

control of the subject. Furthermore, phonological systems show the highest degree of internal structure of all linguistic systems, so that a single social process may be accompanied by correlated shifts of many phonological indexes.

The examples to be cited below are drawn from a study of the social stratification of English in New York City, and particularly a linguistic survey of the Lower East Side.² This survey was based upon a primary survey of social attitudes of Lower East Side residents, carried out by Mobilization for Youth in 1961.³ The original sample of the population of 100,000 consisted of 988 adult subjects. Our target sample was 195 of these respondents, representing about 33,000 native English speakers who had not moved within the previous two years. Through the assistance of Mobilization for Youth, and the New York School of Social Work, we had available a large body of information on the social characteristics of the informants, and we were able to concentrate entirely on their linguistic behavior in this secondary survey. Eighty-one per cent of the target sample was reached in the investigation of language on the Lower East Side.

New York City presents some exceptionally difficult problems for the study of linguistic systems: New Yorkers show a remarkable range of stylistic variation, as well as social variation, to such an extent that earlier investigators failed to find any pattern, and attributed many variables to pure chance.⁴ To study social variation, it was first necessary to define and isolate a range of contextual styles within the linguistic interview. The context of the formal interview does not ordinarily elicit casual or spontaneous speech; the methods which were developed to overcome this limitation were crucial to the success of the investigation. The fact that we did succeed in defining and eliciting casual conversation is

² A complete report on this survey is given in "The Social Stratification of English in New York City", my Columbia University dissertation, 1964. The development of phonological indexes, and correlation with a complex set of social variables, represent continuations of techniques first developed in "The Social Motivation of a Sound Change", *Word*, 19 (1963), 273-309, which dealt with linguistic changes on the island of Martha's Vineyard, Massachusetts.

³ Details on the sampling procedures and other methods utilized in this survey are provided in *A Proposal for the Prevention and Control of Delinquency by Expanding Opportunities* (New York, N.Y., Mobilization for Youth, Inc., 214 East Second St., 1961).

⁴ "The pronunciation of a very large number of New Yorkers exhibits a pattern in these words that might most accurately be described as the complete absence of any pattern. Such speakers sometimes pronounce /r/ before a consonant or a pause and sometimes omit it, in a thoroughly haphazard fashion. . . . The speaker hears both types of pronunciation about him all the time, both seem almost equally natural to him, and it is a matter of pure chance which one comes to his lips." A. F. Hubbell, *The Pronunciation of English in New York City* (New York, Columbia University Press, 1950), 48.

William Labov

THE REFLECTION OF SOCIAL PROCESSES IN LINGUISTIC STRUCTURES

The procedures of descriptive linguistics are based upon the conception of language as a structured set of social norms.¹ It has been useful in the past to consider these norms as invariants, shared by all members of the speech community. However, closer studies of the social context in which language is used show that many elements of linguistic structure are involved in systematic variation which reflects both temporal change and extra-linguistic social processes. The following discussion presents some results of these studies which bring linguistics into close contact with survey methodology and sociological theory.

As a form of social behavior, language is naturally of interest to the sociologist. But language may have a special utility for the sociologist as a sensitive index of many other social processes. Variation in linguistic behavior does not in itself exert a powerful influence on social development, nor does it affect drastically the life chances of the individual; on the contrary, the shape of linguistic behavior changes rapidly as the speaker's social position changes. This malleability of language underlies its great utility as an indicator of social change.

Phonological indexes — based upon the elements of the sound system of a language — are particularly useful in this respect. They give us a large body of quantitative data from relatively small samples of speech: from only a few minutes' conversation, on any topic, we may derive reliable index scores for several variables. To a large extent, the variation on which these indexes are based is independent of the conscious

¹ This paper is based upon a presentation given in a panel discussion on sociolinguistics, at a meeting of the Eastern Sociological Society, in Boston, April 12, 1964.



shown in the convergence of these results with other studies which utilized anonymous observations, and also in the consistency of the patterns of stylistic variation which were found.

