

Sociolinguistic aspects of new dialect forms: language change in progress in Tokyo*

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1. Scope of this study

Recent studies in sociolinguistics have opened a new field of research: the observation of linguistic changes in progress (Weinreich et al. 1968; Labov 1972; Peng 1976; Aitchison 1981; Francis 1983). Similar interest can be seen in at least two fields of linguistics which are closely related to sociolinguistics. One is the study of linguistic geography in which linguistic changes in the past are reconstructed through geographical distribution patterns. Linguistic geography in Japan came close to sociolinguistics by interviewing every member of the community (Grootaers 1967). The other field is the study of language standardization in which many sociolinguistic factors are statistically tested to assess degrees of influence on the standardization of Japanese dialects (Sibata 1975; Nomoto 1975).

These two fields are, however, not direct studies of language changes in progress. Dialectal changes observed in linguistic geography are changes in the past, and language standardization has been studied as a unique process peculiar to a modern society.

In this paper, direct observation of language changes in progress is attempted by studying 'new dialect forms' which were originally found in a sociolinguistic investigation of a modern dialect.

Language changes in progress have mainly been studied in phonetics (Labov 1966; Trudgill 1974) and grammar (Cheshire 1982) in Western sociolinguistics. But as for the Japanese language, there is only a little variation in the phonological system, because there are a smaller number of phonemes, constituting a stable phonological system. Changes from [-ŋ-] to [-g-], or [ʃi] to [si] are, for example, reported in present-day Japanese, but stylistic variation is not apparent in these phonetic changes.

Thus, mainly lexical and grammatical phenomena are treated in our study. By so doing, various kinds of language change are observable in our study because there are so many and diverse items in vocabulary and grammar compared with phonetics and phonology.

Our main concern is the 'new dialect forms', which are defined by three conditions (Inoue 1983a, 1983b):

- (1) having different forms from standard Japanese,
- (2) being more frequently used by younger people than by older people,
- (3) being more frequently used in informal daily conversation than in formal situations (that is, low in style).

In other words, the 'new dialect forms' are nonstandard forms spreading among younger people.

The new dialect forms are considered to be present-day manifestations of linguistic change in progress, the study of which will bring fruitful results in many areas of linguistics.

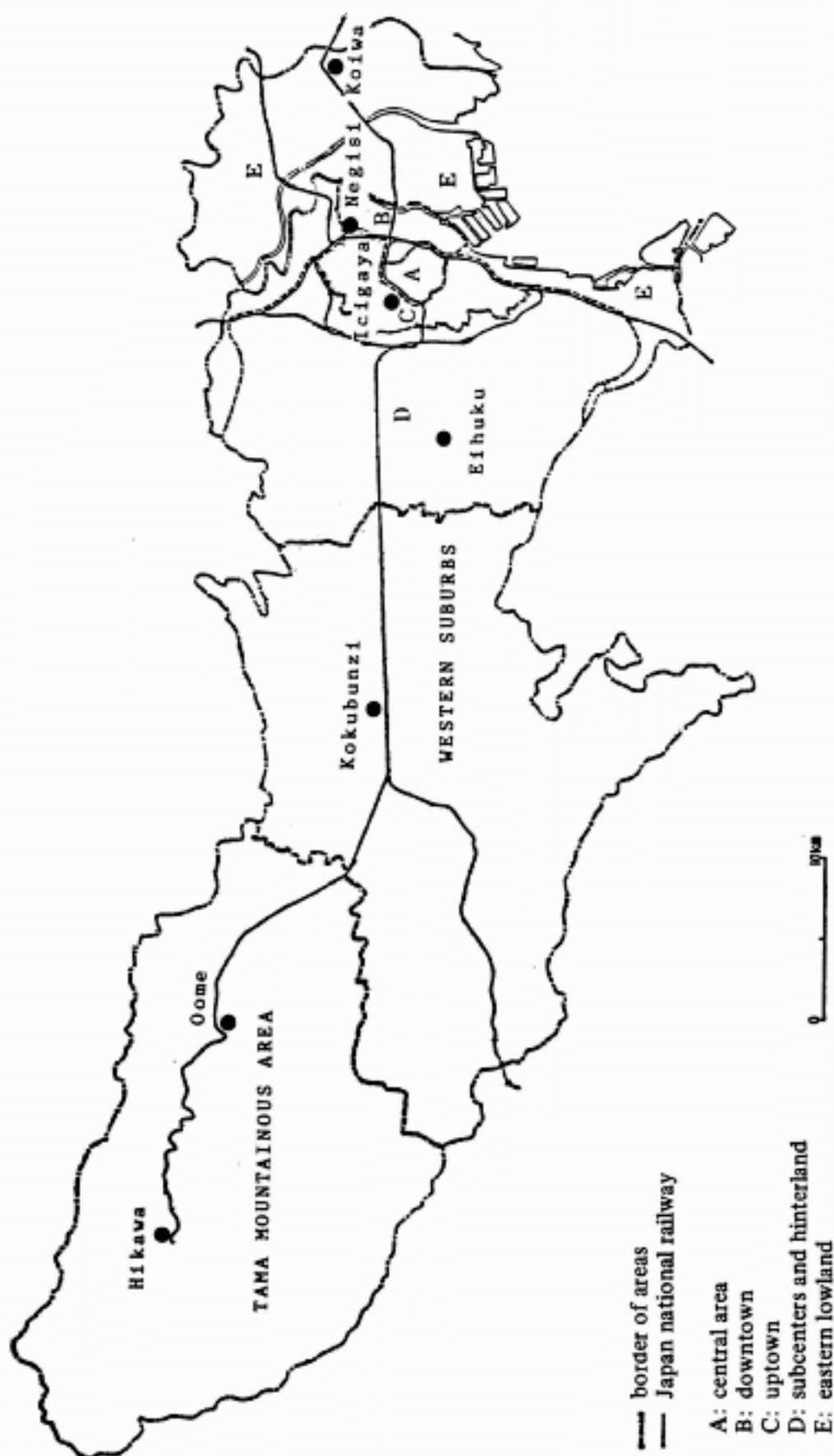
The new dialect forms were first identified as such through a large-scale field survey in northern Japan. A multivariate analysis was useful in classifying these newly born nonstandard forms. Similar phenomena were later found in almost every part of Japan. But no one seems to have perceived the importance of the newly born dialect forms until recently. It was not because the phenomena were not observed but because the phenomena were reported only sporadically and separately as mere exceptions.

