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Reviewed work(s):

Source: *Language in Society*, Vol. 8, No. 1 (Apr., 1979), pp. 33-50

Published by: [Cambridge University Press](#)

Stable URL: <http://www.jstor.org/stable/4167038>

Accessed: 05/12/2011 08:35

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**Speech differences between women and men:
on the wrong track?¹**

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ABSTRACT

Over the last few years the methods and techniques used in sociolinguistics have aroused keen interest and have continually been improved. Yet the claims that have been made about differences of degree between the language used by women and that used by men are often based on research methods which seem to be anything but reliable. On the basis of a corpus of 587 utterances produced in buying a train ticket, an investigation was made of whether there is a statistically significant difference between women and men in certain aspects of their language use which have been mentioned in the literature: the number of words used to deal with a set task, diminutives, civilities, forms of language expressing insecurity (repetitions, hesitations, self-corrections, requests for information). In addition to the independent variable of sex of speaker, three other variables were introduced: sex of addressee, age of speaker, and time of ticket purchase (rush-hour or normal). The results of our investigation indicate that there are few significant differences between the language used by women and that used by men in this particular situation, with regard to the variables mentioned above. As a consequence, this investigation has demonstrated once again that intuitions should be considered critically. It is remarkable, however, that sex of addressee seems to affect almost all of the variables under consideration. Consequently, the results strongly suggest that anyone who wants to investigate language by means of interviews must take into account the fact that the kind

[1] This article interprets the results of an investigation carried out by the members of the seminar on 'Language and sex', held at the Institute of General Linguistics of the University of Amsterdam in 1976–7. Participating in the seminar were: Edith Brouwer, Lenny van der Hagen, Sjoerd Groenewold, Joke Huisman, Hilda Koopman, Margot Oehlen, Mariëtte Postema, Hanneke Steenstra and Mieke Wolterink. We are very grateful to Margreet van Ierland and Catherine Snow, who helped with the statistical analyses. Furthermore, we are indebted to Simon Dik, Dell Hymes, Frank Jansen, and Pieter Muysken for their helpful comments on an earlier draft of this paper. We thank the Nederlandse Spoorwegen (Dutch Railway Company), which generously allowed us to use its facilities for performing the investigation. Finally, we would like to express our gratitude to Patricia Muysken for polishing our English.

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of language used does not depend only on the informant, but just as much on the addressee. (Language and sex, investigation methods, influence of addressee on speaker.)

INTRODUCTION

The women's liberation movement of recent years has contributed to the fact that since 1970 the research done on language differences between women and men has increased in both quantity and quality. Many of us realize that ideas about 'how women are' and about the subordinate role women (have to) perform are reflected in language. It is important that these sex-dependent language differences be described. Knowledge of the differences can contribute to awakening. Awakening can contribute to change.

In various disciplines, with the help of different methods, and starting from differing conceptions of the problem, a number of aspects of sex differences in language have been studied. The differences described fall into two categories, which can occur on all linguistic levels (see also Bodine 1975: 131):

(a) Sex-based differences inherent in the *language system*. Every natural language has a language system in which two things can be distinguished: a set of basic elements (phonemes, morphemes, and words) and a set of combination rules. All native speakers have the same knowledge of the combination rules of their language. In some languages, however, people have to use a certain number of combination rules which are dependent on the sex of the language user/speaker. In French, for instance, a woman must say 'Je suis heureuse', while a man must say 'Je suis heureux'. These differences between women and men in the application of the combination rules of a language are *absolute*, i.e. exclusive for women or men.

(b) Sex-based differences in *language use*. These differences are concerned with the extent of the use of certain basic elements and/or combination rules. They are *differences of degree*: one of the sexes uses a certain basic element and/or combination rule more often than does the other.

Anthropologists have examined particularly language differences between the sexes which are inherent in the language system, while linguists have occupied themselves more with sex-based differences in speech (category (b)). In this article we will not look at differences inherent in the language system; our discussion will center on sex-based differences in speech and language behavior.

What value can be placed on what has been said in the literature depends on the research method used. It is striking that the greater part of the research on sex-based differences of degree in language has been done with research methods which seem to be of dubious reliability. We shall give here a survey of the methods most often applied.²

[2] For a more detailed description of sociolinguistic methods in general, see Labov (1972c).