As one example we may consider the phonological variable (r) in New York City.⁵ In the traditional New York City pattern, /r/ is not heard in final position, nor before consonants. The words *guard* and *god* are homonyms: [go:d] and [gɔ:d]. So also, *bared* and *bad* are homonyms: "I [b :əd] my [a:m]; I had a [be:əd] cut." In recent decades, a new prestige form has appeared in the speech of native New Yorkers, in which /r/ is pronounced. The phonological index used to measure this variable is simply the percentage of words with historical /r/ in final and pre-consonantal position, in which /r/ is pronounced. Thus we find a lower middle class man, 22 years old, using 27% /r/ in careful conversation: an (r) index of 27. In less formal contexts, in casual speech, he uses no /r/ at all: (r)-00. In the more formal direction, he shows (r)-37 in reading style, (r)-60 in reading lists of words, and (r)-100 in reading pairs of words in which his full attention is given to /r/: *guard* vs. *god*, *dock* vs. *dark*, etc. An upper middle class subject may show the same pattern at a higher level of (r) values; a working class speaker at a much lower level.

We may consider another variable, one which is not peculiar to New York City: the pronunciation of *th* in *thing*, *think*, *through*, *bath*, etc. The prestige form throughout the United States is a fricative, scraping sound: [θ]. In many areas, many speakers occasionally use stops, *t*-like sounds in this position: "I [tɪŋk] so; [svmtɪŋ] else." Even more common is an affricate, a blend of stop and fricative: "I [tʰɪŋk] so; [svmtʰɪŋ] else." The phonological index for (th) assigns "0" to the fricative, "1" to the affricate, and "2" to the stop; thus an index of (th)-00 would indicate the use of only fricatives, and an index score of (th)-200 only stops. A working class man, for example, might show an index score of (th)-107 in casual speech, -69 in careful conversation, -48 in reading style. A middle class woman might show a score of (th)-20 in casual speech, and -00 in all more formal styles.

Although there is a great range in the absolute values of these variables as used by New Yorkers, there is great agreement in the *pattern* of stylistic variation. Almost eighty per cent of the respondents showed patterns of stylistic variation consistent with the status of /r/ as a prestige marker, and stops and affricates for /th/ as stigmatized forms.

⁵ The convention of notation which is adopted here is as follows: (r) represents the *variable*, as opposed to the phonemic unit /r/ or the phonetic unit [r]. A particular value of the variable is shown as (r-1) or (r-0), while an average index score is shown as (r)-35. In this case, (r-1) usually coincides with the phonemic unit /r/, and the more familiar notation /r/ is used instead of (r-1).

This pattern of stylistic variation is primarily of concern to linguists and to students of the ethnography of speaking. However, it is closely associated with the pattern of social stratification in New York City. The pattern of stylistic variation, and the pattern of social variation, enter into the complex and regular structure which is seen in Figure 1.

