IS A STRUCTURAL DIALECTOLOGY POSSIBLE?

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1. In linguistics today the abyss between structural and dialectological studies appears greater than it ever was. The state of disunity is not repaired if 'phoneme' and 'isogloss' occasionally do turn up in the same piece of research. Students continue to be trained in one domain at the expense of the other. Field work is inspired by one, and only rarely by both, interests. The stauncher adherents of each discipline claim priority for their own method and charge the others with 'impressionism' and 'metaphysics,' as the case may be; the more pliant are prepared to concede that they are simply studying different aspects of the same reality.

This might seem like a welcome truce in an old controversy, but is it an honorable truce? A compromise induced by fatigue cannot in the long run be satisfactory to either party. The controversy could be resolved only if the structuralists as well as the dialectologists found a reasoned place for the other discipline in their theory of language. But for the disciplines to legitimate each other is tantamount to establishing a unified theory of language on which both of them could operate. This has not yet been done.

While the obstacles are formidable, the writer of this paper believes that they are far from insurmountable. The present article is designed to suggest a few of the difficulties which should be ironed out if the theories of two very much disunited varieties of linguistics, structural and dialectological, are to be brought closer together. A certain amount of oversimplification is inevitable, for the 'sides' in the controversy are populous and themselves far from unified. The author would not presume to function as an arbitrator. He simply hopes, without a needless multiplication of terms, to stimulate discussion with others who have also experienced the conflict of interests—within themselves.

If phonological problems dominate in this paper, this is the result of the fact that in the domain of sounds structural and non-structural approaches differ most;[1] semantic study has (so far, at least) not equalled sound study in precision, while in the domain of grammar, specifically structural points of view have had far less to contribute.

2. Regardless of all its heterogeneity, structural linguistics defines a language as an organized system. It was one of the liberating effects of structural linguistics that it made possible the treatment of a language as a unique and closed system whose members are defined by opposition to each other and by their functions with respect to each other, not by anything outside of the system. But since organization must have a finite scope, one of the major problems in a structural linguistic description is the delimitation of its object, the particular system described. Only in ideal cases can the linguist claim to be describing a

[1] Some of the phonological points made here were inspired by N. S. Troubetzkoy's article on linguistic geography, "Phonologie et géographie linguistique," *TCLP* 4.228–34 (1931); reprinted in his *Principes de phonologie*, Paris, 1949, pp. 343–50.

whole 'language' in the non-technical sense of the word. In practice he must delimit his object to something less. One of the steps he takes is to classify certain items in his data as intercalations from other systems, i.e. as 'synchronically foreign' elements (e.g. *bon mot* in an otherwise English sentence). Another step is to make certain that only one variety of the aggregate of systems which the layman calls a 'language' is described. These steps are taken in order to insure that the material described is uniform. This seems to be a fundamental requirement of structural description.

To designate the object of the description which is in fact a subdivision of the aggregate of systems which laymen call a single language, the term 'dialect' is often used. But if 'dialect' is defined as the speech of a community, a region, a social class, etc., the concept does not seem to fit into narrowly structural linguistics because it is endowed with spatial or temporal attributes which do not properly belong to a linguistic system as such. 'Dialects' can be adjacent or distant, contemporary or non-contemporary, prestigious or lowly; linguistic systems in a strictly structural view can only be identical or different. It is proposed that the term 'dialect' be held in reserve for the time being and that, for purposes of structural analysis as set forth here, it be replaced by 'variety.'

In deference to the non-structural sense of 'dialect' as a type of speech which may itself be heterogeneous, some linguists have broken down the object of description even further to the 'idiolect' level. This term has been used in the United States to denote 'the total set of speech habits of a single individual at a given time.' The term has been seriously criticized on two grounds: (1) constancy of speech patterns may be more easily stated for two persons in a dialogic situation (a kind of *dialecte à deux*) than for a single individual; (2) there are differences even within an 'idiolect' which require that it be broken down further (e.g. into 'styles').

'Idiolect' is the homogeneous object of description reduced to its logical extreme, and, in a sense, to absurdity. If we agree with de Saussure that the task of general linguistics is to describe all the linguistic systems of the world,[2] and if description could proceed only one idiolect at a time, then the task of structural linguistics would not only be inexhaustible (which might be sad but true), but its results would be trivial and hardly worth the effort.