(1) *Introspection*

With introspection, one makes judgments about speech differences between the sexes on the basis of one's own experiences and intuitions. The great success of transformational generative theory has led many linguists to apply the introspective method. However, describing a grammatical system is quite different from describing the spontaneous speech of the members of a language community, because in the latter case one has to account for sociolinguistic and dialect variation. Intuitions about grammaticality have often been disputed (Spencer 1973); intuitions about differences of degree in speech are still more doubtful (Greenbaum 1975). The introspective method carries the additional disadvantage that the intuitions of linguists are only valid for a limited circle of acquaintances. A last disadvantage is that one incurs the risk of not being able to distinguish between intuition and prejudice. Nevertheless, introspection has the advantage of allowing phenomena to be recognized which are less likely to be discovered by other kinds of methods, for example, phenomena that are infrequent.

Introspection is necessary as a basis for further research, but it is only possible to say well-founded things about differences of degree in spontaneous speech after research of a different kind has been done. Lakoff (1973, 1975) and Key (1975) are examples of research that relies a great deal upon introspection. Among the variables which they consider are: tag-questions, intonation patterns, civilities (i.e. polite forms), word choice and the use of questions, commands and statements. Dubois & Crouch (1975) and Timm (1976) have already pointed out shortcomings of Lakoff's approach.

(2) *Questionnaires*

The oral or written answering of questions about speech behavior by a number of informants is a fairly simple method. At the same time, this method holds many risks. In the first place, informants who are not linguistically trained often find it very difficult to answer questions about their own speech. A second problem is whether the answers indeed reflect the spontaneous speech of the informant, or merely the norm that the informant thinks she/he should meet. Examples of research based on questionnaires are Oliver & Rubin (1975), Bailey & Timm (1976), and Blocker (1976). In the first two articles the difference between women's and men's use of expletives is looked at; in the last one, the difference in their use of address forms is studied.

(3) *Elicitation*

In the questionnaire method, explicit questions are posed, while, in the elicitation method, one hides from the informant as much as possible the fact that the questions concern her/his language. The interviewer takes care that the questions cover subjects of interest to the informants (school, youth, danger of death). One

hopes to collect in that way language data which approximate as much as possible daily speech. Some disadvantages of this method are that one does not often get precisely those linguistic data which one wants to obtain, and that the interview situation is too unusual to the informants, because of the presence of interviewer and recorder, to elicit spontaneous speech (the observer's paradox, Labov (1972a) and Wolfson (1976)). Examples of studies of differences between women's and men's speech based on the elicitation method are Trudgill (1972), Shuy (1969) and Labov (1972b). The variables examined are mainly phonological ones; once or twice syntactic or morphologic phenomena are studied.

(4) *Observation*

Spontaneous speech can only be studied through use of the observation method: the informants are observed without their knowing it. One can observe merely by listening well, but such observation is very difficult to check. It is better to use a hidden tape recorder, although this can be objected to on ethical grounds. Besides, one encounters practical problems, such as the fact that it is often impossible to recover data about the informants other than their sex and approximate age. Furthermore, it is possible that another variable crosses the one being examined. The effect of this other variable can be neutralized by working with a large number of informants.

Another disadvantage of this method is the possibility of obtaining too few data about less frequent language phenomena to allow one to make 'strong' pronouncements. Examples of research relying on the observation method are Ruke-Dravina (1952), who studied the use of diminutives, and Zimmerman & West (1975), who considered the language behavior of women and men in conversation.

The results of research which employed the above-mentioned methods in our opinion are often not very sound, partly because, owing to the methods used, it was impossible to discover actual facts about differences of degree in speech, and partly because no statistical analyses took place. Quantitative analyses and statistical operations are necessary in order to be able to make strong statements about the significance of the speech differences found.