Only the metropolitan area around Tokyo seemed to be unaffected by the new dialect forms, because it is a general belief that no dialect is used in Tokyo where the modern standard Japanese was created. But new dialect forms which can be regarded as forms of active language change should logically exist also in Tokyo. The so-called deterioration or decay of Japanese, or mistaken (broken) Japanese of youngsters in Tokyo seems to be related to the new dialect forms (Inoue 1983c).

Some field research has been made on this point in and around Tokyo. Differences of language according to generation and style are our main concern here. Some new methodologies were adopted, and a part of the result will be reported in this paper.

2. The methodology

Seven localities in Tokyo Metropolis were selected for investigation. Map 1 shows approximately how the seven localities represent major geographical areas of Tokyo Metropolis. The reasons why not just one but seven localities were selected are manifold. One purpose is not to isolate the language of Tokyo from dialects of the suburbs or of Japan as a whole, that is, to treat Tokyo on the same level as other dialectal areas. In the background of this treatment lies an attempt at the combination of sociolinguistics and linguistic geography (Chambers and Trudgill 1980). Another reason is a hope to find geographical differences inside metropolitan Tokyo among these seven



Map 1. Seven localities of investigation and division of Tokyo Metropolis

localities. The influence of the speech of the suburbs, a countertide from outside into the center of Tokyo, is in itself interesting. Geographical differences of new forms permit further theoretical reasoning: clear geographical differences may show that the diffusion has been made not by way of mass media but by way of face-to-face communication. A third reason can be added: in the speech of young people in and around Tokyo, dialectal differences are fading, so that the language distinction between the outside and the inside of Tokyo is not so decisive as in the past. Thus the equal treatment of the center and periphery of the Tokyo metropolitan area can be justified.

In each locality, younger people (aged from 10 to 28 years old), and older people (aged from 58 to 73 years old) were selected from the resident card lists of public offices by a random sampling method. A total of 795 (662 young and 133 old) informants were successfully interviewed in 1983 and early 1984 by interviewers including the present writer.

The questionnaire consists of many kinds of topics (usage of grammatical and lexical forms, psychological reactions, social behavior, and so on). In this paper, the part concerning the usage of 11 representative new forms will be treated.

3. General trend

An overall result of eleven representative words is shown in Figure 1, which shows percentages of the younger generation of all localities for four kinds of questions. The first column will be discussed later.

The second column shows answers for daily use of each word form. *Burikko*, which was created in 1981 from *kawaiko-burikko* [a girl who pretends to be a pretty girl] and propagated through mass media (mainly through TV), is the most popular. *Kattarui* [dull], *zyan* [isn't it], and *cyarinko* [bicycle] follow next, whereas *cigakatta* [was different] is still not fully accepted.

The third column is concerned with usage in an imaginary situation of appearing in a television interview. A standard Japanese expression *kataasitobi* (hopping on one foot) shows the highest percentage of usage. *Burikko*, which was originally diffused through TV, *waapuro* [an abbreviation from 'word processor', computerized typewriter for Japanese characters] and *kenken* [a new colloquial expression for 'hopping on one foot'] are used vigorously in this formal situation. The other forms, especially *zyan*, *tarui* [dull], *cyarinko*, and *peke* (the last in order) are practically prohibited in this situation.

The fourth column is concerned with the question about informants' impression if used by a television announcer. The standard form *kataasitobi* is accepted almost unanimously. *Waapuro*, *kenken*, and *burikko* seem to be quite acceptable, whereas a slanglike form *tarui* is shown to be unacceptable