The restriction of descriptive work to homogeneous material has led to a paradox not quite unlike that proposed by Zeno about motion. A moving arrow is located at some point at every moment of time; at intermediate moments, it is at intermediate positions. Therefore it never moves. Rigidly applied, the typical elements of structural description—'opposition' and 'function of units with respect to other units of the same system'—have come close to incapacitating structural analysis for the consideration of several partly similar varieties at a time. Fortunately, the progress of research no longer requires absolute uniformity as a working hypothesis.[3]

Structural linguistic theory now needs procedures for constructing systems

[2] Ferdinand de Saussure, *Cours de linguistique générale*, Paris, ⁴1949, p. 20.

[3] André Martinet, in preface to Uriel Weinreich, *Languages in Contact*, Linguistic Circle of New York, Publication no. 1, 1953, xii+148 pages, p. vii.

of a higher level out of the discrete and homogeneous systems that are derived from description and that represent each a unique formal organization of the substance of expression and content. Let us dub these constructions 'diasystems,' with the proviso that people allergic to such coinages might safely speak of supersystems or simply of systems of a higher level. A 'diasystem' can be constructed by the linguistic analyst out of any two systems which have partial similarities (it is these similarities which make it something different from the mere sum of two systems). But this does not mean that it is always a scientist's construction only: a 'diasystem' is experienced in a very real way by bilingual (including 'bidialectal') speakers and corresponds to what students of language contact have called 'merged system.'[4] Thus, we might construct a 'diasystem' out of several types of Yiddish in which a variety possessing the opposition /i ~ ɪ/ is itself opposed to another variety with a single /i/ phoneme. Be it noted that a Yiddish speaker in a situation of dialect contact might find information in the confusion of /i/ and /ɪ/ of his interlocutor, which is opposed, on the diasystem level, to his own corresponding distinction. It might tell him (in a 'symptomatic' rather than a 'symbolic' way) where, approximately, his interlocutor is from.

It may be feasible, without defining 'dialect' for the time being, to set up 'dialectological' as the adjective corresponding to 'diasystem,' and to speak of dialectological research as the study of diasystems. Dialectology would be the investigation of problems arising when different systems are treated together because of their partial similarity. A specifically structural dialectology would look for the structural consequences of partial differences within a framework of partial similarity.

It is safe to say that a good deal of dialectology is actually of this type and contains no necessary references to geography, ethnography, political and cultural history, or other extra-structural factors. In Gilliéron's classic studies, the typical (if not exclusive) interest is structural rather than 'external.' In the diasystem 'French,' we may very well contrast the fate of *gallus* in one variety where *-ll-* > *-d̯-* with its fate in another variety where this phonological change did not take place, without knowing anything about the absolute or even relative geography or chronology of these varieties. Non-geographic, structural dialectology does exist; it is legitimate and even promising. Its special concern is the study of partial similarities and differences between systems and of the structural consequences thereof. The preceding is not to say, of course, that 'external' dialectology has been surpassed; this subject will be referred to below (section 7).

Dialectological studies in the structural sense are, of course, nothing new. Binomial formulas like 'Yiddish *fus/fis* "foot",' which are often condensed to *fi͡us* etc., have always been the mainstay of historical phonology. But it should be noted that structural dialectology need not be restricted to historical problems to the extent to which it has been in the past. Consequences of partial differences between varieties can be synchronic as well as diachronic. The following is an

[4] *Languages in Contact*, pp. 8f.

example of a 'synchronic consequence.' In one variety of Yiddish (we stick to Yiddish examples for the sake of consistency), the singular and plural of 'foot' are distinguished as (*der*) *fus* vs. (*di*) *fis*, while in another variety, both numbers are *fis*. Now, in the number-distinguishing variety, the singular, *fus*, occurs also as a feminine (with *di*); even so, the distinction between singular and plural can still be made in terms of the vowel: *di fus* 'sg.'—*di fis* 'pl.' In the other dialect, *fis* is invariably masculine, perhaps as a consequence of, or at least in relation to, the fact that there only a masculine could distinguish between sg. *der fis* and pl. *di fis*.[5]

If structuralism were carried to its logical extreme, it would not allow for the type of comparisons suggested here: it could only study relations within systems; and since in a perfect system all parts are interrelated ("tout se tient"), it is hard to see how systems could even be conceived of as partially similar or different; one would think that they could only be wholly identical or different. Considerations of this nature prevented orthodox Saussureanism of the Geneva school from undertaking the study of gradually changing systems, since it was felt that languages could only be compared, if at all, at discrete 'stages.'[6] But a more flexible structuralism has overcome this hurdle by abandoning the illusion of a perfect system, and is producing notable results in the diachronic field.[7] We should now take the further step of asserting the possibility of a synchronic or diachronic dialectology based on a combined study of several partially similar systems.