In the seminar 'Language and sex' there was general agreement – based on intuition and on the information found in the literature – that differences in speech and language behavior between women and men do occur in Dutch. We set out to subject a number of these intuitions to a quantitative analysis of a corpus of speech. The idea was brought up that women order a train ticket in a different way than men do. This speech event was recognized as a splendid opportunity for further study of sex-based differences in speech. It would also have the advantage of being a type of research that resembles Labov's fourth-floor study, about which Labov (1972b: 69) himself said: 'We see rapid and anonymous observations as the most important experimental method in a

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linguistic program which takes as its primary object the language used by ordinary people in their everyday affairs.'

The purchase of a train ticket in the Central Station in Amsterdam happens in the following way. The traveller enters the main hall and goes to one of the ticket windows. Sometimes there is a queue, especially in the rush-hour, but often a ticket can be ordered immediately. One has to talk into the microphone placed in a thick pane of glass that separates the traveller from the ticket seller. The traveller is the one who initiates the speech act. The ticket seller does not say anything before the traveller has spoken. A ticket can be ordered in different ways, for example:

- | | |
|--|--|
| (1) Traveller: <i>Retour Utrecht.</i> | 'Return ticket, Utrecht.' |
| (2) Traveller: <i>Mag ik van u een retour Utrecht, alstublieft?</i> | 'May I have a return ticket Utrecht from you, please?' |
| (3) Traveller: <i>Ik zou graag een eh, eh, retour, nee, enkele Utrecht willen.</i> | 'I would like to have a eh, eh, return ticket, no. one-way Utrecht.' |

The speech event and the factors of situation, addressee, setting, and topic are almost the same for all. Theoretically, we could get the same utterance from each informant. The pragmatic aspect – the function of the utterance – is the same for every informant, and the semantic aspect – the content of the message – offers but limited possibilities. In short, on the one hand the utterance could differ to only a slight extent at lexical, morphological, syntactic and semantic levels. On the other hand, there would be a place in the utterance for a number of optional speech forms which, according to the literature, are used more often by women than by men (e.g., hesitations, diminutives, civilities, etc.). In the ticket window situation the hypothesis could be tested, by means of the observation method, that women are less secure in their language behavior than are men. We would have the opportunity to study language aspects which until then had only been speculated about introspectively.

Removal of the above-mentioned disadvantage of the observation method, i.e. the difficulty of recovering sociological variables, could easily be achieved in this situation, since a great number of informants are readily available. As far as the possible ethical objections to using a hidden tape recorder are concerned, we felt that we could do this without being unscrupulous. After all, who makes intimate, private confessions to a ticket seller?

METHOD

Informants

Serving unwittingly as informants were the 309 women and 278 men who on the morning of our investigation bought a train ticket in the Central Station of

Amsterdam at one of the two ticket windows where our recording equipment was set up. Since the tape recorders and microphones were placed under cover and none of the travellers discovered them, we are quite sure that the informants were not aware that their utterances were being recorded.

Design

On the grounds of the results of a pilot study, and considering the differences in speech use among several groups mentioned in the literature, we felt that besides the factor of sex three other factors could influence the utterance used to buy a train ticket: age of speaker, sex of the addressee and time of the ticket purchase.

We introduced the independent variable of age because we thought that there might be differences within the group male speakers and within the group female speakers. We took into account sex of addressee and time of ticket purchase because we had the idea that both could affect the utterance used by the travellers.

(A) *Independent variables.* The independent variables were arranged in a $2 \times 3 \times 2 \times 2$ factorial design: *sex of speaker*: (1) female, (2) male; *age of speaker*: (1) under 35, (2) from 35 to 60/65, (3) 60/65 and older³; *sex of addressee*: (1) female, (2) male; *time of purchase*: (1) 8.00–9.00 (rush-hour) (2) 10.30–12.30 (normal hours).

(B) *Dependent variables.* We investigated only the utterance used to order each train ticket and any requests for information. Any further interaction between traveller and ticket seller was not taken into account. In (4) and (5) the part of the interaction which was studied is printed in italics.

