 011122 | | | | Palat. /s/ | .17 | 1.32 | .68 |
| | | | | Vel. /l/ | 1.92 | 1.32 | .18 |
| | | | | Flap. /r/ | .08 | 1.32 | .78 |
| | | | | Dipht. /e/ | 4.74 | 1.32 | .04* |
| source | F | d.f. | p | Dep. variable | F | d.f. | p |
| AGE by STYLE | 1.38 | 6.27 | .26 | Raised /a:/ | .01 | 1.32 | .94 |
| | | | | Nas. /a:/ | 4.07 | 1.32 | .05* |
| | | | | Palat. /s/ | 2.02 | 1.32 | .17 |
| | | | | Vel. /l/ | 1.92 | 1.32 | .18 |
| | | | | Flap. /r/ | 1.32 | 1.32 | .26 |
| | | | | Dipht. /e/ | .44 | 1.32 | .51 |
| source | F | d.f. | p | Dep. variable | F | d.f. | p |
| SEX by STYLE | 4.44 | 6.27 | .01* | Raised /a:/ | .01 | 1.32 | .94 |
| | | | | Nas. /a:/ | 2.96 | 1.32 | .10 |
| | | | | Palat. /s/ | .57 | 1.32 | .46 |
| | | | | Vel. /l/ | .05 | 1.32 | .83 |
| | | | | Flap. /r/ | .51 | 1.32 | .48 |
| | | | | Dipht. /e/ | 5.61 | 1.32 | .02* |

^{*} p < 0.05

Table 12

MANOVA results for interaction effects for style as 'within-group' factor (n=40)

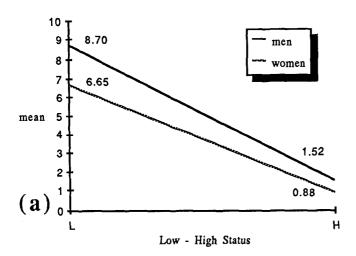
in Table 2 do show that slightly more stigmatized variants are used in the lower than in the higher age group. The tendency for the independent variable age is, therefore, in the opposite direction from what had been hypothesized.

Hypothesis III, concerning the independent variable status, is reliably confirmed by the data in this study. In the case of diphthongized /e:/, the differences between low and high status women is very slight in both styles, which is not surprising, since the data in Tables 2 and 3 show that this variant is used primarily by men. In all, status is clearly a variable that affects the use of stigmatized variants substantially, according to the data presented in this study.

Hypothesis IV, concerning the independent variable *style*, seems to be neither confirmed nor rejected on the basis of the data presented in this study. The results presented in Table 3 and Table 12 are very inconclusive. Half of the data show greater use of stigmatized variants in formal style, while the other half shows more use of stigmatized variants in informal style.

One of the most interesting results produced by the present study is the interaction effect of sex and status on the use of the stigmatized variants. The graphs in Figure 1 clearly show that the effect of low status is relatively greater for men than it is for women with regard to the use of the combined stigmatized variants. This phenomenon is even clearer when the separate stigmatized variants are considered for which the interaction effects in the MANOVA tests were significant (cf. Tables 8 and 9). As is shown in Figure 2, the use of diphthongized /e:/ is considerably greater for low status men than for low status women, both in formal and in informal style.

However, the truly striking result shown by this study is the difference between the sexes in the use of the two separate stigmatized variants for the vowel /a:/. Figures 3 and 4 clearly indicate that raised /a:/ is used mostly by low status men and hardly at all by low status women. Nasalized /a:/, on the other hand, is used primarly by low status women and a great deal less by low status men. In addition, women use less nasalized /a:/ in formal than in informal style, while interaction between sex and status is also not significant in formal style for nasalized /a:/. This type of style shift for a socially diagnostic variable is in line with the behavior that may be expected of low status women, on the basis of other sociolinguistic studies (cf. Labov, 1966:312). No other sociolinguistic study, though, has ever documented the existence of separate status-bound male and female linguistic variants. However unlikely such a



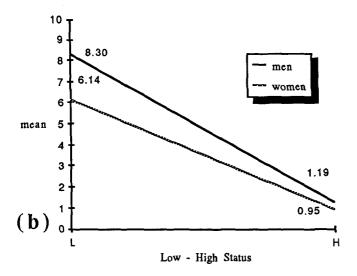
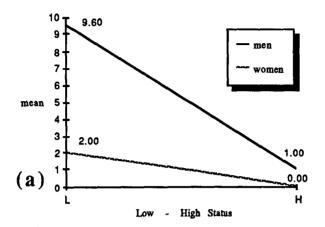


Figure 1
Index for the combined stigmatized variants by sex and status in (a) informal style and (b) formal style