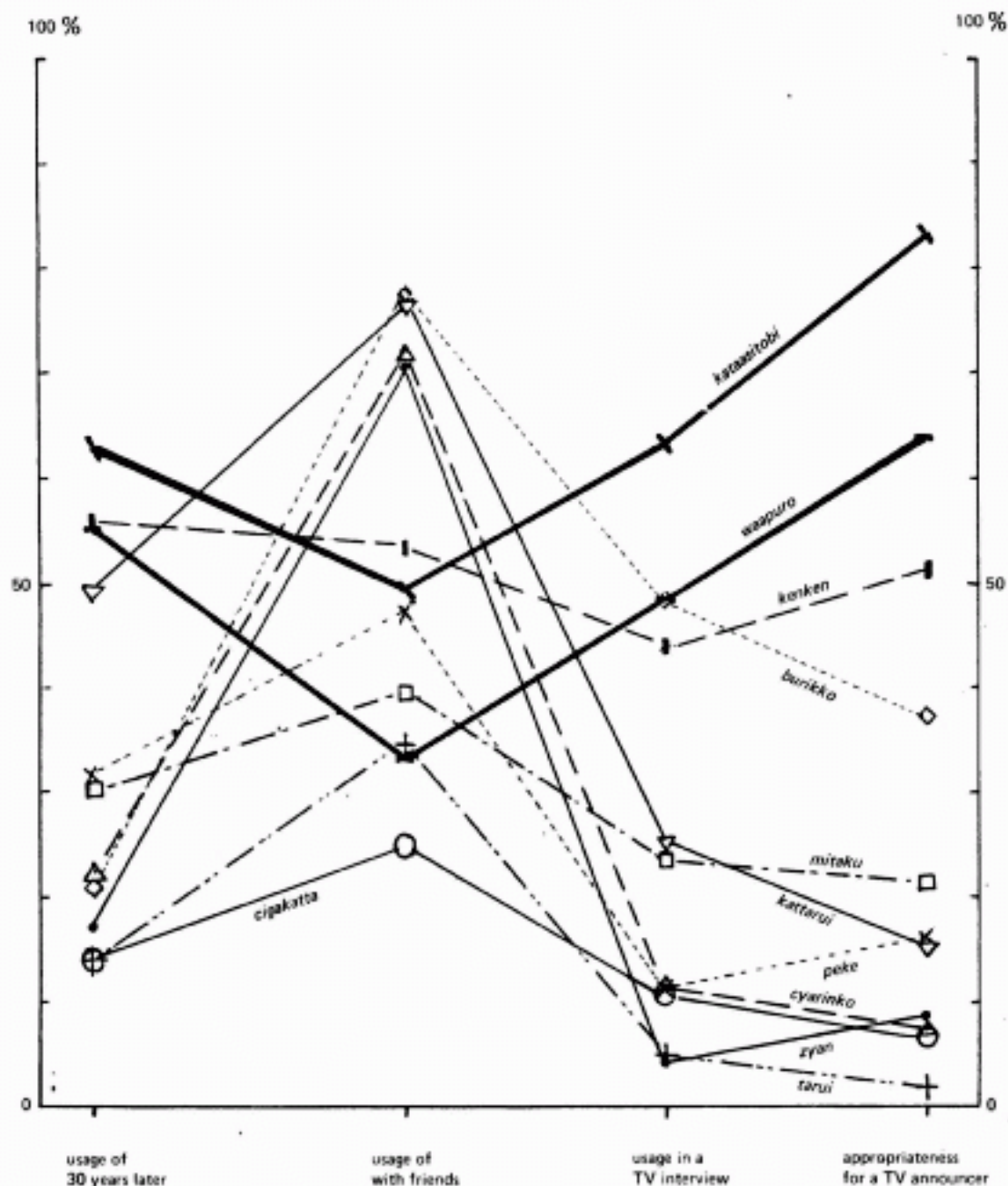


Figure 1. Usage of 11 forms in four situations (young informants as a whole)

for a TV announcer. *Cigakatta*, *cyarinko*, and *zyan* are also unacceptable. *Mitaku* [as if, something like], *katterui*, and *peke* can also be taken as improper forms for announcers. *Kataasitobi* and *waapuro* are special in that their usage increases in the two formal situations, whereas other forms decrease.

The first column shows informants' conjecture about their own usage of forms 30 years from now. The formal *kataasitobi*, the new word *waapuro*,

and the newly diffusing *kenken* and *kattarui* (which has long been used in surrounding dialects near Tokyo) are expected to live long by the users themselves. Other forms are expected to become unpopular.

When compared with the present usage of the second column, slopes of the lines for *burikko*, *cyarinko*, and *zyan* are steep. This steepness of lines is due to two reasons. One is the fast decline of the words themselves. This perhaps fits for *burikko*, which is a newly coined word in fashion. The other reason is the slanglike character of the expression, which is thought to be inappropriate for grownups. *Cyarinko*, originally slang among delinquent boys, is a case in point. But as for *zyan*, this form was introduced from central Japan through the western suburbs of Tokyo about a quarter of a century ago, and is now spreading all over Japan. So our diagnosis is that *zyan* will flourish also 30 years from now. Speakers thought that this form is perhaps adequate only for young people, and that they would quit using the form within 30 years. The slopes for *cigakatta* and *mitaku* (and also for *peke* and *tarui*) are not so steep. As for *mitaku* and *cigakatta*, the reason must be that these forms are grammatically motivated. The reason for *peke* and *tarui* would be the fact that they are not popular even now.

We can learn a lot more from the overall pattern of usage in Figure 1. But we can expect from these differences due to formality of expressions that the users of the standard Japanese forms are different from users of slang (as to age, sex, education, occupation, and so on), and also that age difference might be found even among the younger generation of our research.

4. Differences by age

In an ordinary approach to an analysis of this kind of extensive data, it is customary to make many cross-tabulations by various external (nonlinguistic) factors and to apply some kind of statistical test of validity (credibility). A multivariate analysis was first applied to our data, and an ordinary cross-tabulation was made later. But in this paper, the ordinary method will be shown first.

As a representative example, differences of usage in a daily situation by the ages of informants are shown in Figure 2, which means subdivision of the second column of Figure 1, adding the percentage of older generation. As we could get a sufficient number of young informants, the younger generation is divided into five age groups, which approximately correspond to primary school children (born in 1971-1973), junior high school pupils (1968-1970), senior high school students (1965-1967), mainly college or university students (1962-1964), and mainly workers (1955-1961).