- | | | |
|----------------|--|--|
| (4) Traveller: | <i>Een retour Utrecht.</i> | 'A return ticket, Utrecht.' |
| Ticket clerk: | Acht vijftig. | 'Eight fifty.' |
| Traveller: | <i>Weet u ook hoe laat hij vertrekt?</i> | 'Do you know when it leaves?' |
| Ticket clerk: | Tien voor negen. | 'Ten to nine.' |
| (5) Traveller: | <i>Mag ik een retourtje naar Utrecht en kunt u me ook zeggen hoeveel het kost en waar het perron is?</i> | 'May I have a return ticket [dim] to Utrecht and can you tell me how much it costs and where the platform is?' |
| Ticket-clerk: | Acht vijftig, perron één. | 'Eight fifty, platform one.' |
| Traveller: | Dank u wel. | 'Thank you very much.' |

To get one's ticket, it is sufficient in modern Dutch to use an utterance containing

[3] The age limit for the third age group, older than 60/65, may look rather strange. However, this division is based on the system for reduced rates of the Dutch Railway Company. Women can get a reduction when they are 60, men only when they are 65. We adopted this discrimination in our survey, since we had the idea that this five-year margin would not make much difference and because this would make it unnecessary to guess at one of the two points on our age scale.

merely the kind of ticket and the name of your destination, for example: *Retour Utrecht* ('Return ticket, Utrecht').⁴

The dependent variables can be divided into two categories:

(a) The variables which, according to the literature, would be used differently by women and men: *number of words*, *diminutives*, *civilities* or *polite forms*, *requests for information*, *hesitations*, *repetitions*, and *self-corrections*. According to Swacker's (1975) quantitative investigation, women use less words than men to deal with a set task. Ruke-Dravina (1952) found that in Lettish women use more diminutives than men, and predicts that this is true for other languages. Lakoff's (1973, 1975) intuition is that civilities are used more frequently by women than by men. The supposed insecurity of women (Lakoff, Key) might find expression, in our opinion, in a more frequent use of hesitations, repetitions, self-corrections and requests for information by women.

The dependent variables mentioned above are optional. This holds true to a lesser extent for *number of words*, since someone who buys a ticket falling into one of the categories of special reduced rates needs more words to make this known.

In Dutch, every countable noun can be made a *diminutive* by the addition of the suffix *-je* or one of its phonological variants, for example *-tje* after /l/ and /r/. The use of diminutives is so frequent in modern Dutch that in several words the diminutive form is unmarked: the word with the diminutive suffix has lost the diminutive meaning/function. This holds particularly for *kaartje* (ticket). In this investigation we counted only the diminutives which could also have been non-diminutives in the situation being studied: *retourtje* (return ticket), *enkeltje* (one-way). We regarded as *civilities* such optional phrases as: *alstublieft* (please), *graag* (gladly), *mag ik van u hebben* (may I have from you), *kunt u me geven* (can you give me), *zou ik mogen hebben* (might I be able to have). We counted as a *hesitation* the use of 'eh' in an utterance, and as a *repetition* the whole or partial reiteration of the utterance. The whole or partial correction of the utterance was considered a *self-correction*; inquiries about time of departure, departure platform and fare were classified as *requests for information*. We are aware of the fact that asking for information is not a purely linguistic variable, but believe that it can be an indication of insecurity.

(b) We also considered certain co-variables which could act upon and explain the use of speech forms mentioned under (a):

(1) The use of *diminutives* might be correlated with *kind of ticket* and/or *travel distance*.

(2) The use of *civilities* might be influenced by the *number of tickets* ordered, the *class* (first or second) one travels and/or whether a *ticket with a special reduced rate* is ordered. The *number of words* is related to the points mentioned under (2).

[4] The use of civilities is less necessary in Dutch than in English. It is not at all impolite to order a train ticket without using any polite forms.

Procedure

Collecting the data. The taping took place on the morning of a working day in November 1976. Tape recorders (Uhers 4000 Report IC) were placed under cover behind two ticket windows. At one of these worked a young female ticket seller and at the other, a young male one. The microphones of the tape recorders were concealed in the microphones in the pane of glass separating traveller and ticket seller, into which the traveller must speak, for otherwise the ticket seller cannot hear her/his order. Two students were stationed at each ticket window. One stood before the window on the traveller's side, while the other stood behind the window on the ticket seller's side. Both students wrote down independently of each other the sex and age of each informant.