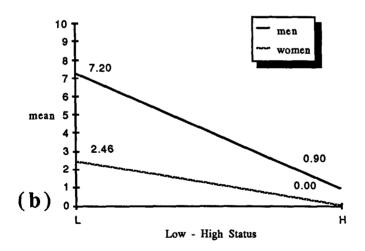
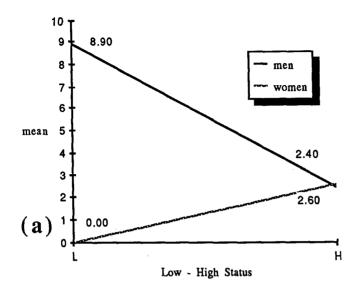


Figure 2
Index for diphthongized /e:/ by sex and status in
(a) formal style and (b) informal style



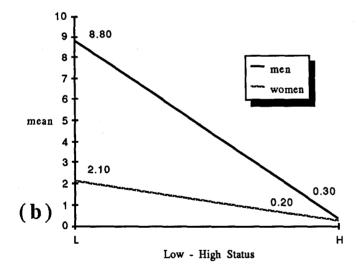
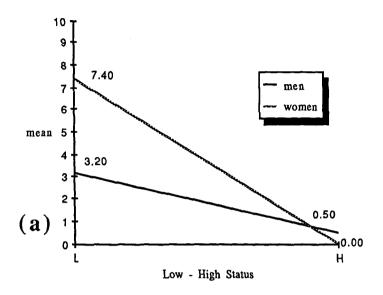


Figure 3
Index for raised /a:/ by sex and status in
(a) informal style and (b) formal style



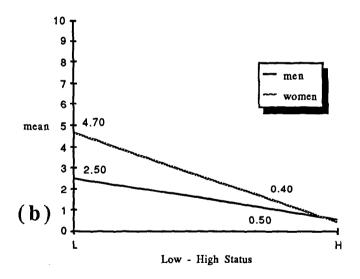


Figure 4
Index for nasalized /a:/ by sex and status in
(a) informal style and (b) formal style

phenomenon may seem, the statistical evidence produced in this study convincingly shows that such variants do indeed exist in the speech of Amsterdam. A possible explanation to account for this interesting phenomenon will be advanced in section 6.2, but the existence of such sex-bound socially diagnostic variables definitely merits further research.

6.0. Summary

The purpose of studying naturalistic language data, with regard to the Amsterdam variables was in part to quantitatively test hypotheses about the relationship among linguistic and social variables. The quantitative investigation was begun with a predetermined list of linguistic variables and their variants, so the variants were clearly expected to actually occur in the language data. Similarly, the range of hypotheses about the relationship between the social variables and the linguistic variants was also to some extent determined by the available data.

Most of the work in urban sociolinguistics is based on similar types of data and departs from similar hypotheses. Still, it should be acknowledged that this methodology is not totally devoid of the risk of prejudging the results by starting with the wrong hypotheses about the relationships between linguistic and social variables. Since the study of naturalistic data is extremely time-consuming, this type of research has often concentrated on linguistic variables which occur relatively frequently — as is the case in this study —. In many cases (for an exception see e.g. Jansen, 1981), the factor of frequency tends to rule out the study of quite a few infrequent phenomena, such as syntactic constructions, morphological phenomena, individual lexical items, or even infrequent phonological phenomena. Another risk in studying naturalistic language data, is to look only at phenomena that are relatively easy to identify, thereby ruling out many other, perhaps more telling, variables.

Despite these drawbacks, this type of sociolinguistic study of urban language is useful as a first approximation towards placing a dialect in its social context. Since the dialect of Amsterdam has never really been studied systematically in this way, the present study should be regarded as exploratory, in this respect. This study should give rise to further, more detailed investigations of the dialect of Amsterdam, in order to avoid constraining effects of frequency and easy identification on the linguistic variables considered for detailed investigation.

6.1. Socio-economic status

From the previous section it has become clear that the occurrence of all the *Plat Amsterdams* variants in this study is significantly affected by the variable low socio-economic status. Most sociolinguistic studies, including this one, have adhered to the notion that socio-economic status is a single hierarchy in a society with a hierarchical structure. A variety of factors, such as dwelling place, income, occupation, and education are viewed as characteristic for an individual's position in this hierarchy. As a result, a person can be placed within the hierarchy on the basis of data relating to these status factors, which are combined into a single scale of socio-economic status.