This step in structural linguistic theory would, it seems, do much to bring it closer to dialectology as it is actually carried on.

3. We come next to dialectology's share in the proposed rapprochement. The main objection raised by structuralists against dialectology as usually practiced might be formulated thus: in constructing 'diasystems' it ignores the structures of the constituent varieties. In other words, existing dialectology usually compares elements belonging to different systems without sufficiently stressing their intimate membership in those systems.

In the domain of sounds, this amounts to a non-phonemic approach. A traditional dialectologist will have no scruples about listening to several dialect informants pronounce their equivalents of a certain word and proclaiming that these forms are 'the same' or 'different.' Let us assume four speakers of a language who, when asked for the word for 'man,' utter 1. [man], 2. [man], 3. [mån], and 4. [mån], respectively. On an impressionistic basis, we would adjudge 1 and 2 as 'the same,' 3 and 4 as 'the same,' but 1 and 2 as 'different' from 3 and 4. Yet suppose that informant 1 speaks a variety in which vowel length is significant;

[5] For an example of synchronic consequences in phonemics, see Anton Pfalz, "Zur Phonologie der bairisch-österreichischen Mundart," *Lebendiges Erbe; Festschrift. . .Ernst Reclam*, Leipzig, 1936, pp. 1–19, which is at the same time one of the rare instances of German phonemics and of structural dialectology.

[6] Albert Sechehaye, "Les trois linguistiques saussuriennes," *Vox romanica* 5.1–48 (1940), pp. 30f.; H[enri] Frei, "Lois de passage," *Zeitschrift für romanische Philologie* 64.557–68 (1944).

[7] Cf. the bibliography of diachronic phonemics by Alphonse G. Juilland in *Word* 9.198–208 (1953).

phonemically his form is $_1$/măn/. Informant 2 does not distinguish vowel length, and has given us $_2$/man/. We can further visualize a variety represented by informant 3 where a vowel with maximum degree of opening has the positional variant [å] between /m/ and /n/; phonemically, then, we have $_3$/man/. In the fourth variety, no such positional variation exists; that form is perhaps $_4$/mon/. The structural analysis is thus different from the non-structural one: 2 and 3 now turn out to be possibly 'the same' (but only, of course, if the systems are otherwise also identical), while 1 and 4 appear to be different. Structural linguistics requires that the forms of the constituent systems be understood first and foremost in terms of those systems, since the formal units of two non-identical systems are, strictly speaking, incommensurable.[8]

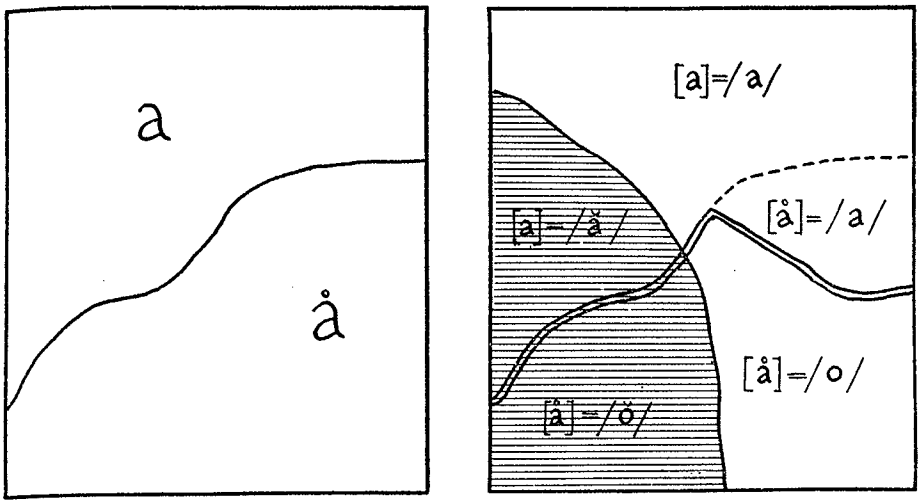
A similar requirement could be made about the units of content, or 'semantemes.' It would not do to say, for instance, that the word *taykh* in one variety of Yiddish is 'the same' as *taykh* in another if, in the one, it is opposed to *ózere* 'lake,' and hence means only 'river,' while in the other it is not so opposed and stands for any sizable 'body of water.' Similar structural cautions would be required with respect to 'synonyms' in the diasystem. In the diasystem 'Yiddish,' *baytn*, *shtékheven*, and *toyshn* all signify approximately 'to exchange,' but they cannot be synonyms on the variety level if they do not all exist in any one variety.