Determining the sex of the speaker did not yield any difficulties – with the exception of one case. The division into the different age groups (up to 35, and 35 to 60/65) was done by estimation. Some problem cases were discussed afterwards by the two students. Classification of age group (3) (60/65 and older) did not give any problems, since most persons older than 60/65 show a special card in order to get a sort of 'senior citizen's' reduced rate. The recordings took place from 0800 to 0900 (rush-hour) and from 1030 to 1230 (normal hours).

It was our intention to record the utterances of 600 people, spread equally over all the levels of the four independent variables. However, it can be seen in Table 1 that not all of our cells are evenly filled. This is partly due to the nature of our investigation, partly to our leaving out of consideration all non-native speakers of Dutch.

Processing the data. All utterances were transcribed from the tapes and the

TABLE 1.

Sex of addressee				
Sex of speaker	Time of purchase	Age	Female (N = 294)	Male (N = 293)
Female (N = 309)	Rush-hour (N = 139)	0-35	29	40
		35-60	27	15
		60+	16	12
	Normal hours (N = 170)	0-35	21	38
		35-60	27	34
		60+	38	12
Male (N = 278)	Rush-hour (N = 143)	0-35	41	39
		35-65	23	28
		65+	5	7
	Normal hours (N = 135)	0-35	34	30
		35-65	17	24
		65+	16	14

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independent variables were noted. Next, codes were determined for all the dependent variables. All utterances were encoded and entered on a scoreform, together with the independent variables belonging to them. These codes were subsequently transferred to punch cards and fed to the computer for processing according to programs of the Statistical Package for the Social Sciences (SPSS).

RESULTS

The dependent variables which could be used in different ways by women and by men:

The results for the independent variable *sex of speaker* are presented in Table 2, in absolute numbers and percentages for each dependent variable. Indicated for our sample are: how many women used a certain dependent variable and what percentage this is of all the women; how many men used a certain dependent variable and what percentage this is of all the men. It seems justified from Table 2 to consider in further processing only the factors *number of words*, *diminutives*, *civilities*, *hesitations*, and *requests for information*. Repetitions and self-corrections seem to occur too seldom to make further calculations involving them worthwhile. A $2 \times 2 \times 2 \times 3$ (sex of speaker \times sex of ticket seller \times time of purchase \times age) analysis of variance was conducted to test the significance of the main effects and their interactions for all the dependent variables which were frequent enough to warrant further processing. The average number of words, and the average number of occurrences of diminutives, civilities, requests for information, and hesitations are presented per cell in Tables 3, 4, 5, 6 and 7, respectively.

Regarding the *number of words*, a significant main effect was revealed for: (a) sex of addressee ($p \leq 0.01$), and (b) age ($p \leq 0.01$). The average number of words spoken to the female ticket seller lies 0.34 below the mean of the entire population (3.51) and the average number of words spoken to the male ticket seller lies 0.32 above it. The mean of the youngest age group lies 0.33 below that of the entire population, that of the middle age group lies 0.06 above it, and that of the oldest, 0.67 above. No statistically significant interaction was found for the number of words.

With regard to *diminutives* a significant main effect was found for: (a) sex of addressee ($p \leq 0.01$), and (b) age ($p \leq 0.01$). The average number of diminutives spoken to the female ticket seller lies 0.04 below the mean of the entire population (0.12) and the average number of diminutives spoken to the male ticket seller lies 0.04 above it. The mean of the youngest age group was 0.07 above the mean of the entire population; those of the middle and oldest age groups 0.06 below it. Furthermore, an interaction was found for the use of diminutives between: (a) sex of addressee, and age ($p \leq 0.05$), and (b) sex of addressee, and time of purchase ($p \leq 0.05$). The most diminutives were spoken by the youngest age group to the male ticket seller. Outside the rush-hour the most diminutives were uttered to the male ticket seller.

TABLE 2.