However, there are some problems with this notion of socio-economic status. First, it is not possible to determine which of the contributing factors that combine to form the socio-economic scale are actually the factors to which the scores on the linguistic variables should be related. Not all of them may be equally important for all linguistic variables, so it might, therefore, be better in this type of research to divide up the parameter socio-economic status into its component parts and divide the informants for a sociolinguistic study accordingly. If these factors are recorded separately, it should then be possible to treat them as individual social parameters and find out by statistical testing which of them is relevant to the occurrence of a linguistic variable. In this way, the separate factors making up socio-economic status may also interact with variables such as sex, age, or speech style.

Another problem concerning the notion of socio-economic status is the fact that in studies such as this one, society is in fact neatly divided up into social groups on the basis of socio-economic status. This seems more an artefact of the research situation, in which discrete categories must be created somewhat arbitrarily for the convenience of allotting phenomena to different categories, than a reflection of how society is actually organized. It might not necessarily be the case that society consists of a hierarchy of distinct social groups. In fact, it seems more likely that there is a social continuum, on which there are certain normative points around which members of a society locate themselves, with respect to a particular variable, not only in speech, but also in other behavior. This may be another motive for breaking down the notion of socio-economic status into its component parts, in order to shed some light on the exact nature of this normative pattern. In this way, it should be possible — if a status factor affects the use or non-use of a certain

variable - to find out more exactly where the relationship between this variable and the factors constituting status should be placed on the social continuum. In the case of linguistic variables, this may differ per variable, as it does with respect to a number of other behavorial variables. In no other way does it seem possible to explain the fact that, despite the stigmatized character of certain forms of speech, speakers will continue to use these forms. Obviously, there is some normative point around which users of stigmatized forms group themselves, which is not the norm of the standard language or of some non-stigmatized dialect. Hagen (1983:9) describes this phenomenon in his inaugural address for the acceptance of the first Dutch joint chair in both sociolinguistics and dialectology, stating that 'Dialect, or, for that matter, linguistic diversity in general, is a strong means of group identification'. This group identification, though perhaps not conscious, may be subject to change, perhaps within a short time-span. 'Thus, people mark the social, regional or age group to which they belong with their languages and dialects; also, verbal adaptation to changing circumstances is possible, in this respect'² (Hagen 1983:10).

How short the time-span may be in which such changes in group identification may actually take place, is illustrated by a remark made by the famous Dutch dialectologist Kloeke (1934:246). He describes the situation that existed at the time at which he wrote, which is quite opposite to the present-day situation, only half a century later. Discussing the relative prestige of *Plat Amsterdams* and the vernacular spoken in The Hague, Kloeke states: 'It has always struck me as something extraordinary that the appreciation of the pure speech of Amsterdam is so minimal here. If Amsterdam origins are noticeable from speech, it is usually because of negative peculiarities that are generally viewed as nonstandard. (...) However, it seems to me that for cultured speech colored by The Hague vernacular evidence may definitely be found'. In the last fifty years, speaker identification with a given vernacular may have been subject to change, with respect to speech in The Hague and in Amsterdam, in view

¹ 'Dialect, trouwens taalverscheidenheid in het algemeen, is een sterk middel tot groepsidentificatie'.

² 'Zo ook markeren de mensen met hun talen en dialecten bij welke sociale, regionale of leeftijdsgroep ze behoren; en ook hier is een verbale aanpassing mogelijk aan wisselende omstandigheden'.

³ 'het heeft mij (...) altijd als iets heel bizonders getroffen, dat de appreciatie van het zuivere Amsterdams ten onzent zo gering is. Als Amsterdamse afkomst aan de spraak kenbaar is, dan is dat meestal door negatieve, algemeen niet als beschaafd beschouwde eigenaardigheden. (...) van een Haags (...) gekleurd "beschaafd" zijn echter, dunkt me, wêl symptomen aan te wijzen'.

of Kloeke's observations as opposed to the present-day situation. In both cases the speech varieties under consideration are those of the lower classes, which clearly indicates that simplifying the rather complex notion of socio-economic status may confuse, rather than clarify, some of the diversity of social structure as well as of linguistic usage.

The present study is no exception in its simplification of the social structure by means of imposing a rather artificial dichotomy on the notion of socio-economic status. Nevertheless, the results for the linguistic variables that have been studied are extremely clear with respect to the social parameter of status. However, the raw data of the informants is still available and research on the same linguistic corpus in the future should be carried out in such a way that the social structure of this representative sample of the Amsterdam population is represented in a more refined way. By including the raw data on education and occupation as separate variables in the analysis and allowing them to interact with sex and age, a more realistic description of Amsterdam speech in its social context could be achieved.

