

179p.

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EDRS PRICE MF-$0.83 HC-$10.03 Plus Postage.

DESCRIPTORS *Contrastive Linguistics; English; English Instruction; Error Patterns; Instructional Materials; Interference (Language Learning); *Language Instruction; *Language Research; Psycholinguistics; *Second Language Learning; *Serbocroatian; Synchronic Linguistics

IDENTIFIERS *Error Analysis; Yugoslavia

ABSTRACT

Articles in this volume relate to the Yugoslav Serbo-Croatian-English Contrastive Project: (1) "The Yugoslav Serbo-Croatian-English Contrastive Project at the End of its Second Phase (1971-1975)," Rudolf Filipovic: Pedagogical goals and application of contrastive analysis are best achieved when accompanied by error analysis. Reports, papers and pedagogical materials resulting from the second phase are discussed and a third phase projected. (2) Dora Macek’s "Relatives in English and their Serbo-Croatian Equivalents": Discusses relatives in both languages through contrastive analysis and notes implications for a Serbo-Croatian learner of English. (3) "On Compiling Pedagogical Materials," Mirjana Vilke: Describes procedures used to test theories and the steps in constructing pedagogical materials. (4) Ralph E. Weber’s "Critical Response to the Project": Examines comments made about the study. (5) This section presents biographical and bibliographical data on contributors to the project. (6) Zeljko Bujas, "On Translational Conversion in English: Serbo-Croat Contrastive Analysis": Outlines the problems of a contrastive study of conversion patterns in the two languages. (7) "On Serbo-Croat Complement Sentences," Collette Craig: Classifies verbs in complement sentences and discusses tenses of embedded verbs. (8) Gordana Opacic, "On Psycholinguistics and its Assumed Relevance to Contrastive Analysis": Discusses theories of language acquisition. (CHK)
THE YUGOSLAV SERBO-CROATIAN - ENGLISH CONTRASTIVE PROJECT
Director: Professor Rudolf Filipović, Ph. D.

STUDIES

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Contents


Dora Maček: Relatives in English and Their Serbo-Croatian Equivalents ............. 27

Mirjana Vilke: On Compiling Pedagogical Materials .................................. 63

Ralph E. Weber: Critical Response to the Project .. 78

Biographical and Bibliographical Data on Contributors to the YSCECP ................... 90

II. Željko Bujas: On Translational Conversion in English: Serbo-Croat Contrastive Analysis ....................... 139

Colette Craig: On Serbo-Croatian Complement Sentences ............................ 148

Gordana Opačić: On Psycholinguistics and Its Assumed Relevance to Contrastive Analysis .......................... 165
1.0 Introduction. At the Zagreb Conference on English Contrastive Projects1 (held 7-9 December 1970) I reviewed the work of the Yugoslav Serbo-Croatian - English Contrastive Project in its first phase2 (1967-1970). During that phase, besides the basic work on the organization of the project, (1) questions on the approach to the contrastive analysis and on its application were decided; (2) the aim of the project was determined (it would be twofold: general linguistic and pedagogical); (3) the relationship of the project to linguistic theory and to individual linguistic models was established; (4) the question of the method and the methodology of work was settled; (5) the translation method was accepted and it was decided to work with a corpus and its translation into Serbo-Croatian; (6) the topics to be analyzed contrastively were adopted and it was decided to analyze them on three levels: a) phonological, b) morphological, and c) syntactic; (7) the decision was made to use the American Brown corpus (the Standard Sample of Present-Day Edited American English); (8) this corpus was purposely shortened to half and translated into Serbo-Croatian, and this shortened and translated version of the Brown Corpus was termed the Zagreb version of the Brown Corpus; (9) this shortened version was coded so that all those morphological and syntactic elements which the analysis would need in their work could be obtained; (10) with the help of a computer contrastive concordances were obtained in which each coded grammatical unit is noted in its English or Serbo-Croatian context.3

1.1. The First Phase of the Project. After all this preparatory work was completed, the contrastive analysis and error analysis themselves were begun. In my report given
at the Zagreb Conference I presented the results of that period. All these results were made available to the scientific public in the publications of the project: Studies\textsuperscript{4}, Reports\textsuperscript{5}, and Pedagogical Materials\textsuperscript{6}.