A grammatical example might also be cited. In terms of function within the system, it would not be justified to identify the feminine *vaysl* 'Vistula River' of two Yiddish varieties if in the one it is opposed to a neuter *vaysl* 'eggwhite,' while in the other it is completely homonymous with the (also feminine) word for 'eggwhite.' It is even doubtful whether any two feminines in these two varieties could be legitimately identified in view of the fact that one of the varieties does not possess a neuter gender altogether.

The dialectologist is used to comparing directly the 'substance' of different varieties. The demand of the structural linguist that he consider the train of associations, oppositions, and functions that define linguistic forms seems to the dialectologist complicating, unreasonable, and unnecessary ('metaphysical'). To show up the disagreement most clearly, let us represent the phonic problem just discussed on a map and compare the traditional and the proposed structural treatments of it. Obviously the structural approach involves complications, but the dialectologist will become convinced of their necessity when he realizes that phonemics, like structural linguistics generally, represents not a special technique for studying certain problems, but a basic discovery about the way language functions to which structural linguists are completely committed.

Since, in the structural view, allophonic differences between sounds are in a sense less important than phonemic differences, the 'substantial' isogloss (Map 2) which separates [a] from [å] in the overall /a/ area is structurally somehow less important than the purely formal isogloss which separates pronunciations of [mån] = /man/ from those of [mån] = /mon/; the latter isogloss may not reflect

[8] *Languages in Contact*, pp. 7f.



Map 1: Traditional Map 2: Structural

THE VOWEL IN 'MAN' IN LANGUAGE *X*

On map 2, a continuous single line divides areas with different phonemic inventories (shaded area distinguishing vowel length, unshaded area not distinguishing it). The double line separates areas using different phonemes in this word (difference of distribution). The dotted line separates allophonic differences.

any difference in 'substance' at all; it would not show up on the non-structural map (Map 1). The traditional dialectologist naturally wonders what he stands to gain by the drawing of such 'metaphysical' lines. But if dialectological maps are considered diachronically as snapshots of change, and if it can be shown that the difference between phonemes and allophones can be material in determining sound change, it may be possible to convince the dialectologist that the structural map is after all more true to the reality of functioning language. Similar arguments, perhaps, could also be persuasive insofar as they are pertinent to grammatical and lexical matters.

If dialectologists would consider the functions of the elements which they use in their comparisons, their conception of a 'diasystem' would come close to that proposed here for structural linguistics and might lead to the unified theory which is so badly needed.

4. The partial differences which are proposed as the specific subject matter of dialectologic study may be of two kinds: differences of inventory and differences of distribution. While the latter are the standard material of comparative study, the former have not received their due stress.

As an example of a difference in inventory, let us take a simple phonemic case first. In the following discussion, single slashes enclose sets of phonemes and single tildes designate phonemic oppositions in a variety identified by a preceding subscript number; oppositions in the constructed diasystem are characterized by double tildes, and the formulas for the diasystems are surrounded by double

slashes. Given two varieties with identical five-vowel systems, we might construct the following diasystem: $_{1,2}$//i ≈ e ≈ a ≈ o ≈ u//. Now let us assume that in one of the varieties, the front vowel of the intermediate degree of openness is more open than in the other; choosing a phonemic transcription which would reflect this fact, we might indicate the difference in the diasystem thus:

$$_{1,2}/\!/\, \mathrm{i} \approx \frac{{}_1\mathrm{e}}{{}_2\varepsilon} \approx \mathrm{a} \approx \mathrm{o} \approx \mathrm{u} \,/\!/ \ .$$

Given two varieties, one of which (1) distinguishes three front vowels, the other (2) distinguishing four, we might formulate the corresponding part of the vowel diasystem thus:

$$_{1,2}/\!/\, \frac{{}_1/\mathrm{i} \sim \mathrm{e} \sim \mathrm{æ}/}{{}_2/\mathrm{i} \sim \mathrm{e} \sim \varepsilon \sim \mathrm{æ}/} \approx \mathrm{a} \approx \mathrm{o} \cdots \,/\!/ \ .$$

Here is the actual vowel inventory of Yiddish considered as a diasystem of three dialects, 1. Central ("Polish"), 2. Southwestern ("Ukrainian"), and 3. Northwestern ("Lithuanian"):

$$_{1,2,3}/\!/\, \frac{{}_1/\mathrm{i}\text{:} \sim \mathrm{i}/}{{}_2/\mathrm{i} \sim \mathrm{ɪ}/\ {}_3\mathrm{i}} \approx \mathrm{e} \approx \frac{{}_1/\mathrm{a}\text{:} \sim \mathrm{a}/}{{}_{2,3}\mathrm{a}} \approx \mathrm{o} \approx \mathrm{u} \,/\!/ \ .$$

Similarly differences in inventory of grammatical categories might be stated, e.g. between varieties having two against three genders, three as against four conjugational types, and the like. All examples here are tentative and schematic; the possibilities of a more analytical statement of the diasystem, based e.g. on relevant features, remain to be investigated.