6.2. Sex

The results presented in section 5.0. clearly show that the occurrence of all Plat Amsterdams variants is significantly affected by the independent variable sex. It is not surprising to notice quantitative sex differences in the language use of Amsterdam. The recent sociolinguistic literature has shown that women have a tendency to use fewer stigmatized linguistic variants than men do if they are matched with men for socio-economic status and age. Clearly, the situation in Amsterdam is not different in this respect. For example, Labov (1966), Shuy, Wolfram and Riley (1968), Wolfram (1969), and Trudgill (1972, 1974) have all found that women use more standard variants than men. Some linguists have attempted to advance explanations for this phenomenon and have tried to relate them to the different positions men and women occupy in the western societies in which their studies have been carried out. The differences in question are not seen to function as distinctive social markers of sex, as has been documented for some other cultures. It has been suggested that, in western societies, women are more insecure than men and that they show this insecurity linguistically. The observation has also been made that women have few means, other than language, to signal social prestige. For this reason, the way in which they are perceived by others is doubly important to women. Other than their looks, language use is probably the single most important signal to show social prestige. Language use also shows the appropriateness of a person's behavior with respect to her or his sex. It is all the more important for a woman to behave appropriately to her sex, because it is still the woman, in most cases, who raises the children, so that they will become respected, well-adapted members of mainstream society.

It could be that women show more awareness of prestige norms in their speech and in their attitudes towards the speech of others, in order to achieve this task successfully. This has been documented also in the present study by the remarks of several women about their use of stigmatized speech forms (cf. ch. IV, 1.3.). Women, who generally carry the responsibility for raising children, probably have to be more sensitive to the prestige norms in society, since they are the prime candidates for handing down these norms to the next generation.

The norms in western societies include viewing toughness and roughness to a certain degree as virtues for males, while rough and tough women are looked upon askance. Tough behavior in Amsterdam is no exception in that it is associated with the use of stigmatized speech, as it is in many other western societies. Thus it is more likely that the norms for men allow for their speaking Plat Amsterdams. The Plat Amsterdams raised /a:/ is viewed as stigmatized by most of the respondents in the informal subjective evaluation test, while the stigmatized nature of nasalized /a:/ is clearly below conscious awareness (cf. ch. IV, 3.0.). Thus it is all the more interesting that, although both variants are stigmatized, one is produced chiefly by men and the other chiefly by women. A possible explanation for this curious phenomenon may be the fact that raised /a:/ is not only viewed as very stigmatized by hearers, but also by speakers of Plat Amsterdams. Understandably, women, who are more sensitive to the norm of needing to avoid stigmatized speech, will worry more about avoiding raised /a:/ than men. They will be more likely to attempt to 'standardize' their pronunciation. The nasalized variant certainly sounds more like Standard Dutch than the raised one. Consequently, the pattern could be explained as a halfway successful attempt at sounding like a speaker of Standard Dutch, motivated by women's aspirations to conform to the norm. Raised /a:/ may thus be regarded as a typical male speech variant in Amsterdam, while nasalized /a:/ is more of a female variant.

Comparing speech of different age groups may be a convenient technique to study changes in linguistic patterns over time. This method works on the assumption that the linguistic differences created by language change over 'real time' are similar to those existing in the 'apparent time' of different age groups. Use of the apparent time technique enables the scholar to avoid having to collect data at more than one point in time. This is a necessity in making comparisons with naturalistic language data from before the days of the tape-recorder, and it is still a convenience when dealing with recorded data. However, it is not necessarily the case that apparent time data reflect the real time situation. It is difficult to disentangle the results of real time linguistic change from differences which occur over and over in each generation of speakers.

Hypothesis II in this investigation, stating that older speakers would use more stigmatized forms than younger speakers, was based on the assumption that *Plat Amsterdams* is slowly disappearing. However, the results presented in the previous section did not conform to this hypothesis. On the contrary, they show that, although the use of *Plat Amsterdams* variants is not significantly affected by the independent variable age, younger speakers tend to use more stigmatized variants than older speakers. Such a decrease of nonstandard usage in adulthood has been documented in a number of other sociolinguistic investigations. Similar patterns of covariation of age and speech phenomena have been found, for example by Fasold (1972) in the speech of blacks in Washington, D.C., by Trudgill (1974) in Norwich, England, and by Wolfram and Christian (1976) in Appalachian English. It seems that this is the normal pattern of age grading for nonstandard dialects, and clearly the speech of Amsterdam is no exception in this respect.

This grading effect may be explained by assuming that younger speakers do not yet fully feel the pressure of having to conform to the norms of the standard language. Young people look to their peer group for support and, to a certain extent, they try to set themselves apart from the norms of the mainstream 'adult' society, by speaking more nonstandard. Adults, who are fully functioning members of the work force, yield to social pressures from their own peer group and conform more to the standard language norms. Those that are beyond the working age are again less under pressure to conform to the standard norm and, as a result, they can allow themselves to lapse back into more nonstandard language use.