1.1.1. By the time of the Zagreb Conference three volumes of Studies\textsuperscript{7} had been published, containing 12 contributions which discussed questions of the contrastive approach in our project. In the Reports series of publications were published the first analyses of individual grammatical units on the morphological and syntactic levels, 26 contributions in three volumes\textsuperscript{8}. In that phase the first volume\textsuperscript{9} of the third series, Pedagogical Materials, was also published, containing six articles. The significance of this last volume is twofold: first, we showed the pedagogical application of the results of the contrastive analysis and how we came to accept the final form and method of working with those materials; second, we published, in that volume of Pedagogical Materials (in lengthy résumés of three M. A. theses) the results of the error analysis\textsuperscript{10} which we were working on at the same time that we were working on the contrastive analysis.

In "The Use of Contrastive and Error Analyses..."\textsuperscript{11} I emphasized our viewpoint that contrastive analysis cannot be successfully applied without error analysis and that only on the basis of both kinds of results (CA and EA) could good teaching materials be compiled. It is thus our belief that such materials must be based on: a) the results of contrastive investigation, b) the findings of error analysis, c) the experience of analysts with errors which students of a foreign language make, and d) methodologists' knowledge of which method to apply and how to apply it.\textsuperscript{12}

A detailed investigation of errors made by those learning a foreign language offers material for a compromise system\textsuperscript{13} which we can construct to give the teacher a systematic list of errors, their nature and their causes. Such a list serves the teacher as a handbook whenever he wants to identify and eliminate some error. Errors arise as a result of language transfer or for some other reason which has no connection with transfer. Therefore the teacher must know not only the causes of errors based on interference from the mother tongue but also causes such as false analogy, the study or knowledge of another foreign language, taking up another grammatical unit before the first has been fully mastered, a student's abandoning of the system of his native language before he has
mastered the new system of the foreign language and thus, under the influence of the stimulus "this is new, this is different from my native language," he creates his own transitional systems which have no connection with transfer.

1.1.2. On the basis of the results attained in the first phase of work on contrastive and error analysis, we came to the very convincing conclusion that the general linguistic goals of CA can be attained by conducting CA alone, but that the pedagogical goals and the application of the results of CA cannot be realized without conducting error analysis. Thus both analyses (CA and EA) must be conducted parallelly so that on the basis of their results the planned final products of our project could be obtained: a contrastive grammar, a compromise system, and teaching materials.

To check the applicability of the results of CA we began already in the first phase to test the results of CA completed up to that time, and we came up with some very interesting findings.14 We used two types of tests: the first served to test the applicability of the pedagogical materials in classroom teaching and thus to ascertain how much and when they could be used in the teaching process, while the second kind of test actually represents a continuation and completion of the error analysis (done earlier mainly on a spoken corpus), because the tests were compiled separately for just those areas which we wished to investigate more carefully and which would thus give supplementary information on the types and causes of mistakes. This second type of test served also to check the results obtained in CA as they represent areas of interference. Occasionally those results were of particular interest for establishing the relation of CA and EA.

2.0. The Second Phase of the Project - Results, Plans, and Goals. The work that we reviewed in the preceding sections (Introduction, 1.0. - 1.1.2.) was not all completed in the first phase (1967-70) and is continuing in the second. This holds especially for the analysis of individual grammatical units and the publication of results in the Reports, for testing those results and compiling pedagogical materials. In the second phase of the project two main goals were set: a) to determine the way in which the studies, the final result of the contrastive analysis, would be written, and b) to establish the form of pedagogical materials intended for the teacher of English.

Even at the very beginning of the project (which I reviewed at the AILA Congress at Cambridge15, Aug 1969)
the difference between articles printed in the Reports and those in the Studies series was defined. Later the aim and method were defined more precisely for both kinds of articles, those in Reports and those in Studies. At the Zagreb Conference (December 1970) I developed the methodology for preparing reports. All contributions printed in Reports up to the end of 1970 were done according to this much more developed concept, and the results were presented by me in my report at the Zagreb Conference.

In the second phase of the project (YSCECP) we followed the same concept, i.e. each article for the Reports is to be written on the basis of the literature available, existing descriptive grammars and other sources, as well as the intuition and experience of the analyzer, but without the use or documentation of the corpus. Reports were used as a place for project workers to publish the results of their work in progress and to discuss openly questions which appear during their work. Although discussion on the results of analyzing individual grammatical units was carried on in regular Project meetings, some discussion appeared in the publications as well.16 Whatever differences conceivably exist between reports from the first phase and those done during the second phase, these differences are the result of greater experience on the part of project workers and of wider acquaintance with the material and aims of the project. Sometimes the difference represents a step closer to a study. This is especially true for those reports which were done after we developed in a more detailed fashion the concept of a study. The best example of this is an article on adjective comparison17 in which the author prepared a theoretical introduction on the basis of the latest literature. This introduction will serve the author well when he is writing the chapter on comparison in his study on adjectives.