One thing is certain: In the study of language contact and interference (see section 5), a clear picture of differences in inventory is a prerequisite.[9]

Differences in distribution cannot be directly inferred from a comparison of the differences in inventory, although the two ordinarily stand in a definite historical relationship. For example, in the diasystem 'Yiddish' described above, the phoneme $_3$/i/ in variety 3 usually corresponds to either $_2$/i/ or $_2$/ɪ/ in cognates of variety 2, and to either $_1$/i:/ or $_1$/i/ in cognates of variety 1 ($_3$/sine/: $_2$/sɪne/: $_1$/sĭne/ 'enmity'). This is, as it were, a correspondence between the nearest equivalents. But many $_3$/o/'s correspond to /u/'s in variety 1 and 2, even though all three varieties today possess both /o/ and /u/ phonemes. Thus, /futer/ means 'father' in varieties 1 and 2, but 'fur' in variety 3; /meluxe/ means $_{1,2}$'craft' and $_3$'state'; /hun/ means $_{1,2}$'rooster' and $_3$'hen.' For the tens of thousands of speakers for whom the contact of these varieties is an everyday experience, these 'Yiddish' sound sequences are not fully identified until the particular variety of Yiddish to which they belong is itself determined. Now no one would deny that a form like Yiddish [fiˇl] ($_{1,2}$'full,' $_3$'many') is identified fully only in conjunction with its meaning in one of the varieties, i.e. when account is taken of the differ-

[9] *Ibid.*, pp. 1f.

ences in distribution of sounds in cognates occurring in the several varieties. The less obvious point made here is that the form is not fully identified, either, if relevant differences in *inventory* are not accounted for, i.e. if it is not rendered in terms of the phonemes of one of the concrete varieties: [fil] = ₁/fĭl/, ₂/fɪl/, ₃/fil/.

Recent descriptive work on American English phonemics has come close to treating the language as a 'diasystem' without, however, satisfying the requirements set forth here. The widely adopted analysis of Trager and Smith[10] provides a set of symbols by which forms of all varieties of American English can be described. It makes it possible, for example, to transcribe Southeastern /pæys/ *pass* in terms of some of the same symbols used in /pæt/ *pat* of the same dialect or in /pæs/, /bəyd/ *bird*, etc., of other varieties. This violates the principle advocated here that the phonemic systems of the varieties should be fully established before the diasystem is constructed. We are not told whether in the phoneme inventory of Southeastern American English, the /æy/ of *pass* does or does not correspond as an inventory item to the /æ/ of other varieties. We cannot tell if the [o] of *home* of Coastal New England is the same phoneme, or a different phoneme, from the [ow] in *go* in the same variety. For reasons of this type, the system has been criticized as providing not a phonemic description or a set of descriptions, but a "transcriptional arsenal."[11] Yet the remaining step toward the establishment of a phonemic diasystem is not difficult to visualize.

5. We might now restate and specify the suggested position of structural dialectology in linguistics as a whole. SYNCHRONIC DIALECTOLOGY compares systems that are partially different and analyzes the 'synchronic consequences' of these differences within the similarities. DIACHRONIC DIALECTOLOGY deals (a) with DIVERGENCE, i.e. it studies the growth of partial differences at the expense of similarities and possibly reconstructs earlier stages of greater similarity (traditionally, comparative linguistics); (b) with CONVERGENCE, i.e. it studies partial similarities increasing at the expense of differences (traditionally, substratum and adstratum studies, 'bilingual dialectology,'[12] and the like).

The opposite of dialectology, which hardly needs a special name, is the study of languages as discrete systems, one at a time. It involves straight description of uniform systems, typological comparisons of such systems, and diachronically, the study of change in systems considered one at a time.

6. It was stated previously that diasystems can be constructed *ad hoc* out of any number of varieties for a given analytic purpose. Constructing a diasystem means placing discrete varieties in a kind of continuum determined by their partial similarities. However, in passing from a traditional to a structural dialec-

[10] George L. Trager and Henry Lee Smith, Jr., *An Outline of English Structure* (=*Studies in Linguistics, Occasional Papers* 3), Norman (Okla.), 1951, esp. pp. 27–9.