Given the effect of age grading, it is unfortunate that no speakers between 65 and 70 years of age have been included in this investigation. If the normal age grading pattern does indeed apply in Amsterdam speech, these speakers would probably also have shown a tendency towards the use of more stigmatized speech forms.

6.4. Style

The method of distinguishing two speech styles and maintaining the object of eliciting naturalistic speech has frequently produced significant quantitative stylistic differences in other sociolinguistic studies. The decision not to combine the data for the two different styles, because they were taken from the same group of informants at two different times, constituting 'repeated measures' has not made it possible in this study of *Plat Amsterdams* to subject the data for style to the same statistical analysis as the other data. Nevertheless, it has become clear that in Amsterdam speech, as it has been elicited in this study, speakers do not tend to differ very much in their usage of stigmatized variants, according to formal or informal style.

The elicitation of more than one speech style relies on the assumption that formal and informal style as they appear on the tape-recordings reflect how speakers behave in real-life formal and informal situations. It is also assumed that these differences may be accounted for in a quantitative manner. As Labov (1972:109) has put it: 'whether or not we consider stylistic variation to be a continuum of expressive behavior, or a subtle type of discrete alternation, it is clear that it must be approached through quantitative methods'. He continues by stating that 'We are in no position to predict exactly when a given speaker will produce a fricative, or when he will produce a stop. A complex of factors operates to obscure stylistic regularities at the level of the individual instance. The remarkable fact is that the basic unit of stylistic contrast is a frequency set up by as few as ten occurrences of a particular variable'.

In Amsterdam, speakers were also expected to devote more attention to the way they speak in formal style than in informal style, and this was thought to result in decreased use of stigmatized variants in formal style. Extending the stylistic range further towards formality would have involved the introduction of reading passages of connected text or word lists. Data elicited in this way was not expected to be comparable to naturalistic speech, since other variables that are specific to the reading

task may obscure the stylistic differences generated by the greater formality of the reading situation.

The relative lack of stylistic differences that seem to be apparent from this investigation could, of course, be accounted for by saying that there is little or no stylistic range in the speech of Amsterdam. It is not necessarily the case that every one of the factors that influence speech behavior is relevant to speech in every community. One set of factors may be relevant in one community and a different set in another. A possible explanation for lack of stylistic differences in *Plat Amsterdams* could also be found in the prestige of *Plat Amsterdams* in the Netherlands, relative to other urban dialects. This might cause Amsterdammers to feel less ashamed about using their relatively stigmatized dialect, even in more formal situations (cf. ch. I, 2.).

On the other hand, considering the results obtained in many sociolinguistic investigations of stigmatized speech, it also seems possible that the formal style in this particular study was not far enough removed from the informal style to produce adequate quantitative style differences. However, given the nature of the formal recordings used in this study, it is difficult to see how a more formal speech style could have been elicited, without resorting to other than naturalistic speech data. At the same time, these results, however scanty they may be, could support the notion that conclusions about stylistic differences which are based for the most part on reading tasks as the formal style should be treated with some reservations. It has not been shown conclusively that the phenomena which are being perceived in such research as stylistic differences are not in fact the differences between formal and informal style.

6.5. Linguistic context

This study has focused on the four social parameters of socio-economic status, sex, age, and speech style, and in particular on the way in which these parameters influence the occurrence of the five selected phonological variables. This particular sociolinguistic study has only quantitatively investigated the kinds of extralinguistic factors that influence the choice of the linguistic variants. Of course, the quantitative study of the influence of one linguistic item on another has also been studied by sociolinguists. Labov (1972), to name the most important one, has shown that the influence of a linguistic context on the selection of a linguistic variant should be expressed in terms of probabilities. In some contexts, a variant is more likely to occur than in others, though no

linguistic context will categorically prevent a variant from occurring. For pronunciation variables, as they have been studied in this investigation, the nature of the sounds preceding or following a variable may be of influence. Also, a variable's place in the word, the closeness of a word or morpheme boundary, or other morphological, syntactic, or lexical aspects of the linguistic material containing the variable in question, may influence the occurrence of one or the other of its variants.