In the Studies series of publications we foresaw publication of two types of contributions: (a) articles which would treat questions and problems of contrastive linguistics directly or indirectly connected with the organization and work of our project; (b) articles representing the final product of the contrastive analysis of some grammatical unit, written on the basis of an analysis completed with the Zagreb version of the Brown Corpus, i.e. an analysis supplemented by material from the corpus and, with the aid of the contrastive concordances, to
revise or complete the results from the "Report" stage.

In the first phase of the Project we published four volumes of Studies and in the second phase one volume with articles of the first type. In the second phase we worked on articles of the second type, i.e. project workers reworked their reports into studies with the help of material from the Corpus. Several such studies are still in progress, and the first such study to be completed is being published in this volume.

At the end of the first phase we solved, after lengthy experimentation, the question of how to write pedagogical materials as we intended them to be written at the conception of our project, i.e. that the results of pedagogical materials should be applied in practical teaching. Two contributions printed in the first volume of Pedagogical Materials reveal our path: the first contribution was written before the substance of my article "The Role of Linguistics in the Development of Modern Language Teaching" was put into practice and reveals our search for the best solution; in the second the application of my teaching scheme consisting of two stages and five phases was detailed. This approach has proved to be very suitable for classifying teaching material. The pedagogical justification of my scheme and the proper method for its application in compiling teaching materials were given by Mirjana Vile in her contribution in this volume "On Compiling Pedagogical Materials". Thus we obtained practical directions for compiling teaching materials as this project's immediate practical results to be used directly in teaching. In this way we continued work on pedagogical materials in the second phase as well.

2.1. Analysis Completed and Results Published. In the second phase, since the Zagreb Conference 59 contributions have been published: 45 in six volumes of Reports (Nos. 4, 5, 6, 7, 8, 9), seven contributions in one Studies volume (No. 5) and seven in one volume of Pedagogical Materials (No. 2). By the same system (which I described at the Zagreb Conference) project workers have continued contrastive analysis of other previously determined topics. In the fifth volume of Studies the publication of theoretically oriented contributions giving further treatment to theoretical questions of CA was continued. The second volume of Pedagogical Materials contains, in addition to an introductory article which shows synthetically the pedagogical application of CA and EA, articles with teaching materials for practical treatment of the
individual units theoretically detailed in the Reports.

2.1.1. Reports. In this second phase of work the analysis of verbal forms was continued. Dr. Leonardo Spalatin distinguished among the various uses of the English preterit and pluperfect which in Serbo-Croatian very often have the perfect as an equivalent. This then leads to difficulties for Serbo-Croatian speaking students. Dr. Damir Kalogjera took up various methods of studying the future tense in both languages (English and Serbo-Croatian), comparing their meanings and restrictions in usage.

Verbal aspect, a finely developed grammatical category in Serbo-Croatian, was the subject of two articles. Dr. Midhat Ridjanović in a lengthy article gave a universal classification of verbs and showed that the same categories are important in both languages but in different ways. Mira Vlatković, in an article dealing with both aspect and verbal tense, showed how to express simultaneous actions.

The remaining contributions on verbal forms and their use discussed the passive. Dr. Ljiljana Mihailović published the first part of a detailed analysis of passive constructions, and Dr. Leonardo Spalatin treated the English passive and its various translations into Serbo-Croatian by both passive and active as well as reflexive constructions, third person plural, etc. Mira Vlatković analyzed the English imperative and its corresponding forms in Serbo-Croatian.

Linking verbs formed a topic of discussion between Dr. Vladimir Ivir and Dr. Midhat Ridjanović. In addition, in a separate article Dr. Ridjanović analyzed the uses of linking verbs in exclamatory sentences.

Dr. Vladimir Ivir carried on a syntactic analysis of adjectives in four contributions. The first article deals with the use of prenominal and postnominal adjectival constructions. Comparative adjectives were the topics of the second and third articles; they were shown to be very similar in both languages. The fourth contribution discussed the superlative. Wayles Browne contributed two notes to the articles on adjectives cited above: one examined the accentuation of adjective + noun groups, and the second, modifiers of the comparative.