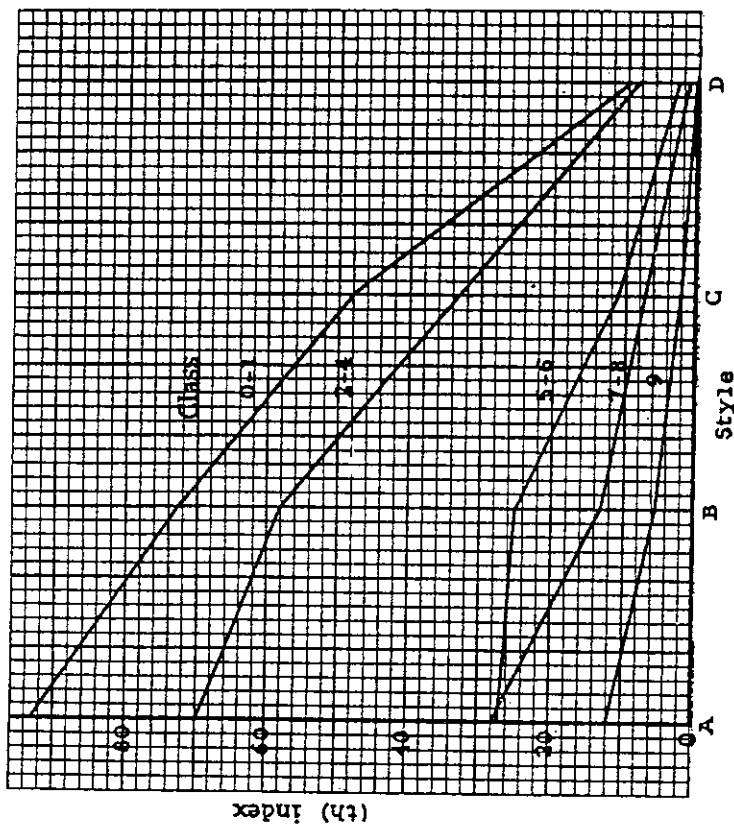


Figure 1. Class stratification of a linguistic variable with stable social significance: (th) in *thing*, *through*, etc.

Figure 1 is a class stratification diagram for (th), derived from the behavior of 81 adult respondents, raised in New York City.⁶ The vertical axis is the scale of average (th) index scores. The horizontal axis repre-

⁶ The main body of informants who were interviewed in detail with the linguistic questionnaire consisted of 122 subjects. Forty-one of these were residents of New York City who were born and raised outside of the city in the critical pre-adolescent years. These informants provided a valuable control in studying language changes and patterns peculiar to New York City. The high degree of regularity and agreement shown by the 81 New York City informants contrasted sharply with the irregular pattern of responses of the non-New Yorkers: in many cases, the trends shown by the New York informants were reversed by the others.

(7)

sents four contextual styles. The most informal style, casual speech, is shown at the left as A; B is careful conversation, the main bulk of the interview; C is reading style; D is the pronunciation of isolated words. The values on the diagram are connected by horizontal lines, showing the progression of average index scores for socio-economic class groups. These groups are defined as divisions of a ten-point socio-economic scale, constructed by Mobilization for Youth on the basis of their data in the primary survey. The socio-economic index is based on three equally weighted indicators of productive status: occupation (of the breadwinner), education (of the respondent), and income (of the family).⁷

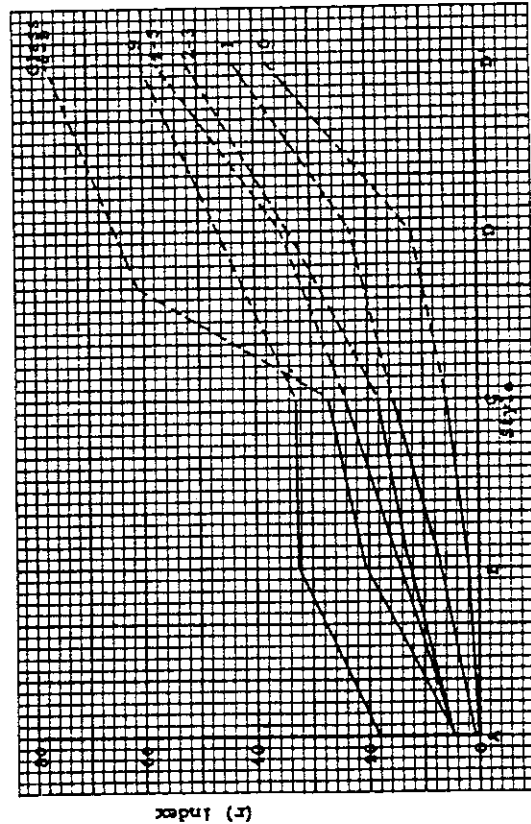


Figure 2. Class stratification of a linguistic variable in process of change: (r) in *guard*, *car*, *beer*, *board*, etc.