The classic Labovian approach to the linguistic interpretation of this type of variation in terms of linguistic theory has been the Transformational-Generative framework. Labov has introduced the notion of the variable rule, in which the contexts that favor the occurrence of the variant in question are written in a generative type of rule. The relative influence of the various contexts on the rule's operation is expressed by listing them in order of probability, or by marking them with indices expressing the probability of their influence on rule operation. Whether the factors constraining rule operation are social, or strictly linguistic, a statistical formula is used to calculate the probability of rule operation, following a method developed by Cedergren and Sankoff (1974). A reliable quantitative analysis of linguistic constraints on rule operation in variable rules requires a large amount of data for each specific linguistic context. Fifteen occurrences of each linguistic variable, the number of occurrences which have been investigated in this study for a total of forty informants, is a large enough number to use as a basis for writing variable rules or for statistically analyzing the probability of the various contexts constraining the occurrence of one variant over another. The considerations for limiting this analysis of the constraints on the speech of Amsterdam to the four social parameters socio-economic status, sex, age, and style, have, therefore, been purely of a practical nature. Linguistic contexts for the specific Amsterdam speech phenomena have, to some extent, been described in the analysis of the sounds of Amsterdam speech as it is presented in Chapter III. A more detailed analysis within the theoretical framework of variable rule methodology was not possible within the scope of this study.

6.6. Conclusion

To conclude this discussion about the speech of Amsterdam, some suggestions for further investigation are in order. In the first place, larger fragments of speech should be investigated in order to be able to treat both the intralinguistic and the extralinguistic constraints on the occur-

rence of all *Plat Amsterdams* variables in an adequate quantitative manner. Secondly, the independent components making up the parameter of socioeconomic status in this corpus of data should be retrieved separately from the raw data, to allow them to interact with the other parameters, in a further quantitative analysis. In the third place, a greater number of the Amsterdam phonological variables, as well as possibly a number of other linguistic variables, should be investigated quantitatively, to obtain a more detailed view of the sociolinguistic situation in Amsterdam. Such an analysis of the urban speech of Amsterdam in its social context would vield important information, not only relating to the dialect itself, but also to its relationship with the standard language. It would help to determine the degree in which a person's speech differs from the standard norm for her or his regional, social, and age group. Knowledge about the speech of different social groups is essential for determining the norm to which the speech of individuals may be related. Only with this type of knowledge will it be possible to make adequate statements, not only about the character of dialects in the Netherlands, but also about the nature of the Standard Dutch language.

APPENDIX A

Selection of questions for the fieldworker interview

- 1. You may have noticed that education has undergone quite a few changes in recent years. What do you think about education nowadays, in comparison with the way it used to be?
- 2. When housewives fill out a form, they often write under 'occupation' that they have none. Do you consider the work of a housewife an occupation or not?
- 3. Some people find a housewife's job the lightest task, others find it the heaviest task. What is your opinion?
- 4. Do you think that boys and girls with equal capacities should be able to receive the same education, even though most girls eventually become housewives because they get married?
- 5. Nowadays, it is a little more frequent that a married woman has a parttime or full-time job. How do you feel about a married woman taking a job?
- 6. People often say that all education should really be free, whether it is the training for engineers, for nurses, or for metal-workers. What do you think about that, about free education for everyone and for every occupation?
- 7. In the Netherlands and outside the Netherlands, too there are quite some differences in income. How do you feel about those income-differences when you think of a forty-hour work week and an equal effort expended in those forty hours?
- 8. You know that at the moment there is quite a bit of unemployment. You know also that there are quite a number of foreign workers in the Netherlands. People sometimes make a connection between these two things. What do you think about that?
- 9. There are occupations that are mainly or exclusively for men and others mainly or exclusively for women. Do you believe that there are in fact typical male and female occupations?
- 10. The last question with some of the character of a last question. When someone has died or when he retires, people sometimes say that he has had a successful life. When do you feel that you can talk about a successful life?

APPENDIX R

Subjective Evaluation Test

Ouestion one:

Thinking particularly of sounds, not of words and expressions, do you think that speakers from Amsterdam sound different to you than speakers in other parts of the country?

(Question *one* is designed to introduce the topic and to 'blind' the subjects to the specific object of investigation)

Ouestion two:

When you think about sounds that are typical for speakers who speak with a 'typical Amsterdam accent', not of typical words or expressions, what kind of sounds do you think of as typical?

(Question two is designed to elicit sterotypes about typical Amsterdam sounds, on the assumption that stereotypes are the subject of social comment in the speech community, while markers and indicators are not)

Question three:

Can you reproduce this sound (name sound) in the following example-words like someone with a typical Amsterdam accent would pronounce it?