[11] Einar Haugen, "Problems of Bilingual Description," *Report of the Fifth Annual Round Table Meeting on Linguistics and Language Teaching* (=[Georgetown University] *Monograph Series on Languages and Linguistics* no. 7), in press.

[12] For an essay in bilingual dialectology, see Uriel Weinreich, "*Sábesdiker losn* in Yiddish: a Problem of Linguistic Affinity," *Word* 8.360–77 (1952).

tology, the more pressing and more troublesome problem is the opposite one, viz. how to break down a continuum into discrete varieties. What criteria should be used for divisions of various kinds? Can non-technical divisions of a 'language' into 'dialects,' 'patois,' and the like be utilized for technical purposes?[13]

Before these questions can be answered, it is necessary to distinguish between standardized and non-standardized language. This set of terms is proposed to avoid the use of the ambiguous word, 'standard,' which among others has to serve for 'socially acceptable,' 'average,' 'typical,' and so on. On the contrary, STANDARDIZATION could easily be used to denote a process of more or less conscious, planned, and centralized regulation of language.[14] Many European languages have had standardized varieties for centuries; a number of formerly 'colonial' tongues are undergoing the process only now. Not all leveling is equivalent to standardization. In the standardization process, there is a division of functions between regulators and followers, a constitution of more or less clear-cut authorities (academies, ministries of education, *Sprachvereine*, etc.) and of channels of control (schools, special publications, etc.). For example, some dialectal leveling and a good deal of Anglicization has taken place in the immigrant languages of the United States, and we might say that a word like *plenty* has become a part of the American Norwegian koinê.[15] But in the sense proposed here, there is no 'standardized' American Norwegian which is different from Old-World Norwegian, and from the point of view of the standardized language, *plenty* is nothing but a regional slang term.

Now it is part of the process of standardization itself to affirm the identity of a language, to set it off discretely from other languages and to strive continually for a reduction of differences within it. Informants of standardized languages react in a peculiar way; moreover, it is much easier to deal with samples of a standardized language, to make generalizations about it and to know the limits of their applicability. On the level of non-standardized or FOLK LANGUAGE,[16] a discrete difference between one variety and others is NOT a part of the experience of its speakers, and is much more difficult to supply. For example, it is easy to formulate where standardized Dutch ends and standardized German begins, but it is a completely different matter to utilize for technical purposes the transition between folk Dutch and folk German.

[13] The possibility of introducing some scientific rigor into existing loose terminology has been explored by André Martinet, "Dialect," *Romance Philology* (1953/54), in press. The article by Václav Polák, "Contributions à l'étude de la notion de langue et de dialecte," *Orbis* 3.89–98 (1954), which arrived too late to be utilized here as fully as it deserves, suggests that we call 'language' a diasystem whose partial similarities are grammatical while its partial differences are phonologic and lexical.

[14] Cf. *Languages in Contact*, pp. 99–103. An interesting book about standardization is Heinz Kloss, *Die Entwicklung neuer germanischer Kultursprachen von 1800 bis 1950*, Munich, 1952.

[15] Einar Haugen, *The Norwegian Language in America*, Philadelphia, 1953, p. 588.

[16] Interesting parallels could be developed between the sociolinguistic opposition 'standardized'—'folk' and the social anthropologist's opposition between the cultures of complex (industrialized) and folk societies or strata of society; cf. e.g. George M. Foster, "What Is Folk Culture?" *American Anthropologist* 55.159–73 (1953).

On the whole dialectologists have avoided dealing with standardized languages and have restricted themselves to folk language.[17] Consequently, in practice as well as in theory the problem of dividing and ordering the continuum of language is especially serious with respect to the folk level and not the standardized level. Time was when the continuum of folk language used to be divided on the basis of (usually diachronic) structural features, e.g. the geographic limits of a certain phonological development. Either one isogloss which the linguist considered important was selected (e.g. *k/x* as the line between Low and High German), or a bundle of isoglosses of sufficient thickness was used as a dividing line. In either case, the resulting divisions were not, of course, all of the same degree; they were major, minor, and intermediate, depending on the thickness of the bundle or the relative importance of the key isogloss. It is evident that no unambiguous concept of dialect could emerge even from this optimistic methodology any more than a society can be exhaustively and uniquely divided into 'groups.'