	Number of words	Diminutives	Civilities	Requests for information	Hesitations	Repetitions	Self- corrections
Women	309 (100%)	36 (12%)	42 (14%)	49 (15%)	19 (6%)	5 (2%)	8 (3%)
Men	278 (100%)	33 (12%)	49 (18%)	12 (4%)	9 (3%)	9 (3%)	5 (2%)

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TABLE 3. *Mean number of words per cell (mean of entire population: 3.5)*

Sex of addressee**				
Sex of speaker	Time of purchase	Age**	Female (3.17)	Male (3.83)
Female (3.7)	Rush-hour	0-35	2.89	3.10
		35-60	3.00	3.93
		60+	5.00	5.50
	Normal hours	0-35	2.76	4.13
		35-60	3.03	4.50
		60+	3.55	4.59
Male (3.3)	Rush-hour	0-35	2.93	3.13
		35-65	3.39	3.66
		65+	3.20	4.85
	Normal hours	0-35	3.18	3.20
		35-65	2.58	4.08
		65+	3.31	3.71

** Significant main effect, $p \leq 0.01$.

TABLE 4. *Mean number of diminutives per cell (mean of entire population: 0.12)*

Sex of addressee**				
Sex of speaker	Time of purchase	Age**	Female (0.08)	Male (0.16)
Female (0.12)	Rush-hour	0-35	0.17	0.25
		35-60	0.07	0.06
		60+	0.00	0.08
	Normal hours	0-35	0.09	0.28
		35-60	0.00	0.05
		60+	0.07	0.09
Male (0.12)	Rush-hour	0-35	0.13	0.17
		35-65	0.13	0.03
		65+	0.00	0.14
	Normal hours	0-35	0.03	0.33
		35-65	0.05	0.08
		65+	0.00	0.07

** Significant main effect, $p \leq 0.01$.

TABLE 5. *Mean number of civilities per cell (mean of entire population: 0.17)*

Sex of addressee**				
Sex of speaker	Time of purchase	Age	Female (0.12)	Male (0.21)
Female (0.15)	Rush-hour	0-35	0.17	0.22
		35-60	0.07	0.20
		60+	0.06	0.41
	Normal hours	0-35	0.09	0.10
		35-60	0.07	0.20
		60+	0.11	0.18
Male (0.19)	Rush-hour	0-35	0.21	0.20
		35-65	0.17	0.22
		65+	0.00	0.57
	Normal hours	0-35	0.15	0.20
		35-65	0.05	0.26
		65+	0.06	0.21

** Significant main effect, $p \leq 0.01$.

TABLE 6. *Mean number of requests for information per cell (mean of entire population: 0.10)*

Sex of addressee				
Sex of speaker**	Time of purchase	Age**	Female (0.08)	Male (0.12)
Female (0.16)	Rush-hour	0-35	0.06	0.12
		35-60	0.03	0.33
		60+	0.31	0.25
	Normal hours	0-35	0.00	0.02
		35-60	0.22	0.44
		60+	0.14	0.09
Male (0.04)	Rush-hour	0-35	0.02	0.00
		35-65	0.13	0.11
		65+	0.00	0.00
	Normal hours	0-35	0.03	0.00
		35-65	0.00	0.04
		65+	0.06	0.14

** Significant main effect, $p \leq 0.01$.

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TABLE 7. Mean number of hesitations per cell (mean of entire population: 0.06)

Sex of addressee**				
Sex of speaker*	Time of purchase	Age	Female (0.02)	Male (0.10)
Female (0.08)	Rush-hour	0-35	0.06	0.07
		35-60	0.00	0.33
		60+	0.12	0.08
	Normal hours	0-35	0.00	0.15
		35-60	0.00	0.17
		60+	0.00	0.04
Male (0.03)	Rush-hour	0-35	0.00	0.07
		35-65	0.08	0.03
		65+	0.00	0.00
	Normal hours	0-35	0.00	0.10
		35-65	0.00	0.04
		65+	0.00	0.00

* Significant main effect, $p \leq 0.05$.

** Significant main effect, $p \leq 0.01$.

For *civilities* a significant main effect was only found for sex of ticket seller ($p \leq 0.01$). The average number of civilities used to the male ticket seller is 0.04 more than the entire population's mean (0.17); the average number of civilities used to the female ticket seller is 0.05 less. An interaction was also revealed for civilities between age and time of purchase ($p \leq 0.05$). The oldest age group uses the most civilities in the rush-hour.