Figure 1 is an example of what we may call *sharp stratification*. The five strata of the population are grouped into two larger strata with widely different use of the variable. Figure 2 is a class stratification diagram

⁷ The original survey utilized the education of the breadwinner, rather than that of the respondent. It was felt that the linguistic survey should utilize the respondent's education as an indicator, since this might be more closely tied to language behavior than to other forms of behavior. However, the over-all correlations of linguistic behavior and socio-economic class were not affected by this change: there were just as many deviations from regular correlation produced by the change as eliminated by it.

which shows a somewhat different type of stratification. The vertical axis is the phonological index for (r), in which 100 represents a consistent r-pronouncing dialect, and 00 a consistent r-less dialect. The horizontal axis shows five stylistic contexts, ranging from casual speech, at A, careful speech at B, reading style at C, isolated words at D, and at D', the reading of word pairs in which /r/ is the sole focus of attention: *guard* vs. *god*, *dock* vs. *dark*. This structure is an example of what we may call *fine stratification*: a great many divisions of the socio-economic continuum in which stratification is preserved at each stylistic level. Other investigations of /r/ carried out in New York City support the following general hypothesis on the fine stratification of (r): *any groups of New Yorkers that are ranked in a hierarchical scale by non-linguistic criteria will be ranked in the same order by their differential use of (r)*.

The status of /r/ as a prestige marker is indicated by the general upward direction of all horizontal lines as we go from informal to formal contexts. At the level of casual, every-day speech, only the upper middle class group 9 shows a significant degree of r-pronunciation. But in more formal styles, the amount of r-pronunciation for other groups rises rapidly. The lower middle class, in particular, shows an extremely rapid increase, surpassing the upper middle class level in the two most formal styles. This cross-over pattern appears at first sight to be a deviation from the regular structure shown in Figure 1. It is a pattern which appears in other diagrams: a similar cross-over of the lower middle class appears for two other phonological indexes — in fact, for all those linguistic variables which are involved in a process of linguistic change under social pressure. On the other hand, the social and stylistic patterns for (th) have remained stable for at least 75 years, and show no sign of a cross-over pattern. Thus the hyper-correct behavior of the lower middle class is seen as a synchronic indicator of linguistic change in progress.

The linear nature of the ten-point scale of socio-economic status is confirmed by the fact that it yields regular stratification for many linguistic variables, grammatical as well as phonological. The linguistic variables have been correlated with the individual social indicators of productive status — occupation, education and income — and it appears that no single indicator is as closely correlated with linguistic behavior as the combined index. However, an index which combines occupation and education — neglecting income — gives more regular stratification for the (th) variable. For education, there is one sharp break in linguistic behavior for this variable: the completion of the first year of high school. For occupation, there are sharp differences between blue-collar workers, white-collar workers, and professionals. If we combine these two indicators, we obtain four classes which divide the population almost equally, and stratify (th) usage regularly. This classification seems

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to be superior to the socio-economic scale for analysis of variables such as (th) which reflect linguistic habits formed relatively early in life. However, the combined socio-economic index, utilizing income, does show more regular stratification for a variable such as (r). Since /r/ is a recently introduced prestige marker in New York City speech, it seems consistent — almost predictable — that it should be closely correlated with a socio-economic scale which includes current income, and thus represents most closely the current social status of the subject.

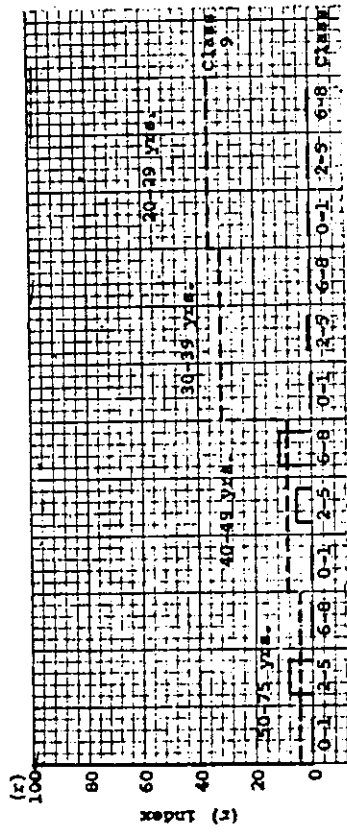


Figure 3. Development of class stratification of (r) for casual speech in apparent time.