Several articles dealt with pronouns. Maja Dubravčić analyzed personal pronouns in English and Serbo-Croatian; Dr. Leonardo Spalatin examined the use of the pronoun it and its equivalents in Serbo-Croatian; Vjekoslav Suzanić...
in one article described the different uses of English one and its equivalents (or lack of equivalents) in Serbo-Croatian, and in a second article treated indefinite adjectives and pronouns and their use in the noun phrase; Dr. Željko Bujas discussed demonstrative pronouns and their translation equivalents, viewing them as a problem of translational conversion; Dr. Ljiljana Mihailović analyzed demonstratives and other elements of the structure of the noun phrase.

The distinctions, formerly quite elusive, among the English prepositions over, under, above, and below were analyzed by Dr. Ranko Bugarski. He concluded that they correspond fairly well to the distinctions in Serbo-Croatian among nad, pod, iznad and ispod.

In the field of derivational morphology only one contribution has appeared. Here Dr. Željko Bujas examined translational conversion, showing that a typical feature of English words — that they are used in functions outside those of their basic part of speech — is not as rare in Serbo-Croatian as was previously thought.

A large number of articles was devoted to the syntax of the simple sentence. Dr. Vladimir Ivir examined number agreement between subject and verb and between members of the noun phrase. Ljubica Vojnović analyzed the types of intransitive sentences and the distribution of adverbial modifiers. Radmila Šević detailed the use of adverbial modifiers in transitive sentences. Dr. Dragica Pervaz studied verbs which take one object, and Radmila Šević, verbs with two objects. Mladen Mihajlović contrastively analyzed a general syntactic problem in an article on elliptic sentences. Dr. Ljiljana Bibović showed in her discussion of word order that the theme-rheme structure is an important determinant in word order, especially in Serbo-Croatian.

The structure of complements or the use of "transformed clauses" as parts of other clauses was examined in several articles: Omer Hadžiselimović studied a series of English constructions with non-finite verbal forms after the main verb and their various equivalents (clauses or lexical units) in Serbo-Croatian. Dr. Dragica Pervaz in one contribution distinguished among several types of English structures which have a direct object followed by a non-finite verbal form. Dr. Ljiljana Bibović analyzed the English gerund used as subject and its equivalents in Serbo-Croatian (clause, infinitive, verbal noun).
Four contributions treat complex sentences: Zorica Grdanić58 examined the use of clauses as subject of a second clause; Gordana Gavrilović59 analyzed three types of adverbial clauses; Mladen Vitezic60, in a lengthy condensation of his MA thesis, treated relative clauses from a practical standpoint; and an article by Dr. Ljiljana Mihailović61 on relative clauses was of a theoretical or general syntactic character.

An article by the three authors Ivir, McMillan and Merz described S-relators62 (conjunctions, adverbs, prepositional phrases, etc.) as the means by which various logical relations between clauses and sentences may be studied. The article contains a comprehensive list of relations and S-relators, with examples.

2.1.2. Studies. In this time period only one volume of Studies (Studies 5, Zagreb 1972) has been published. It contains, as did earlier volumes, articles which have more of a theoretical value for contrastive linguistics and are not directly connected to work on our project (YSCECP). Four of these articles were written by members of the project and the other three by foreign linguists.

The members of the project contributed the following studies: Dr. Midhat Ridjanovic63 took up the question of verbal aspect as a grammatical category and presents part of the results of his research into that question. This article represents part of his as yet unpublished Ph.D. dissertation. Dr. Vladimir Ivir64 analyzed adjectives with that-complements, e.g., happy that you can come, and classified them according to the various transformations that the complement can undergo. Dr. Ljiljana Mihailovi65 studied existential sentences and contributed to the study of word order as well as to general and contrastive syntax. In his theoretically-oriented article, Dr. Rudolf Filipovic66 sought to draw a parallel between compromise systems which a student unconsciously forms while studying a foreign language and systems which appear when one language adopts elements of another.

The articles written by non-members of the project treat several questions. The value of R.L. Allen's notion of sector analysis to contrastive syntactic studies was shown by T.K. Adeyanju67. Dr. Carl James68 pits CA against error analysis and throws light on two problems: (a) interference which arises in studying a foreign language which is similar or typologically different from the native language of the student, and b) interference caused by a foreign language which the student has previously studied. Dr. W.R. Lee69 stressed the use of language
in communicative situations; his opinion is that contrastive studies are useful to foreign-language teaching but they should not lead to exaggerated emphasis, during classroom work, of the differences between two languages. Dr. Olga Tomić proposed a classification of definite determiners and wh-words in English and Serbo-Croatian.