The 11 words can be classified according to steepness of the slope, which

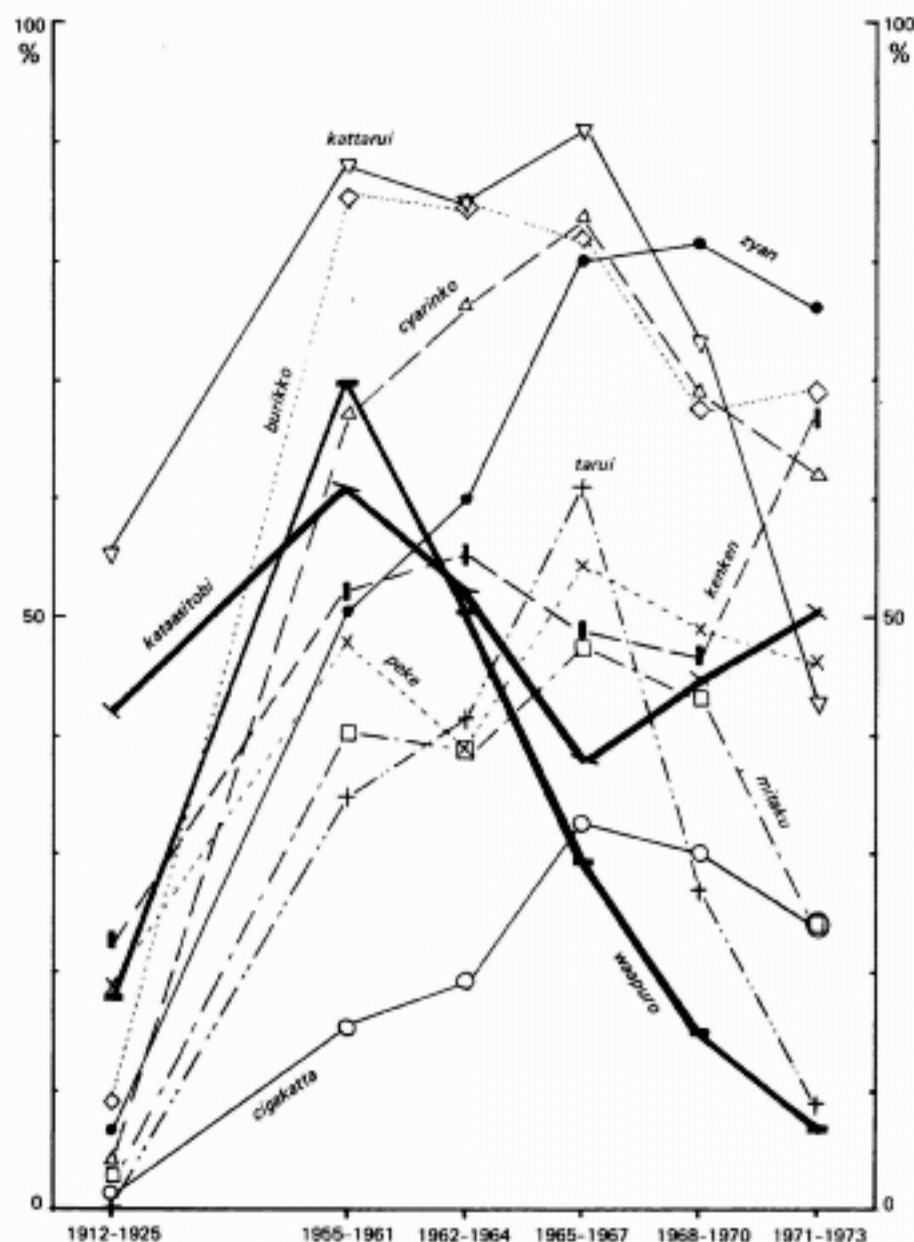


Figure 2. Age differences of usage in a daily situation (old and young informants, by six age groups).

partly reflects speed of diffusion, or according to the contour (peak) of the line (that is, differences of usage according to age), or again, according to the overall location (height) of the line (which reflects popularity of words). Most of these new forms show peaks in adolescent years. This is perhaps partly because the total volume of lexical items increases in these years, and also because these youngsters are required to use slanglike words if they want to communicate smoothly with other members.

Disparity between old and young generations is not so big for the following three items: *cigakatta* is not yet popular among the younger generation because it is still in the beginning stage of diffusion; *kataasitobi* is a formal expression which must have been used for a long time. *Kattarui* is a long-lived dialectal expression near Tokyo, which has been continuing to penetrate into Tokyo.

Differences between younger and older generations are especially large for *burikko*, *cyarinko*, and *waapuro*, all three newly coined and fast-spreading forms. *Waapuro* shows quite a different pattern in that the peak of usage is found in the age group of 1955-1961, which includes workers in companies. This is due to their daily chances of contact with situations in which the word is used. A similar mechanism works perhaps in slanglike words as *tarui*, *kattarui* [dull], and *cyarinko* [bicycle], of which preadolescent children are main users. One of the peaks of *kataasitobi* [hopping on one foot] is also found among people born in 1955-1961, perhaps due to formality of the form. (The peak of *kenken*, with the same meaning, lies in the youngest informants.) Thus the age differences in Figure 2 are quite probable and understandable.