Classificatory procedures of this type are today virtually passé. Dialectologists have generally switched to extra-structural criteria for dividing the folk-language continuum. The concept of language area (*Sprachlandschaft*) has practically replaced that of 'dialect' (*Mundart*) as the central interest in most geographic work,[18] and ever more impressive results are being obtained in correlating the borders, centers, and overall dynamics of language areas with 'culture areas' in a broader sense. Instead of speaking, for instance, of the *helpe/helfe* and *Lucht/Luft* isoglosses as the border between the Ripuarian and Moselle-Franconian 'dialects' of the German Rhineland, linguistic geographers now speak of the Eifel Barrier between the Cologne and Trier areas. This Eifel mountain range happens to be the locus not only of those two random isoglosses, but, among others, also the dividing line between *kend* and *keŋk* 'child,' *haus* and *hus* 'house,' *grumper* and *erpel* 'potato,' *heis* and *gramm* 'hoarse'; between short-bladed and long-bladed scythes, grey bread in oval loaves and black bread in rectangular loaves, New Year's twists and New Year's pretzels, St. Quirin as the patron saint of cattle and the same as the patron of horses, two different types of ditty addressed to the ladybug, etc.[19] The line is meaningful as a reflex of a medieval boundary which can in turn be accounted for by more permanent climatic, orological, hydrographic, and other geographic factors.[20]

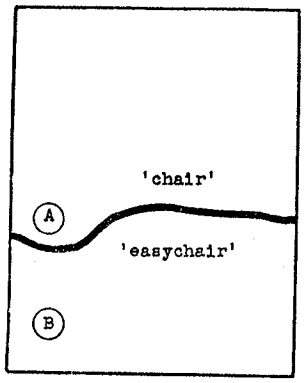
The search for ways to divide the folk-language continuum has also led to

[17] Some people are not averse to calling modern standardized languages 'Indo-European dialects', or speaking of 'literary dialects'. Dialectology in the sense proposed in this paper need not restrict itself to the folk level, but such usage is one more reason why the term 'dialect' ought to be held in abeyance.

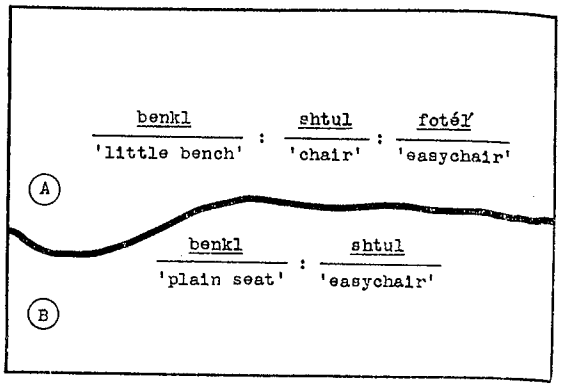
[18] This is particularly evident in the methodologically most advanced German Swiss work; cf. the publications series *Beiträge zur schweizerdeutschen Mundartforschung* edited by Rudolf Hotzenköcherle.

[19] Linguistic data from Adolf Bach, *Deutsche Mundartforschung*, Heidelberg, ₂1950, pp. 123ff.; ethnographic data from Adolf Bach, *Deutsche Volkskunde*, Leipzig, 1937, p. 228.

[20] In the United States, Hans Kurath (*A Word Geography of the Eastern United States*, Ann Arbor, 1949), has successfully combined strictly linguistic with 'external' criteria in breaking down the relatively undifferentiated American folk-language area.



Map 3: Meaning of *shtul* in East European Yiddish (Schematized)



Map 4: Designations of Seats in East European Yiddish (Schematized)

statistical correlation methods.[21] Rather than plotting the border lines of single selected structural features, which may be impossible in areas of amorphous transition, the following procedure is used. Inquiries are made at various points concerning the presence or absence of a whole list of test features; then the correlation between the results at some reference point and at all other points is computed, and may be represented cartographically, points with similar correlation coefficients being surrounded by lines which have variously been called 'isopleths' or 'isogrades.' Theoretically related to this procedure are the tests of mutual intelligibility between dialects.[22] All these procedures must depend on an arbitrary critical constant (or constants) for the drawing of a dividing line (or lines, of various degrees of importance), but they do yield an insight into the makeup of a continuously varying language area which supplements, if it does not supersede, the results derived by other methods.