Although during the first phase of our project intensive work was being done on the "first" studies, the final products of the analysis of individual grammatical units, thus far only one has been completed and we are publishing it in this volume. This study by Dr. Dora Maček, entitled "Relatives in English and their Serbo-Croatian Equivalents", was written on the basis of her article "Relative Pronouns in English and Serbo-Croatian", published in Reports 372 (Zagreb 1970) and completed with the help of the bilingual contrastive concordances from the Brown Corpus. This study serves as a pilot study, as a model for other project workers in writing their studies.

The discussion of this study led to many methodological questions which had to be formulated in that last phase of work. The discussion also offered some solutions on which project members can rely when they are writing other studies. The genesis and structure of a study is discussed in section 3.

2.1.2. Pedagogical Materials. In the second phase, work on pedagogical materials was continued according to the principles we established at the end of the first phase. In this second phase one volume of Pedagogical Materials was published. Drawing on the experience of the YSCECP, Dr. Rudolf Filipović details in the paper "The Use of Contrastive and Error Analysis to Practicing Teachers" how both contrastive and error analysis can help the practicing teacher: first, they can lead to the creation of a compromise system comprising a list of errors typical for the language he is teaching and a list of reasons for these errors; second, CA and EA can aid in compiling pedagogical materials so that teaching and learning efficacy are maximized.

The basis for writing pedagogical materials is formed around my five-step scheme which consists of two stages (habit formation and cognitive) and five phases in accordance with which the exercises are built. Both analyses, CA and EA, lead to the establishment of a compromise system showing the stages through which the student goes in the process of learning a foreign language when he gives up using his native language's system as a model but
hasn't yet mastered the system of the target language.

In this second phase one volume of Pedagogical Materials was published with seven contributions. Besides the above-noted introductory article in six contributions on practical materials, exercises for mastering individual units, based on tests taken in Zagreb schools, are given. Radmila Djordjević wrote three contributions to the Pedagogical materials following the Filipović scheme. One analyzes the types of errors which occur in the use of noun phrases as subject in English and suggests a three-step review of the problems met in this area: from the most common ("yes/no questions" and their answers) to the less common and harder (agreement of subject and verb, inversion of subject and verb). In the second, making use of the results of the tests, she suggests stages through which the student of English can be led so that he meets the fewest possible difficulties in mastering English constructions, noun phrases as subject, where one finds demonstratives, personal pronouns, a proper noun in the genitive, or all, both and half. In the third contribution she discusses questions of pronominalization in English creating problems for the student of English - especially the use of the indefinite pronoun one and certain personal pronouns. The areas in which these difficulties occur are treated so that they can be easily handled in the classroom: from the less difficult to the most complicated questions.

In three articles, Dr. Mirjana Vilke follows the structure of the Filipović scheme: in the first stage, consisting of three phases, the approach is toward habit formation, and in the second stage of two phases the approach is cognitive. For every phase not only what needs to be worked on is shown but examples of exercises, drills and dialogs for classwork are given. M. Vilke developed materials in this way for covering modals, the perfect tense, and the imperative.

3.0. New Studies. The main reason that the studies, which we envisioned as the final product of analysis of each unit, couldn't be published in the first five volumes of the series of our publications was that the reworking of the corpus took a long time and we wished to and had to work without a corpus in the first phase of CA, using a method explained in several other papers. This is apparent from the methodology we followed, which sought to do CA on the basis of other sources and not a corpus.
Only after getting bilingual "contrastive concordances" through computer treatment of the corpus did we fulfill the basic conditions for work on the studies as the final products of our project's CA. In addition, experience gained in writing articles (anticipated for publication in the Reports) and discussions carried on during the work on them and after their publication in the Reports gave us some new ideas and knowledge which we incorporated into the conception of writing studies.

Thus when we started to work on the studies with the help of computer concordances we could formulate the goal of the studies-writer more concretely and precisely than earlier when we decided (theoretically) that the final product of the CA of each unit would be a study.

3.1. The first and fundamental principle was that each unit for which we completed CA ought to have its own study based on the results obtained from work on the Reports article and should be further documented with examples from the corpus. The transformation of a Reports article into a study does not have just the formal character of supplementing it with the help of examples from the corpus. By our principle the analyst reworks the report into a study so that it includes all new findings and later results of the analysis obtained in researching the corpus. Thus a study shows which results the analyst has incorporated into it from existing literature and from his own experience and knowledge of English, and which he included on the basis of his analysis of the corpus. The examples from the corpus are designated with computer numbers and the rest are not. Thus the study does not toss aside the article; rather, the article is supplemented and all its results are tested with the help of the corpus since the study must be the full-circle totality of our work on one topic.