5. Geographical differences

Differences among seven localities under investigation were also found. Only typical ones are to be shown in Figure 3. (Only data of younger informants are shown here, for simplification.) *Cigakatta* and *mitaku* are mainly used in the eastern (downtown) part of Tokyo. *Kattarui* is used in both the western (mountainous) and eastern parts of Tokyo. From maps of a nationwide mail survey made in 1983, these three forms appear to be used even by adults in the eastern part of Japan (especially immediately north of Tokyo). Thus it was clearly shown that some of the forms prevalent among young Tokyoites originated in the dialectal area, and also that some of these forms were first introduced into the downtown area.

We intentionally included forms which were originally used in dialects. Geographical differences are observed even in the Tokyo metropolitan area. These differences show that diffusion of these forms was made from man to man, not through mass media. But this kind of conjecture is not always right. The clear geographical difference of *waapuro* is significant in this sense. This is perhaps due to differences of interest of residents of the area which are also conditioned by major occupations of young residents, the word being a neologism related to the computerization of office work. Thus the geographical differences do not always reflect directly the routes of diffusion.

Other forms show little differences between the localities. We can expect

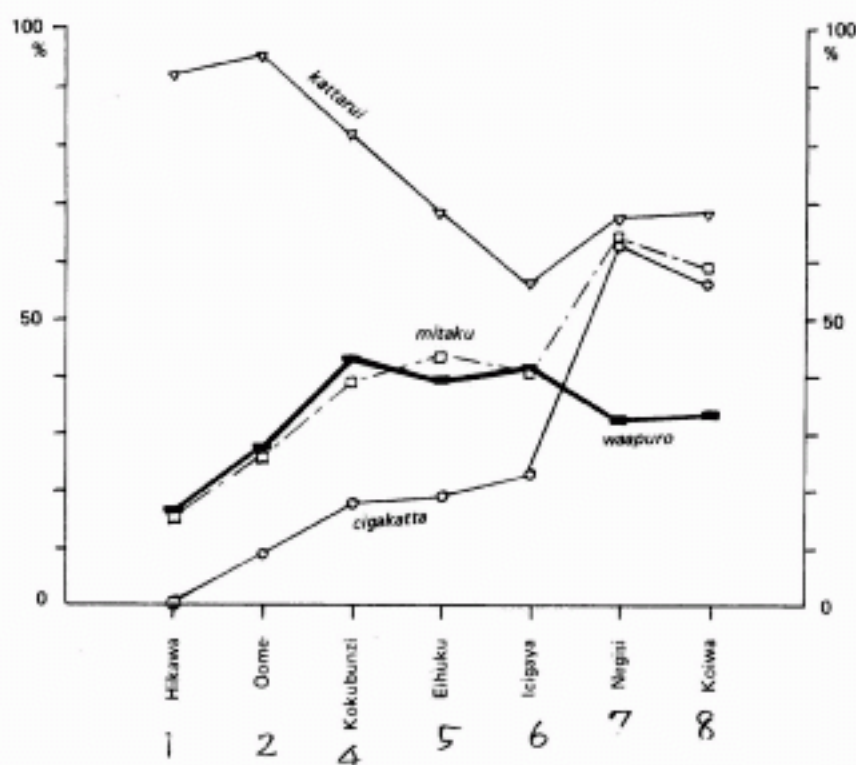


Figure 3. *Geographical differences of usage in a daily situation (young informants, by seven localities)*

that these forms were diffused through mass media or by some other routes which are not regulated by geographical factors.

These kinds of cross-tabulation can be made for educational history, profession, communicative behavior, and so on. And these can also be applied to other questions (usage in an imaginary TV interview, prospects about 30 years later, and so on). Our 11 forms can be characterized by each of many dozens of graphs. But it is not clear which would be the most essential factor, and it would be difficult to classify these 11 forms into groups, because the materials to be considered become too complicated.

6. A multivariate analysis: Hayashi 3

For general characterization of this kind of varied and extensive data, a multivariate analysis is helpful. But most multivariate analyses have been developed only for numerical values. Most linguistic data are, on the other hand, composed of answers of informants which are not continuous values like marks on examinations.

A statistical method called 'Hayashi's quantification theory type 3'

(Hayashi 3, hereafter) is applicable to nonnumerical data like public opinion research (Hayashi 1952, 1954). This method has produced excellent results in analyzing sociolinguistic data, classifying dialect distribution patterns, and so on.

By applying Hayashi 3 to our data of new linguistic forms, it would become possible to characterize 11 forms or three (or any number of) situations. By this method informants and answers are first arranged in columns and rows in the form of a matrix. The order of items (in the column or in the row) is interchanged, so that informants with similar answers come near and also so that answers showing similar patterns come near. The process can be shown as in Figure 4 for a small number of answers from a small number of informants. The optimum arrangement can be calculated by a large computer. Thus Hayashi 3 works as factor analysis which is used for continuous numerical values.

Item	Form Localities				Form Localities				Form Localities			
	A	B	C	D	A	B	C	D	A	B	C	D
1	1	0		0	7	0			7	0		
	2	0	0		2	0	0		2	0	0	
	3		0		3		0		3		0	
	4			0	→ 5	0	0	→	5		0	0
2	5	0	0		1	0		0	1		0	0
	6			0	4			0	4			0
	7	0			6			0	6			0

Figure 4. *A simplified model of Hayashi 3*

Only the informants of the younger generation are treated in Hayashi 3 because the patterns of answers are so different between generations (as seen in Figure 2), and the answers of the young are important for a classification of new words. One of the most effective results is shown in Figure 5.