With respect to *requests for information* a significant main effect was found for: (a) sex of speaker ($p \leq 0.01$), and (b) age ($p \leq 0.01$). The average number of requests for information uttered by women lies 0.06 above the population's mean (0.10); the average number of requests for information uttered by men lies 0.06 below it. The average of the youngest age group lies 0.07 below the mean of the entire population, that of the middle age group 0.17 above it, and that of the oldest 0.04 above it. Moreover, an interaction for requests for information was found between sex of ticket seller and age ($p \leq 0.05$). The middle age group made the most inquiries of the male ticket seller.

With respect to *hesitations* a significant main effect was revealed for: (a) sex of speaker ($p \leq 0.05$), and (b) sex of addressee ($p \leq 0.01$). The average number of hesitations used by women lies 0.02 above the mean of the entire population (0.06) and the average number of hesitations used by men lies 0.03 under it. In speech directed to the female ticket seller, the average number of hesitations occurring is 0.04 less than the population's mean; in speech directed to the male

ticket seller this average is 0.04 more than the population's mean. For hesitations no statistically significant interaction was found.

The co-variables

Chi-square tests were performed to investigate whether or not a significant correlation between co-variables and dependent variables existed. No significant correlation was found.

DISCUSSION

In this section, we shall consider first the results relating to the independent variable of sex. We will see whether or not our hypothesis, that women and men request a train ticket in different ways, is verified by the results. Next we will pay attention to the results concerning the independent variable of sex of addressee (here, of ticket seller). It was the purpose of our investigation to test with the observation method some statements about speech differences between women and men which were based on intuition: the sex of the *speaker* was central to our survey. However, on analyzing the results, we discovered that the (sex of) addressee significantly determined the utterance used by the speakers. Neither the two-way interactions mentioned in the 'Results' section nor the significant main effects for the independent variable of age will be explored further, since these interactions and main effects do not lead to a clearer insight into the results obtained for the independent variables of sex of speaker and sex of addressee.

Sex of speaker

Most of the differences between the language use of women and that of men as mentioned in the literature and examined by us, are in fact not confirmed by the results of our investigation. No significant relation exists between sex of speaker and the number of words used, the use of diminutives and the use of civilities. The number of repetitions and self-corrections was too small to yield useful statistical results. Several possible explanations can be found for the fact that the results fall short of our expectations:

(1) The speech event 'requesting a ticket' is so simple that any insecurity does not become manifest in the speech act itself. The code concerned is a relatively fixed one which can be thought of beforehand.

(2) In the *situation* under investigation there is no difference in language behavior between the sexes.

(3) In Dutch, women and men have the same language behavior *regardless of situation*.

It is unclear which of these explanations has the greatest validity. The first two are closely interconnected and we believe that these are more probable than (3). We had purposely selected for our survey a situation in which the speech act allowed for only limited variation in the speech forms used. Owing to this design,

we were able to verify whether the linguistic differences can rightly be attributed to the variable of sex of speaker.

Needless to say, our findings do not imply that linguistic differences based on sex will not occur in other situations. While investigating such linguistic differences, it is of great importance to realize that situation and speech act/topic do affect language use.

Only for the dependent variables of hesitations (a linguistic variable) and requests for information (a non-linguistic variable) did there appear to be a significant main effect for sex of speaker. Women hesitate more frequently than men and are more likely to request information. These results tend to affirm the hypothesis that women are more insecure than men, so that our findings do agree with one of the assumptions made in the literature. It may be worthwhile, however, to notice the rather low level of significance ($p = 0.04$) for hesitations. Moreover, the raw data of repetitions and self-corrections (Table 2), the other variables indicating insecurity, do not point to differences between the language behavior of women and that of men.

A possible explanation for the larger number of requests for information made by women may be that women have less experience of travelling. Those who, in spite of our findings, prefer to remain convinced believers in insecure female language behavior, may suggest that men would rather risk missing their train than humble themselves to ask for information. The results of our investigation of speech differences between the sexes are very different from what intuition had led us to expect. It appears that an intuitive approach has evident shortcomings. Our results confirm the importance of our statement 'Introspection is necessary as a basis for further research, but it is only possible to say well-founded thing about differences of degree in spontaneous speech after research of a different kind has been done'. Owing to our research design, we have been able to check and reject intuitions about linguistic sex differences by using the observation method, which can be considered the most reliable one.

