

unable to deal completely with the semantic properties of the transformations; 2. There were difficulties with the formalization and the formal complexity of the generalized transformations and transformation markers, which in any case have never been solved completely; 3. Psychological aspects, clearly explained by Katz.¹⁴ In conclusion it must however be remarked that the justification of the new conception of GG will be best demonstrated by the construction of the GG of a concrete natural language. The current stage of development of GG is so far characterized by a great number of theoretical deliberations and "indicated" GG, but an infinitesimal percentage of concrete work¹⁵, which would tend to the formation of concrete GG, the adequacy of which could be controlled experimentally. It seems however that we have been waiting too long for such a concrete GG.

To sum up we may say that the papers in the field of ML given at the 9th Linguistic Congress demonstrated the vitality and fruitfulness of mathematical methods in contemporary linguistics and that the further development of linguistics including its relationship to other sciences, is inconceivable without new methodological approaches.

Notes

1. P. Novák, *O terminologii matematické lingvistiky*, (On the Terminology of Mathematical Linguistics.) Čs. terminologický časopis 2, 1963, 234 n.
2. See e.g. N. Chomsky, *On Certain Formal Properties of Grammars*, Information and Control 2, 1959, 137—167; also *Syntactic Structures*, 's Gravenhage 1957, *Three Models for the Description of Language*, IRE Trans., vol. IT-2, No 3, 1956, 113—124, and several others.
3. Gammon's approach has several features in common with that of Andreyev, see n. 5.
4. The problems dealt with in Schachter's paper, and in Bach's too, are dealt with distinctly differently in Chomsky's new conception, see op. cit. n. 12.
5. N. D. Andreyev, *Algoritmi statisticko-kombinatornogo modelirovaniya morfolologii, sintaksisa i semantiki*, Materiali po matem. lingvistike i mashinnomu perevodu, II, Leningrad, 1963, 3—44.
6. B. V. Sukhotin, *Algoritmi lingvisticheskoy deshi/rovki*, Problemi strukturnoy lingvistiki, Moskva, 1963, 75—101.
7. L. D. Andreyeva, *Statisticko-kombinatornoye videleniye paradigmi pervogo morfologicheskogo tipa v ruskom yazike*, loc. cit. n. 5, 45—63.
8. J. W. Perry, A. Kent, *Tools for Machine Literature Searching*, New York, 1958; K. Čulík, B. Palek, *Automatizace referování*, (Automatisation of Information Retrieval), Metodika a technika informací, 1962, No. 3—4, 65 n.; some very interesting, even though very simple results are given by L. E. Pshenichnaya, E. F. Skorochodko, *Sintez osmyslennikh predlozhenii na ECVM*, Problemi kibernetiki 10, Moskva, 1963, 261—275.
9. See e.g. *Annual Review of Automatic Programming I, II, III*, Pergamon Press, Oxford, London, New York, Paris.
10. A corrected and expanded version of this lecture has now been published in the volume *The Structure of Language* (Readings in Philosophy of Language), ed. by J. A. Fodor, J. J. Katz, Prentice Hall Inc., Englewood Cliffs 1964, under the title *Current Issues in Linguistic Theory*, 50—118, We were unable to refer to this since it did not reach us until this report was finished.
11. See the work quoted in n. 2.
12. N. Chomsky, *Categories and Relations in Syntactic Theory*, M. I. T. 1964 (a paper sent to the conference on "Sign and System in Language" held in September 1964 in Magdeburg; further also J. J. Katz, P. M. Postal, *An Integrated Theory of Linguistic Descriptions*, M. I. T. Press, Cambridge, Mass., 1964; P. M. Postal, *Nový vývoj teorie transformační gramatiky*, (New Development in the Theory of Transformational Grammar), translated from English, SaS 26, 1965, 1—13.
13. J. J. Katz, J. A. Fodor, *The Structure of a Semantic Theory*, Language 39, 1963, 170—210.
14. J. J. Katz, *Mentalism in Linguistics*, Language 40, 1964, 124—137.
15. An honourable exception here is R. B. Lees, *The Grammar of English Nominalizations*, Baltimore, 1960.