(Question *three* is designed to elicit markers, on the basis of the sound inventory of Amsterdam speech presented in this study, represented by a list of example-words. The question is also meant to differentiate markers from indicators)

List of examples

| /0/ | pan | pad | pas |
|------|---------------|---------------|-------|
| | pand | kant | want |
| /ε/ | pen | pet | les |
| | vent | kent | zend |
| /5/ | pon | pot | bos |
| | pond | bont | lont |
| /œ/ | dun | dut | dus |
| | punt | kunt | rund |
| /1/ | pit | dit | vis |
| | kind | vind | wind |
| /a:/ | baas | kaas | maas |
| | baant | waant | maand |
| /e:/ | deen | beet | pees |
| | beent | weent | meent |
| /0:/ | koon | poot | poos |
| | toont | loont | woont |
| /i:/ | kien | piet | kies |
| | kient | ziend | dient |
| /y:/ | tuut | guus | |
| /ø/ | leun leunt | peut föhnt | keus |
| /£i/ | fijn | lijdt | wijs |
| | lijnt | seint | deint |
| /œy/ | duin duint | zuid tuint | thuis |

| /n#/ | pan | pen | pin |
|---------|--------------------------|------------------|-----------------|
| | dan | den | dun |
| | kan | ken | kin |
| /nt#/ | pand | pent | pint |
| | kant | kent | kind |
| /t#/ | pad | pet | pit |
| | dat | dot | dit |
| | bad | bod | bit |
| | kat | kot | kit |
| /s#/ | pas | pus | poes |
| | bas | bos | bes |
| | das | dus | dos |
| /#s/ | sap | sop | sip |
| | soep | samen | 's avonds |
| /#V/ | vaas | vos | vis |
| | van | voos | voet |
| /#Z/ | zeem | zuip | zat |
| | zit | zoet | zoop |
| V /χ/ V | dagen vlaggen | vlagen raggen | dragen |
| /1#/ | bal | bel | boel bol |
| | dal | del | doel dol |
| | pal | pel | poel pol |
| /1/ | balen delen kuilen | bellen kolen | dalen kielen |
| /#1/ | let | lat | lot |
| | lap | lip | lok |
| | lek | lak | lik |

| /#r/ | ras | ros | roep | | |
|------|----------------|----------------|-------|--|--|
| | rits | ruit | rib | | |
| /r/ | krap | draf | droog | | |
| | kroop | kracht | kring | | |
| | baren boren | toren koren | beren | | |

APPENDIX C

Sample Transcript (tape 15-10-7-02)

En en over over eh, ja, laten we maar meteen 't punt noemen, en en o:fer o:fere ja: la: la: we ma: mete:net pcent nume (And and about about eh yes let us immediately mention the point)

over sex, bijvoorbeeld, hè, wat je vroeger nooit had, dat o:fer šeks befobelt he wat je fruxer no:jt hat tet (about sex, for example, eh, what you never had formerly, that)

hebben ze nu misschien wel een beetje te vroeg, maar hebe še ny: mesxu:en welen be:tje toe frux ma:or (they have now perhaps a little too early, but)

vroeger had je 't helemaal niet. En nu hebben ze fruxəratjət heləmã: 1 nu:t en ny hebə šə (before you didn't have it at all. And now they have)

dat er dus bij. Ze hebben d'r meer punten bij getrokken, dat e dæš be: še hebe der me:r pænte be: Xetroke (that added. They have pulled in other points, too)

APPENDIX D

| | | | A | PPI | END | IX | ע | | | | | |
|----------------------|----------------------------|---------------------------|-----------------------|----------------------------|--------------------------|---------------------------|----------------------------|----------------------------|---------------------------|---------------------------|--------------------------|----------------------------|
| men | | | | | | | | | | | (1 | n = 40) |
| social parameters | | a;° | ã: | a: | š | s | 4 | 1 | Ţ | r | e: | e: |
| MYL, F | 1 2 3 4 5 | 9 12 11 6 6 | 0 1 4 5 1 | 6 2 0 4 8 | 8 12 9 14 13 | 7 3 6 1 2 | 11 11 10 13 11 | 4 4 5 2 4 | 11 8 11 15 0 | 4 7 4 0 15 | 6 11 8 8 | 9 4 7 7 14 |
| MYL, I | 1 2 3 4 5 | 6 13 9 8 5 | 3 1 6 7 4 | 6 1 0 0 6 | 12 12 13 9 | 3 3 2 6 6 | 7 9 11 11 11 | 8 6 4 4 | 10 10 14 14 0 | 5 5 1 1 15 | 6 12 5 14 6 | 9 3 10 1 9 |
| МҮН, F | 6 7 8 9 10 | 0 0 0 0 | 0 0 0 | 15 15 15 15 15 | 0 4 6 0 | 15 11 9 15 15 | 0 0 1 0 | 15 15 14 15 15 | 0 0 8 2 0 | 15 15 7 13 15 | 0 0 0 0 | 15 15 15 15 15 |
| МҮН, І | 6 7 8 9 10 | 2 0 0 0 0 | 0 1 4 0 0 | 13 14 11 15 15 | 0 4 6 2 0 | 15 11 9 13 15 | 0 0 2 2 0 | 15 15 13 13 15 | 3 0 10 0 0 | 12 15 5 15 15 | 2 0 0 0 | 13 15 15 15 15 |
| MOL, F | 11 12 13 14 15 | 6 15 0 10 13 | 5 0 4 5 0 | 4 0 11 0 2 | 10 13 8 9 | 5 2 7 6 6 | 6 11 8 14 11 | 9 4 7 1 4 | 14 13 15 15 0 | 1 2 0 0 15 | 3 12 2 11 10 | 12 3 13 4 5 |
| MOL, I | 11 12 13 14 15 | 13 12 0 11 12 | 0 1 4 4 2 | 2 2 11 1 1 | 10 14 9 10 9 | 5 1 6 5 6 | 7 8 8 14 11 | 8 7 7 1 4 | 13 13 13 14 0 | 2 2 2 1 15 | 7 15 3 15 13 | 8 0 12 0 2 |
| МОН, F | 16 17 18 19 20 | 0 0 0 0 3 | 0 0 0 0 5 | 15 15 15 15 7 | 1 0 1 0 6 | 14 15 14 15 9 | 0 0 3 1 9 | 15 15 12 14 6 | 0 0 10 0 2 | 15 15 5 15 13 | 0 0 0 0 9 | 15 15 15 15 15 |
| МОН, І | 16 | 0 | 0 | 15 | 0 | 15 | 1 | 14 | 5 | 10 | o O | 15 |