The patterns of answers of 11 expressions in the three situations were discussed above (see Figure 1, usage of forms with friends, usage in an imaginary TV interview, and naturalness for an announcer of television). The horizontal axis of Figure 5 shows the numerical values of the first root which is the most effective in characterizing and grouping the items, and the vertical axis shows values of the second root which follows next in effectiveness. (The eigenvalues of RO^{**2} are 0.15, 0.12 and 0.10 for the first, second, and third roots.)

The answers in each of three situations show similar tendencies in that in the informal situation (with friends), the answers are always placed to the left-hand side, and in the formal situation (appropriateness for an announcer)

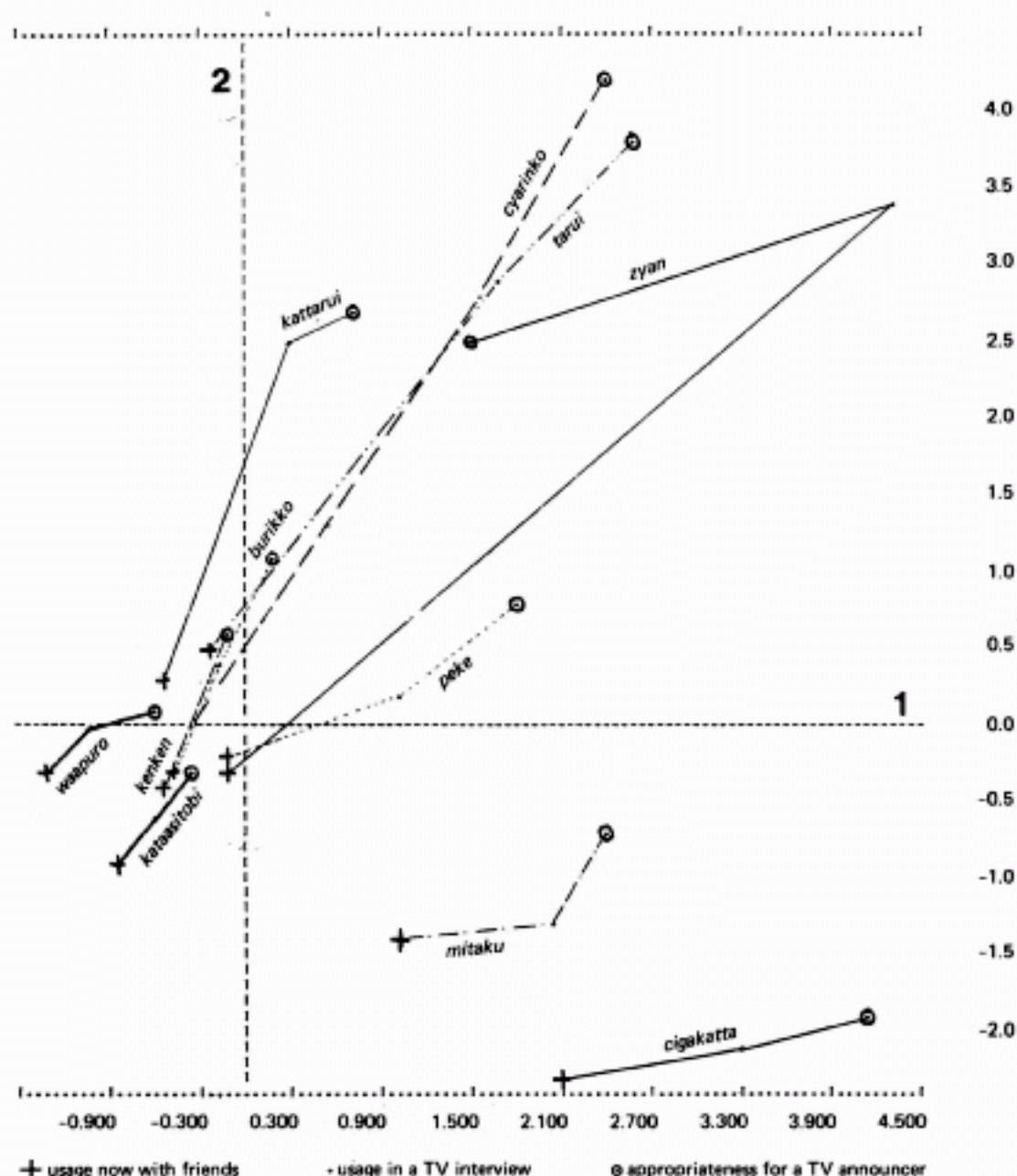


Figure 5. *Distribution of 11 forms as a result of Hayashi 3*

to the right-hand side (except for *zyan*). Thus the horizontal axis is interpreted as showing formality (of expressions and of situations). The fact that the vertical axis is also related to formality can be seen because these three situations are generally placed aslant from the lower left-hand side to the upper right-hand side.

The 11 forms themselves can also be characterized by the first axis. All three answers for *waapuro* and *kataasitobi* are plotted to the left-hand side, showing that the users of the forms are different from those of other forms.

The second root (vertical axis) also seems to classify the other words. *Cigakatta* and *mitaku* (both grammatically originated changes) are plotted to the lower half of the figure. The answers of four forms (*kattarui*, *cyarinko*, *tarui*, and *zyan*) in a formal situation are plotted in the upper half of the figure. The fact that these four forms are treated like slang is shown because their values for two formal situations are quite apart from the values of the daily situation.