Figure 3 shows the distribution of (r) by age levels, a distribution in *apparent time* which indicates a sudden increase in real time of the social stratification of (r) in every-day speech. The upper middle class usage is indicated by the horizontal dotted line. The usage of other class groups — 0-1, lower class; 2-5, working class; 6-8, lower middle class — is indicated by the series of vertical bars at each age level. For the two oldest age levels, there is little indication of social significance of /r/. But beginning with those under 40 years old, there is a radically different situation, with /r/ acting as a prestige marker of upper middle class usage only. This sudden change in the status of /r/ seems to have coincided with the events of World War II.

So far, we have been considering only one aspect of social stratification: the differentiation of objective behavior. In the recent studies of New York City, the complementary aspect of social stratification has also been examined: social evaluation. A subjective reaction test was developed to isolate unconscious social responses to the values of individual phonological variables. In these tests, the subject rates a number of short excerpts from the speech of other New Yorkers on a scale of occupational suitability, and cross-comparisons of these ratings enable us

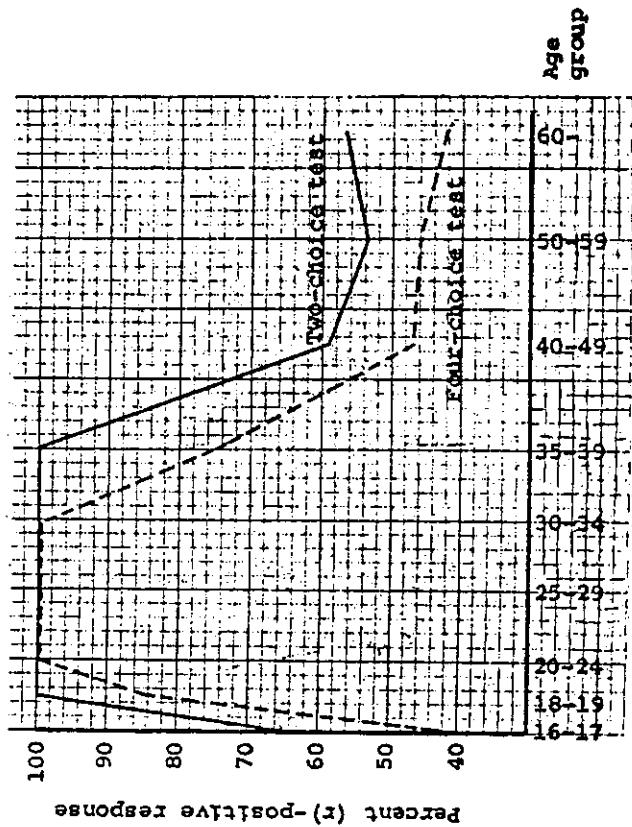


Figure 4. Development of social evaluation of (r) in two subjective reaction tests.

to isolate the unconscious subjective reactions of respondents to single phonological variables. Figure 4 shows the percentage of subjects who displayed reactions which were consistent with the status of /r/ as a prestige marker. We see that all subjects between 18 and 39 years old showed agreement in their positive evaluation of /r/, despite the fact (as shown in Figure 3) that the great majority of these subjects do not use any /r/ in their every-day speech. Thus sharp diversification of (r) in objective performance is accompanied by uniform subjective evaluation of the social significance of this feature. On the other hand, the subjects over 40 years old, who show no differential pattern in their use of (r), show a very mixed pattern in their social evaluation of /r/.

This result is typical of many other empirical findings which confirm the view of New York City as a single speech community, united by a uniform evaluation of linguistic features, yet diversified by increasing stratification in objective performance.