Karel Pala

Dialectology and Linguistic Geography at the Ninth International Linguistic Congress

It is a satisfactory feature that so much time at the congress and so much space in the report were devoted to problems of dialectology, and not only to dialectology itself but also to linguistic geography and to languages in contact. The contribution by Pavle Ivić, *Structure and Typology of Dialectal Differentiation* (113—121) was the most provocative of discussion. The author endeavoured to determine features which are quantitative and thus measurable: 1. the differentiation density of the dialect, 2. the linear distribution of isoglosses (equal distances — a bundle

of isoglosses), 3. the distribution of isoglosses as to direction (= relative density of differentiation as to direction), 4. the size of areas, 5. the shape of isoglosses, 6. the relationship between areas. Besides this it is possible to express numerically whether dialectal areas are original or non-original. Dialects of a whole landscape can be surveyed in respect to the percentage of original features contained. "More exact definitions can be given also to other concepts pertaining to the phenomena of linguistic differentiation such as bundles of isoglosses, degree of concentration of isoglosses in a bundle, kernel and peripheral parts of a territorial dialect, conservatism and progressiveness of dialects, and so on. In all these cases, too, facts are expressible by numerical indices." (121)

J. Hamm expressed himself in the discussion more sceptically as regards the new possibilities. He characterized certain suggestions as "things that could not be done at the present stage". "The interdependent value of features cannot be fully represented by quantitative numerical indices" (126). In his reply Ivić once more stressed that the dialectology of the times to come would deal with its material by the use of advanced technological devices. In our opinion it is certainly of great service to lay dialectological research too on the objective basis of quantitative (numerical) investigations. Alongside this, of course, it will still be supremely useful to discover new phenomena directly in the terrain and adequately expound them in a system. The general and continually repeated thesis of the decay of dialects can result in leading us somewhat astray: certain local phenomena extend beyond their dialectical base and spread even into spoken speech intended as standard (e.g. pronunciation habits), so that decidedly in a certain sense they will remain.

Dialect Borders and Linguistic Systems (109—114) is the theme of the contribution by Giuseppe Francescato. He tries to see dialect through "structural lens". He correctly points out that "similar, or identical, phonetic elements can correspond to quite different phonemic systems". And again on the other hand: quite different phonetic elements can have a similar or identical role in the common pattern of a group of dialects" (111). This common pattern is what he calls "a diasystem". "All sorts of differences between dialects could be possibly interpreted as aspects of a certain diasystem, and the variations thereof as the manifestation of the different subsystems partaking in the diasystem... We can in fact define a dialect as the grouping of various linguistic entities, whose systems all partake in the same diasystem" (112).

Opinions on the fundamental nature of dialect have been and are various. We agree with Hamm, however, in supposing that "every dialect — even the smallest subdialect — yields its own system" (124). The path towards the structural conception of dialect begins in our opinion with the recognition of the invariability of the structure of the concrete traditional dialect, understood of course as the territorial variant of the national standard language; the common structural laws of the dialects of one national language could then be termed a "diasystem". Up to now the definition of dialect has been a functional definition, characterizing the dialect by comparison with the language in its higher cultural functions. The structural definition of dialect should set out from its structural invariability in comparison with the many-layered variability of the standard tongue. The modern development of society results in the disturbance of dialect structure and finally in its being replaced by unstable non-standard groupings of means of expression. — Béla Kálmán in his contribution *Remarques quelques isoglosses dialectales* (131—134) gave some interesting interpretations of Hungarian dialectology with general conclusions.

Georges Redard contributed the evaluating and methodological study *Le renouvellement des méthodes en linguistique géographique* (253—257). Questionnaires should be formulated only after experience from the terrain. Notes taken of spontaneous utterances are valuable. The phonetic recording must be schematized. Material should be published completely, not in selection, so that information is not distorted. The atlas cannot be a substitute for structural analysis. It is merely the "grain" which must be ground down. Dialectological research does not come to an end with the publication of an atlas. We must go on from statistical description to dynamic research. (In general the same experiences resulted in the preparation of the Czech language atlas; maps require inscriptions and a commentary including non-linguistic moments.)

Further contributions forsook the field of dialectology considered in the narrow sense of the word. In his paper *Interrelation between Regional and Social Dialects* (135—144), Hans Kurath deals with a problem whose solution would be sought by the Czech reader in studies of urban speech, common Czech, the interdialectal hierarchy, etc.; it is not a case here of investigation into what we call slang. The author here points out the need to examine not only the speech of the folk (the peasant or rustic, and unprivileged city dweller), but that of the cultural elite and the middle class, too, these terms being obviously merely working ones. Kurath gives six maps from the American milieu on which he indicates the spread of "prestige" words and phonetic similarities from the speech of cultured speakers into the speech of lower classes. (It would of

course be equally interesting to follow the preservation of regional features in the language of the cultural elite, which would of course above all have reference to phonetic phenomena.) On the question of interlingual and interdialectal borrowing of phonemes R. Jakobson pointed out that phonemes, originally confined to foreigners, in the further development of language often prove to be adopted by the native phonemic code as well. Strang's remarks in the discussion summed up the social situation affecting dialects thus: there must be a prestige dialect, a mediating dialect, a non-prestige dialect, and also an awareness by the speakers of the socially inferior dialect that their usage does lack prestige (144):