The remaining forms, *kenken*, *burikko*, and *peke*, do not show significantly big values, having an intermediate character as to this kind of classification of words.

7. Characterization of informants

The informants also can be classified or characterized by Hayashi 3, by calculating how many of the above forms are used by each informant. But showing the values for hundreds of informants will bring us to no generalization, so that average values for some nonlinguistic (social) groups will be shown here. Figure 6 can be read in the same way as Figure 5.

The first root (horizontal axis) is related to educational history, which is naturally proportionate to the ages of the young informants. The vertical axis (the second root) is related to the localities of investigation, and also to the sex of the informants.

The fact that the second root in Figure 6 shows mainly geographical differences can also be seen by comparing Figure 3 and Figure 5. Distribution of expressions in both figures is fairly exactly correlated. (Forms prevalent in eastern parts of Tokyo are plotted in the bottom of Figure 5, a form prevalent in the western part is situated in the upper part of Figure 5, and so on.)

Figures 5 and 6 are closely related. Hence interrelationships between expressions and extralinguistic factors can be inferred by collating the two figures. Thus we can infer for example, that the formal expressions *kataasitobi* and *waapuro* are characteristically used by university students and by people in the western (high class) residential area of Tokyo. Grammatical change in *cigakatta* and *mitaku*, plotted in the lower side of the figures, is shown to be prevalent in the downtown area (as shown in Figure 3). Some slanglike words are, in contrast, prevalent in the suburbs of Tokyo and also among male informants, which is quite understandable, because manliness is often linked to rough words (Trudgill 1972).

The main pattern of Figure 5 is determined by formality and the geographical distribution of words. But still it is possible from Figure 5 to characterize these eleven representative forms in the other way.

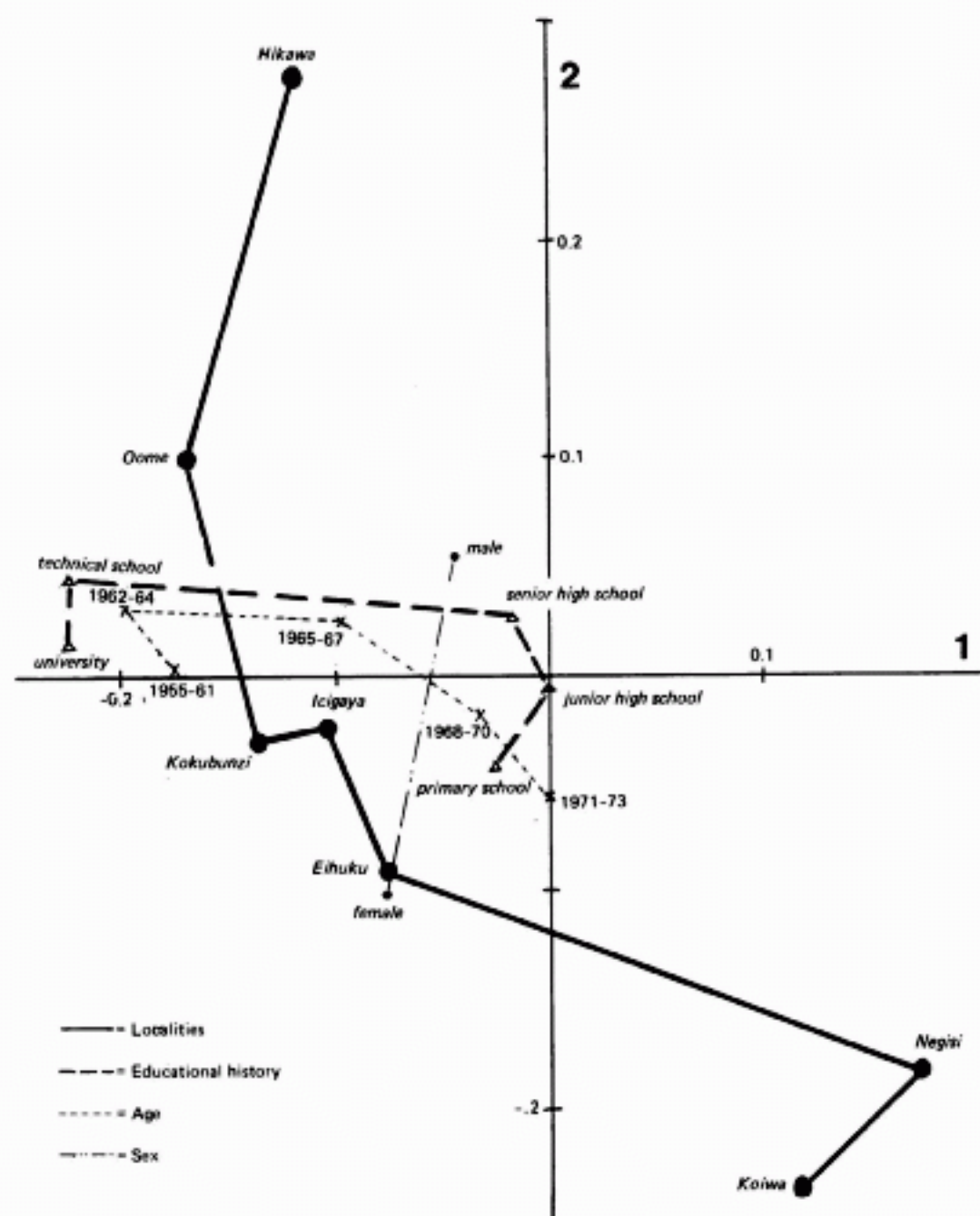


Figure 6. *Characterization of informants as a result of Hayashi 3*

8. Classification of expressions

In the terminology hitherto used in dialectology and sociolinguistics, the 11 forms can be classified as follows. A tentative classification is shown in Figure 7.