The special role of the lower middle class in linguistic change has been illustrated here in only one example, the cross-over pattern of Figure 2. When Figure 3 is replicated for increasingly formal styles, we see that in each age level, the lower middle class shows the greatest tendency to-

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wards the introduction of *r*-pronunciation, and in the most formal styles, goes far beyond the upper middle class level in this respect. A great deal of evidence shows that lower middle class speakers have the greatest tendency towards linguistic insecurity, and therefore tend to adopt, even in middle age, the prestige forms used by the youngest members of the highest ranking class. This linguistic insecurity is shown by the very wide range of stylistic variation used by lower middle class speakers; by their great fluctuation within a given stylistic context; by their conscious striving for correctness; and by their strongly negative attitudes towards their native speech pattern.

Another measure of linguistic insecurity was obtained by an independent approach, based on lexical behavior. The subjects were presented with eighteen words which have socially significant variants in pronunciation: *vase*, *aunt*, *escalator*, etc. Each word was pronounced in two alternate forms, such as [veɪz - va:z], [æ'nt - a'nt], [eskeleɪə - eskjuleɪə]. Respondents were asked to select the form they thought was correct. They were then asked to indicate which form they usually used themselves. The total number of cases in which these two choices differed was taken as the index of linguistic insecurity. By this measure, the lower middle class showed much the greatest degree of linguistic insecurity.

Social stratification and its consequences are only one type of social process which is reflected in linguistic structures. The interaction of ethnic groups in New York City - Jews, Italians, Negroes and Puerto Ricans - is also reflected in these and other linguistic variables. For some variables, New York City Negroes participate in the same structure of social and stylistic variation as white New Yorkers. For other variables, there is an absolute differentiation of white and Negro which reflects the process of social segregation characteristic of the city. For example, there is a Southern phonological characteristic which merges the vowels /i/ and /e/ before nasals: *pin* and *pen*, *since* and *sense*, are homonyms: "I asked for a straight [pɪn] and he gave me a writing [pɪn]." In New York City, this phonological trait has been generalized throughout the Negro community, so that the younger Negro speakers, whether or not they show other Southern characteristics in their speech, regularly show this merger. Thus this linguistic characteristic acts as an absolute differentiator of the Negro group, reflecting the social processes which identify the racial group as a whole. Similar phonological characteristics can be found which mark the Puerto Rican group.⁹

Segregation of Negro and white may be seen in aspects of linguistic behavior quite distinct from the phonological system. Our investigation

⁹ Most New Yorkers differentiate the vowel of *can* as in "tin can" from that of *can* as in "I can". None of the Puerto Rican subjects interviewed showed a consistent use of this phonemic distinction.

of New York City speech includes a number of semantic studies: one of the most fruitful of these concerns the semantic structures which revolve about the term *common sense*. This term lies at the center of one of the most important areas of intellectual activity for most Americans. It is a term frequently used, with considerable affect; its meaning is often debated, and questions about common sense evoke considerable intellectual effort from most of our subjects. Negroes use the term *common sense*, but also an equivalent term which is not a part of the native vocabulary of any white speakers. This term is *mother-wit*, or *mother-with* [mɔðəwɪθ]. For a few white speakers, *mother-wit* is identified as an archaic, learned term: but for Negroes, it is a native term used frequently by older members of the household, referring to a complex of emotions and concepts that is quite important to them. Yet Negroes have no idea that white people do not use *mother-wit*, and whites have no inkling of the Negro use of this term. Contrast this complete lack of communication in an important area of intellectual activity with the smooth and regular transmission of slang terms from Negro musicians to the white population as a whole.

The process of social segregation springs from causes and mechanisms which have been studied in detail. However, the opposing process of social integration is less obvious, and on the plane of linguistic structure, it is not at all clear how it takes place. Consider the semantic structure of *common sense*. When we analyze the semantic components of this term, its position in a hierarchical taxonomy, and its relation to coordinate terms in a semantic paradigm, we see great differences in the semantic structures used by various speakers.