TABLE 1: The raw scores

| | | | | | | | | | | | Q | n = 20 |
|----------------------|----------------------------|-----------------------|-------------------------|----------------------------|--------------------------|----------------------------|---------------------------|----------------------------|----------------------------|---------------------------|------------------------|----------------------------|
| social parameters | 3 | a:° | ã: | a: | š | s | 4 | 1 | τ | r | e: | e: |
| WYL, F | 21 22 23 24 25 | 0 2 3 5 0 | 0 3 7 7 7 | 15 10 0 3 8 | 3 8 9 13 4 | 12 7 6 2 11 | 7 12 11 12 10 | 8 3 4 3 5 | 11 9 11 13 15 | 4 6 4 2 0 | 4 2 8 8 0 | 11 13 7 7 15 |
| WYL, I | 21 22 23 24 25 | 4 1 3 7 4 | 4 11 10 7 9 | 7 3 2 1 1 | 5 11 10 12 7 | 10 4 5 3 8 | 5 8 10 12 11 | 10 7 5 3 4 | 12 11 12 15 13 | 3 4 3 0 2 | 4 0 6 10 0 | 11 55 9 5 15 |
| WYH, F | 26 27 28 29 30 | 0 1 0 0 | 0 0 0 0 | 15 14 15 15 15 | 0 2 0 0 | 15 13 15 15 15 | 0 3 0 0 | 15 12 15 15 15 | 0 9 7 0 7 | 15 6 8 15 8 | 0 0 0 0 | 15 15 15 15 15 |
| WYH, I | 26 27 28 29 30 | 0 0 0 0 | 1 0 0 0 | 14 15 15 15 15 | 0 0 0 0 | 15 15 15 15 15 | 0 0 1 1 0 | 15 15 14 14 15 | 1 6 9 0 9 | 14 9 6 15 6 | 0 0 0 0 | 15 15 15 15 15 |
| WOL, F | 31 32 33 34 35 | 6 0 0 0 | 4 0 1 6 12 | 5 15 14 9 3 | 10 4 4 5 12 | 5 11 11 10 3 | 10 1 0 14 13 | 5 14 15 1 2 | 12 10 4 14 15 | 3 5 11 1 0 | 2 0 0 0 | 13 15 15 15 15 |
| WOL, I | 31 32 33 34 35 | 7 0 0 0 0 | 5 0 2 13 13 | 3 15 13 2 2 | 10 0 2 0 9 | 5 15 13 15 6 | 11 1 7 9 14 | 4 14 8 6 1 | 9 13 8 15 13 | 6 2 7 0 2 | 0 0 1 0 3 | 15 15 14 15 12 |
| WOH, F | 36 37 38 39 40 | 1 0 0 0 0 | 3 1 0 0 0 | 11 14 15 15 15 | 0 0 0 0 | 15 15 15 15 15 | 2 0 1 0 0 | 13 15 14 15 15 | 7 0 1 0 12 | 8 15 14 15 3 | 0 0 0 0 | 15 15 15 15 15 |
| WOH, I | 36 37 38 39 40 | 0 0 0 0 | 7 0 0 0 0 | 8 15 15 15 15 | 1 1 0 0 | 14 14 15 15 15 | 6 0 0 0 | 9 15 15 15 15 | 4 0 0 0 0 6 | 11 15 15 15 9 | 0 0 0 0 | 15 15 15 15 15 |

TABLE 2: The raw scores

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