Diffusion	Style	
	formal	informal
fast	neologism <i>waapuro</i>	word in fashion <i>burikko</i>
slow	standardization <i>kataasitobi</i>	new dialect forms <i>kattarui</i> <i>tarui</i> <i>cyarinko</i> <i>zyan</i> <i>kenken</i> <i>peke</i> <i>mitaku</i> <i>cigakatta</i>

Figure 7. Classification of the new forms

Kataasitobi is a new and formal word, the standard Japanese form. *Waapuro* is a new word spreading swiftly, as a usual neologism in a modern society (which is coined because a new thing appeared.)

Burikko is a typical word in fashion, which was first used in a TV program. This form shows little differences according to formality.

Kenken is a new word which has long been used in western Japan and is now spreading into Tokyo, replacing original *cincin*. But this form shows very small differences of usage according to formality, perhaps because this word itself is mainly used by children who have not acquired enough competence in code switching.

Cigakatta and *mitaku* are spreading from outside into Tokyo. Both belong to a kind of grammatical change, and most of the users are not conscious that these are nonstandard forms. So we can call these 'new dialect forms' which are typical examples of 'change from below' (Labov 1972: 295).

By the way, it is suggestive that most of the users of *cigakatta* and *mitaku* report that they have heard these nonstandard forms on radio or television programs, so that the frequency of reported contact of the forms in mass media shows clear geographical differences! This is due to the fact that most Tokyoites believe that they speak standard Japanese, and that their speech naturally appears in the mass media. Thus reported experience cannot be fully trusted.

Kattarui, *tarui*, *cyarinko*, and *zyan* are new words which are felt to be slang. *Zyan* and *tarui* seem to have originated from dialects in central Japan, and *kattarui* from dialects in eastern Japan (The origin of *cyarinko* is unknown as yet.)

Peke meaning 'the last in order' was used first in the northern suburbs of Tokyo and is now coming into Tokyo. The result of Hayashi 3 shows that its pattern of usage is near slang, like *zyan* and so on. So we can call these five forms 'new slang', considering the consciousness of speakers, but it is difficult to separate them from 'new dialect forms', if we consider deeper mechanisms of change.

Thus it became possible to classify the 11 forms into some groups by making use of a result of multivariate analysis.

It also became possible to see overall relations between nonlinguistic conditions and the usage of the 11 forms, without presenting an enormous number of tables divided according to sex, educational history, and so on.

9. A problem of terminology

In other dialectal areas of Japan, 'new dialect forms' have now been amply found and interpreted as cases of language change in progress. Through examination of the 11 forms above, the same mechanism as 'new dialect forms' is ascertained to exist in this stronghold of the standard language.

It is characteristic of Tokyo that some linguistic change in progress is related to the so-called slang of youngsters, so that the boundary between the 'new dialect forms' and 'new slang' is vague. To add to this, it is not generally accepted that 'dialect' is used by Tokyoites. They primitively believe that their speech coincides with standard Japanese.

In this way, the place of the 'new dialect forms' does not seem established in Tokyo. The biggest difference between Tokyo and other dialectal areas as to the 'new dialect forms' lies in the speakers' consciousness, though the same mechanism of change is observed.

The name 'new slang' may seem more appropriate for this kind of language change in Tokyo. But because of rapid urbanization, boundaries between Tokyo and the suburbs (and also differences of speech of Tokyo and other dialects) are becoming vague, therefore distinction between the 'new dialect forms' and the 'new slang' is difficult in practice. The distinction is not fruitful for a unified study of language change in progress, so the terminology 'new dialect forms' should be used so as to include 'new slang' in studies of the metropolitan area.

We intentionally included words originally imported from dialects. In our survey, 75 other forms are included in the questionnaire, of which also many forms are observed to be coming into Tokyo as new dialect forms from various areas. As a result, the close interrelationship between the speech of Tokyo and other dialects is proved.

10. Language change

It goes without saying that the standardization of language is rapidly going on all over Japan (Neustupný 1978). Its rapidity is mainly due to factors peculiar to modern society (development of education, traffic, communication, etc.), but taken as a type of linguistic influence of a cultural or political center, this mechanism of centralization has been working through the history of language. Standardization is a modern reflex of unificatory movement of language.

Dialects, on the other hand, reflect the process of diversification of language. The 'new dialect forms' exemplify, thus, the eternal process of mutual differentiation of language. Hence the 'new dialect forms' can serve as a laboratory for historical linguistics. The saussurean dichotomy between synchrony and diachrony should be reconsidered in this sense.

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Note

- * The fieldwork was done with the support of the Scientific Study Fund (Standardization of Language) of the Ministry of Education. Students at Tokyo University of Foreign Studies worked as interviewers. Suggestions by coworker Tsunao Ogino have been helpful. Basic calculation was done with a program package GLAPS (Generalized Linguistic Atlas Printing System) developed by Ogino, and calculation of Hayashi 3 was done by PPSS2 developed by Hitachi Co. Ltd.

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