A. M. Badia-Margarit in *Some Aspects of Bilingualism among Cultured People in Catalonia* (366—373) distinguishes natural bilingualism and environmental bilingualism. E. Haugen would rather speak of "childhood" versus "adolescent" bilingualism or of a "familial" versus "scholastic" bilingualism. He suggests that the Catalan situation could be accommodated under Ferguson's recent term "diglossia". Hans Galinsky dealt with stylistic aspects of borrowing (*A Stylistic and Comparative View of American Elements in Modern German and British English*) (374—381). Borrowings have seven stylistic functions: the impressing of foreign atmosphere, precision ("von cleveren Köpfen"), intentional disguise ("strip-tease"), economic and aesthetic value of the foreign language ("dopen" — "unerlaubtes Präparat zur Leistungssteigerung geben"), the metaphorical nature of foreign expression ("summit conference" — "Gipfelkonferenz"), the comic and playful touches inherent in metaphor and variation of expression. Andrée Tabouret-Keller's study, *Contribution à l'étude sociologique des bilinguismes* (612—621) provided valuable material from Alsace and the Pays d'Oc in the South of France, and also contains many useful methodological ideas. The further two contributions of Lanham and Philipp are of a special character.

The paper by Allen Walker Read, *The Splitting and Coalescing of Widespread Languages* (1129—1134) offered valuable observations. Chief among socio-linguistic influences are: technological improvement in communication, the honouring of a classical or sacred literature, the centralization of a culture to a prestige centre, nationalistic sentiment, tolerance or intolerance of variation. There are three outcomes of these influences: the splitting into several languages; the retention of unity, often at the risk of a rift between literary and colloquial levels; or the development of a koiné. John I. Gumperz's study, *Hindi-Punjabi Code-Switching in Delhi* (1115—1124) is also of general range. "In contrast to Western society, therefore, where one linguistic code or a set of closely related styles of what is popularly considered to be the same language serves all requirements of the daily routine, code diversity characterizes the plural societies of the urban East. Multilingualism is an integral component of social interaction and a requirement for full participation in community life" (1116). The author summarizes the situation described thus: "Interference extends to all levels of the grammar — morphemic, morpho-phonemic, and phonological — as well as to the lexicon. It almost seems as if the two languages were gradually merging" (1123). V. Bright and A. K. Ramanujan deal with *Sociolinguistic Variation and Language Change* (1107—1113). They have examined data on caste dialects of Tamil, a language with an exceptionally long literary tradition, and at the same time they have taken into consideration Tulu dialects. These themes were dealt with more freely in the lecture given by Andrée F. Sjoberg, *Writing, Speech, and Society: Some Changing Interrelationships* (892—897). The speaker concluded that the relationships between writing and speech vary, in a general sense, according to the basic type of socio-economic system, broadly perceived.

Valter Tauli, in his socio-linguistic contribution entitled *Practical Linguistics: the Theory of Language Planning* (605—609); deals with the relationship between spoken and written language with regard to language policy. It was certainly precisely on American soil that interest was aroused by the aim indicated by language planning: the methodical improvement of language. "An urgent task of competent language planning in the present situation is to eliminate the harm done to languages by incompetent grammarians in the past" (605). According to the author the first aim of practical (applied) linguistics is to solve the problem of how to improve the actual state: "The first thing is to establish ideal norms" (608). Even although Tauli's contribution was onesided and though the author's research programme would require considerable elaboration, nevertheless the discussion did acknowledge the topicality of a scientifically based cultural policy in current problems in which languages play a role. According to C. Hodge it is more efficient to have differences between spoken and written language, since they convey a message. "Lacking these differences, we would have to use other, more cumbersome, methods to convey the same message(s)" (609).

The situation in contemporary dialectology (in the broad sense of the word), was summed up tellingly by Roman Jakobson (1139): "It was repeatedly pointed out that diversity among and within languages can and must 'be studied along three synchronic dimensions — geographical,

social, and stylistic', in Bright's and Ramanujan's formulation. These three aspects of variations and their interplay were intently discussed, especially in connection with diasystems, inter-dialectal and interlingual borders, contacts, borrowings, mutual adjustment, 'tolerance or intolerance of variation', role of bidialectal (and multidialectal) or bilingual (and multilingual) individuals or communities. Several instructive 'sociolinguistic' papers... disclosed the promising development of this vital field of research, first outlined by Lévy-Bruhl at the plenary session of the Copenhagen Congress of 1936. Yet one can hardly view the socio-linguistic influences on language as merely intrinsic factors. If we approach linguistics as just one among the conjugate sciences of communication, then any difference in the role of communication may evidently have 'a potent effect' upon verbal communication. Thus the role assigned to the wider radius of communication by a nomadic society leads both to technological improvements in transportation and to a coalescence of language."