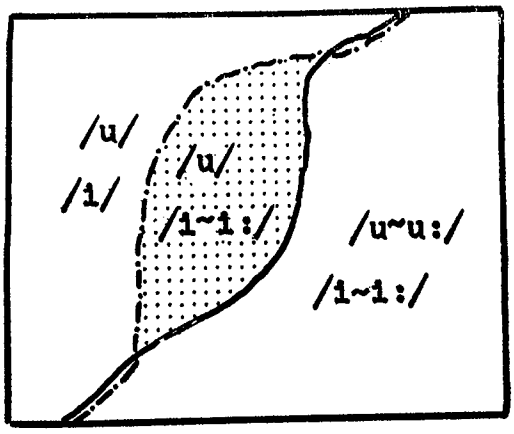
In the domain of dialect sociology, where transitions are perhaps even more continuous and fluid than in dialect geography, the use of extra-linguistic correlations and statistical sampling techniques offers promising possibilities of research in an almost untrodden field.[23]

The use of the social-science tools of 'external dialectology' can do much to supplement the procedures outlined for a structural dialectology. One problem

[21] See David W. Reed and John L. Spicer, "Correlation Methods of Comparing Idiolects in a Transition Area," *Language* 28.348–60 (1952).

[22] Cf. for example C. F. Voegelin and Zellig S. Harris, "Methods for Determining Intelligibility Among Dialects of Natural Languages," *Proceedings of the American Philosophical Society* 95.322–9 (1951).

[23] See the interesting paper by Stanley M. Sapon, "A Methodology for the Study of Socio-Economic Differentials in Linguistic Phenomena," *Studies in Linguistics* 11.57–68 (1953). A scheme for the classification of varieties of a language according to their function (ecclesiastic, poetic, scientific, etc.) to replace the unsatisfactory terminology of 'styles' has been proposed by Yury Šerech, "Toward a Historical Dialectology," *Orbis* 3.43–56 (1954), esp. pp. 47ff.



Map 5: Non-Congruent Vowel-Length Isoglosses in Language *Y*

for combined structural and 'external' linguistic investigation is to determine what structural and non-structural features of language have in fact helped to break up the folk-language continuum into the non-technical units of 'dialects,' 'patois,' etc. This combined research might get to the heart of the question of diasystems as empirical realities rather than as mere constructs. One of its by-products might be the formulation of a technical concept of 'dialect' as a variety or diasystem with certain explicit defining features.

7. Finally a word might be said about the interrelationship of structural and 'external' points of view applied to a specific dialectological problem. Given a map showing an isogloss, the 'external' dialectologist's curiosity is likely to concentrate on the locus of that isogloss. Why is it where it is? What determines the details of its course? What other isoglosses bundle with it? What communication obstacle does it reflect?

The structural dialectologist has another set of questions, stemming from his interest in partial differences within a framework of partial similarity. To take up the semasiological example of Map 3 (which is schematized but based on real data), if *shtul* means 'chair' in zone A, but 'easychair' in zone B, then what is the designation of 'easychair' in A and of 'chair' in B? Every semasiological map, due to the two-faceted nature of linguistic signs, gives rise to as many onomasiological questions as the number of zones it contains, and vice versa. If we were to supply the information that in zone A, 'easychair' is *fotél'*, while in zone B 'chair' is *benkl*, a new set of questions would arise: what, then, does *fotél'* mean in B and *benkl* in A?[24] This implicational chain of questions could be continued further. The resulting answers, when entered on a map, would produce a picture of an isogloss dividing two lexical systems, rather than two isolated

[24] The actual answer is that *fotél'* is not current in zone B, while *benkl* means 'little bench' in zone A.

items (see Map 4). This would be the 'structural corrective' to a traditional dialect map.

It is easy to think of dialectological field problems for the solution of which 'external' and structural considerations must be combined in the most intimate manner. Such problems would arise particularly if the cartographic plotting of systems should produce a set of narrowly diverging isoglosses. Assume that an isogloss is drawn between a variety of a language which distinguishes short /u/ from long /u:/ and another variety which makes no such quantitative distinction. The structuralist's curiosity is immediately aroused about length distinctions in other vowels. Suppose now that the variety that distinguishes the length of /u/ does so also for /i/; but that the isoglosses, plotted independently, are not exactly congruent (Map 5). Some intriguing questions now arise concerning the dynamics of the vowel pattern of the discrepant zone. Nothing but an on-the-spot field study closely combining structural analysis and an examination of the 'external' communication conditions in the area could deal adequately with a problem of this kind.

8. In answer to the question posed in the title of this paper, it is submitted that a structural dialectology is possible. Its results promise to be most fruitful if it is combined with 'external' dialectology without its own conceptual framework being abandoned.

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WORD

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