This diversity can best be illustrated by contrasting two types of responses to our questions on common sense, responses which usually fall into two consistent sets. Respondent A may think of *common sense* as just "sensible talk". If he understands the cognitive content of an utterance, that to him is common sense. Respondent B considers common sense to be the highest form of rational activity, the application of knowledge to solve the most difficult problems. Do most people have common sense? A says yes, B says no. Who has a great deal of common sense? A thinks that doctors, lawyers, professors have the most. B thinks that uneducated people are more apt to have common sense, and immediately calls to mind some highly educated people with no common sense at all. If we say "two and two make four", is that an example of common sense? A says yes, B says no. Can we say that a person is intelligent, yet has no common sense? A says no, because intelligence is the same as common sense. B says yes, common sense and intelligence are quite different. A believes that if someone can be called *smart*, he would also have common sense; B sees no connection between smartness

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and common sense. Can one have *wisdom*, and yet no common sense? A says yes, B says no.

The extreme differences between types A and B, which are not independent of social stratification, lead us to question the possibility of semantic integration. Can such individuals, who have radically opposed semantic structures for *common sense*, be said to understand one another? Can the term *common sense* be used to communicate meaning between these speakers? Some writers (particularly the followers of General Semantics) feel that native speakers of English usually do *not* understand one another, that such opposing structures inevitably lead to misunderstanding. The results of our studies so far lead me to infer the opposite. People do understand one another: semantic integration seems to take place through a central set of relations of equivalence and attribution upon which all English speakers agree. With only a few exceptions, all subjects agree that *common sense* falls under the super-ordinate judgment: it is "good judgment". Equally high agreement is found in the collocation of *practical*, or *every-day*, with *common sense*. We have no simpler term to describe the quality of "not being learned from books", yet there is also a very high degree of agreement in this attribute of *common sense*.

If semantic integration takes place, it must be by a social process in which extreme variants are suppressed in group interaction at the expense of central or core values. The continuing studies of these semantic patterns are designed to throw light on the problem as to whether such a mechanism exists, and how it might operate.

This discussion has presented a number of aspects of language behavior in which linguistic structures are seen to reflect social processes. In the over-all view, there is a wide range of benefits which may be drawn from the interaction of sociological and linguistic investigations. These may be considered under three headings, in order of increasing generality:

1. Linguistic indexes provide a large body of quantitative data which reflect the influence of many independent variables. It does not seem impractical for tape-recorded data of this type to be collected and analyzed by social scientists who are not primarily linguists. Once the social significance of a given linguistic variant has been determined, by methods such as those outlined above, this variable may then serve as an index to measure other forms of social behavior: upward social aspirations, social mobility and insecurity, changes in social stratification and segregation.
2. Many of the fundamental concepts of sociology are exemplified in the results of these studies of linguistic variation. The speech community

is not defined by any marked agreement in the use of language elements, so much as by participation in a set of shared norms; these norms may be observed in overt types of evaluative behavior, and by the uniformity of abstract patterns of variation which are invariant in respect to particular levels of usage. Similarly, through observations of linguistic behavior it is possible to make detailed studies of the structure of class stratification in a given community. We find that there are some linguistic variables which are correlated with an abstract measure of class position, derived from a combination of several non-isomorphic indicators, where no single, less abstract measure will yield equally good correlations.

3. If we consider seriously the concept of language as a form of social behavior, it is evident that any theoretical advance in the analysis of the mechanism of linguistic evolution will contribute directly to the general theory of social evolution. In this respect, it is necessary for linguists to refine and extend their methods of structural analysis to the use of language in complex urban societies. For this purpose, linguistics may now draw upon the techniques of survey methodology; more importantly, many of the theoretical approaches of linguistics may be re-interpreted in the light of more general concepts of social behavior developed by other social sciences. The present report is intended as a contribution to this more general aim. It is hoped that the main achievements of linguistic science, which may formerly have appeared remote and irrelevant to many sociologists, may eventually be seen as consistent with the present direction of sociology, and valuable for the understanding of social structure and social change.

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