Sex of addressee

Our results pointed out that the addressee was an important factor in determining the number of words used, the use of diminutives, civilities and hesitations. We discovered a significant main effect ($p \leq 0.01$) for sex of ticket seller on these four dependent variables with regard to the entire population. All of the kinds of utterances that women are characteristically supposed to use more often than men – utterances indicating insecurity and politeness – were used more often by *both women and men* when speaking to the *male ticket seller*. Possible explanations for these results might be:

(1) In this kind of service situation women are most often responsible for the direct relation with the customer (cf. the service in shops, tourist agencies). It is common to be served by women; a man in these functions is an exception.

(2) The male ticket seller had only been in this job for one month, and seemed to be more interested in and kinder to the travellers. This may have led to their being more polite to him. Nevertheless, it is highly questionable whether the *attitude* of the person sitting behind the ticket window does have any influence on the travellers' behavior, because of the specific nature of the activity involved: a thick glass pane separates the traveller from the ticket seller who only looks at the traveller and waits for a request to be made.

We realize that we cannot really answer the question of whether sex or attitude of the addressee, or both, were decisive for the form of the language used in requesting a ticket. For we involved only one female and one male ticket clerk in our investigation, since it was our main purpose to trace speech differences between women and men speakers. To be sure that no other uncontrolled variables cross the variable *sex of addressee*, one should work with a larger number of female and male addressees. In any case, our results indicate strongly that addressee is an important variable in studying language behavior. Which utterance one uses is highly dependent on the person one is speaking to.

This is hardly a new proposition for pragmaticians and those who study child language. Wolfson (1976) pointed to the fact that sex, age, attitude and/or dialect of the interviewer may affect the verbal behavior of the informant. But most of the sociolinguists so far have cared little about the part played by the addressee in their investigations. This is the more remarkable as sociologists have long ago demonstrated the great influence that the attitude, sex, and age of the interviewer have on the responses of the informant (see, among others, Benney, Riesman & Star (1956)). Neither is this fact unknown to psycholinguists. Greenbaum & Quirk (1970) conclude that significantly different results have been found when the same language experiments were carried out by a linguist and by a psychologist; in the first case the informants focussed their attention more on the linguistic side of the test, in the second case on the psychological side. Still, relatively few inquiries have been made into the effect of the addressee on the speaker's language. For several languages the degree to which the addressee affects the choice of address forms has been explored (Giles & Powesland 1975: 144). A number of bilinguals have been observed in order to find out which language or mixture of languages they use to which person (Rubin 1963; Giles, Taylor & Bourhis 1973). Giles (1973) has shown that a speaker in the presence of a higher status interlocutor standardizes both his pronunciation patterns and his lexico-grammatical usage. So far, sociolinguists have not acted upon the findings of Giles. With the exception of Labov (1972a: 209), detailed descriptions of the interviewers have never been given. Many research reports do not even mention whether a particular investigation was carried out by one interviewer or by several.

In our ticket window situation the addressee obviously plays a prominent part in the choice of the utterance made by the travellers. It is plausible that in different kinds of situations the addressee plays a still more important role. We

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believe that, following Giles (1973), investigation should be made into what particular qualities of the interviewer (as addressee) cause what particular reactions on the part of the informant. In any case, our findings point to the great importance of considering variables of the sex, social class, age, attitude, etc. of the addressee in sociolinguistic research. Sociolinguists must start from the principle that the selection of the interviewer needs as much attention as the selection of the informants, and that both need a similarly detailed description in the research report (although this may be a thorny matter when the interviewer and the author of the paper are one and the same person).

Statements about linguistic differences of degree between the sexes, which are based on the introspection method, pose a challenge for further investigation. The method has its uses as well as some evident shortcomings. The results obtained by the observation method prove that the fact that the intuitions of several linguists agree does not make these intuitions more reliable. They may serve as a valuable starting point, but only after putting them to the test of quantitative analysis is it possible to discover whether or not one is on the right track.

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