It is not I think necessary to add anything to this. Dialectology in this conception has very little to do with any nostalgic homeland studies for popular consumption. It will by necessary to work out a common international tongue both in terminology and in the language of definition. We cannot confuse the two endeavours of modern dialectology: 1. the endeavour to grasp adequately the structure of the dialect, and 2. the endeavour to grasp the relationships between language factors and social factors; these two paths at times approach more closely to each other, at times they deviate, but both lead to a single aim: to the better knowledge of man — of man in society.

Jan Chloupek

Bertil Malmberg: Nya vägar inom språkforskningen. En orientering i modern lingvistik. Stockholm, Svenska Bokförlaget, 1959, 254 s.

Kniha švédského fonetika Bertila Malmberga, jehož jméno známe mj. z 2. dílu Zvegincevova sborníku *Novoje v lingvistike*, chce být pouze „orientačním přehledem úkolů a metod současné lingvistiky se zvláštním zřetelem k tomu, co odlišuje moderní jazkozpyt od jazykovědy 19. století...“. Tím více jsme proto překvapeni hloubkou autorova pohledu na současnou lingvistickou problematiku i jeho obsáhlými znalostmi příslušné literatury, o nichž o obou podává kniha výmluvné svědectví. Připojíme-li k tomu stručné a výstižné formulace, jimiž charakterizuje jednotlivé směry nebo jazykovědné práce, nemůžeme Malmbergův úvod do současné lingvistiky nepokládat za zdařilý — už z toho důvodu, že shrnuje velmi rozsáhlý materiál, jehož utřídění a orientace v něm jsou prvním předpokladem jakéhokoliv dalšího rozvoje té či oné lingvistické koncepce.

Po úvodním vymezení pojmů jazykověda, filologie a lingvistika podává autor nástin vývoje a současného stavu historicko-srovnávacího jazkozpytu a zahrnuje sem nejen zhodnocení mladogramatické školy, ale i problematiku substrátu, superstrátu a adstrátu, kritiku marrismu, stav výzkumu mrtvých indoevropských jazyků i výsledky srovnávacího studia jazyků indoevropských a neindoevropských. V kapitole „Ferdinand Saussure a ženevská škola. Strukturalismus“ vychází Malmberg z Humboldtova pojetí synchronického rozboru jazyka a přes Whitneyho, Baudouina de Courtenay, Wintelera, Noreena, Svedelia aj. dospívá k Saussurovu dílu *Cours de la linguistique générale*. Jež označuje za základní pro vznik moderní jazykovědy. K Saussurovu pojetí jazyka pak přidružuje Meilleta, Jespersena, Wartburga, Bloomfielda, Gardinera aj. Po kapitole o dialektologii a jazykovém zeměpise, která zároveň podává přehled o stavu jazykových atlasů, následuje pojednání o neolingvistice a Vosslerově škole. Zvláště tato škola vychází z Croceových estetických názorů, především z jeho práce *Estetica come scienza dell'espressione e linguistica generale*. Vosslerův idealismus nepřežil ve větším rozsahu druhou světovou válku, protože některé jeho myšlenky využili pro své neblahé cíle nacističtí ideologové. Neolingvistika naproti tomu žije jmény Bartoli, Bartoni, Bonfante aj. V partii o Pražské fonologické škole rozebírá Malmberg nejprve práce „průkopníků fonologie“ Trubeckého, Jakobsona a Karcevského a píše, že „na mezinárodním lingvistickém kongresu v Haagu roku 1928 vystoupili s fonologickým programem. K němu se připojuje skupina českých jazykovědců a tvoří tzv. Cercle linguistique de Prague. K této skupině patřili kromě jmenovaných mj. Češi Bohumil Trnka, Josef Vachek a Bohumil Mathesius.“ Poté vypočítává další příslušníky fonologické školy a rozebírá některé pojmy, jak říká, „pražské fonologie“. Trubeckého *Grundzüge der Phonologie* hodnotí jako „důležitý mezník v dějinách jazykovědy“ a jim na roveň staví pouze práce Jakobsonovy a Martinetovy, zejména *Économie des changements phonétiques*es posledně jmenovaného autora. Této práci si Malmberg všimá velmi důkladně a několikrát se k ní vrací, protože ji považuje za významný pokus o vytvoření teoretické základny pro historicko-fonologickou analýzu. Na závěr kapitoly hodnotí strukturalismus v tom smyslu, že uvedl hláskové změny do vzájemných vztahů a tím překonal to pojetí jednotlivých jazykových jevů, které jejich usouvztažněnost nerespekto-