In this totality all accessible literature on the subject is reviewed so that the reader-teacher or student gets an overview of the linguistic knowledge on the grammatical unit. This overview covers the approaches to the problem from the oldest to the most modern. In this way supplemental information is obtained on the linguistic approach to some unit through all the main trends in linguistics (from classical through structural to transformational-generative).

One of the reasons for such an approach is that we will in this way introduce the reader (who frequently has
gotten his linguistic knowledge through a classical or perhaps structural approach) to the most modern linguistic approach to language, that of transformational-generative linguistics.

3.2. Of the five studies which are in progress one has been completed and published in this volume of Studies as a pattern for producing the rest of the studies. Discussion held on this study at the sixth working meeting of YSECP showed that it can be taken as a basis for further work but that there are still possibilities for improving its form and content. The other studies which are in progress will certainly profit from the discussion at the meeting, but since they each have their own problems, they will present some other difficulties which will manifest themselves during the writing of a study.

One group of studies contains contributions, each of which is tied to an article published in the Reports; each of these treats one single theme. Included here are the above-mentioned study by Dora Maček on relatives and two others, one by Maja Dubravić on the present perfect tense and the second by Mira Vlatković on the imperative. Another group of studies grew out of several articles on one theme and presents a sort of synthesis of a project member’s work up to the present supplemented by the results of corpus analysis. Vladimir Ivir is writing such a study on adjectives on the basis of his six articles and Damir Kalogjera on modals based on his three articles.

Project works have one more valuable and useful source of information for the analysis of some units: senior theses for the B.A. degree, as well as M.A. theses of students doing Master’s degree work in linguistics at the Faculty of Philosophy in Zagreb. Thus far we have tried whenever possible to publish lengthy condensations of these works in our publications. Those which are unpublished are frequently cited in project members’ articles as having been used. Although these works with one exception are not based on our corpus, they occasionally give data on the topics they treat which are useful from a contrastive standpoint, because they approach the topic from the opposite angle, i.e., from Serbo-Croatian.

The publication of studies in the series bearing that name has as its aim their presentation of the work to the linguistic community and their improvement on the basis of the principles and criticism of the studies. These
studies, discussed and evaluated in this way, will help, first, in writing the final monograph "A Contrastive Analysis of Serbo-Croatian and English" and, second, in applying the results of these studies to practical aims in writing a contrastive grammar of English for the Serbo-Croatian speaking area.

4.0. Perspectives. The Project will continue into a third phase (1976-1980), since several studies and the remaining pedagogical materials must be completed yet, in order to obtain all necessary analytic material for writing the synthetic monograph "A Contrastive Analysis of Serbo-Croatian and English". The monograph will be written on the basis of a detailed plan that Professor Charles Fillmore (University of California, Berkeley) and I have been working on.

In addition to a two-volume monograph, we shall also publish a series of smaller books, each of which will treat a separate grammatical topic which had been previously discussed and analyzed in the Project. Each book will consist of an informative introduction to the Project, a study on the grammatical topic, and pedagogical materials compiled on the basis of the study, with the aim of applying them in teaching. These books will serve the teacher as a source of information on individual grammatical topics and as a collection of exercises and drills for applying the topics in teaching.

In the third phase two new aspects of contrastive analysis will be studied, the psycholinguistic and sociolinguistic. Present-day research in psycholinguistics is opening new possibilities and directions for studying the process of foreign-language teaching. Dr. Gordana Opačić, a perspective member of the Project, suggests that "in order to shed some light on the psycholinguistic nature of contrastive factors in second-language teaching and learning, the existing studies - e.g. those based on error-analysis - be examined for possible correlations of the nature and frequency of errors and the degree of remoteness of particular linguistic sequences from underlying semantically-based cognitive structures." New research in sociolinguistics shows that the spheres of our contrastive analysis, pronunciation and grammar, must be widened and that the study of the sociolinguistic aspect of contrastive analysis promises new and very interesting results.
NOTES


12. Ibid., pp. 6-7.


26. M. Ridjanov, "Contrastive and Non-Contrastive Aspects of Aspect" in R. Filipović, ed., YSCECP, Reports 8, Zagreb 1973, pp. 80-114. This article is based on sections of M. Ridjanov's Ph.D. dissertation entitled "A Synchronic Study of Verbal Aspect in English and Serbo-Croatian", which was completed at the University of Michigan, Ann Arbor, USA, 1969.


34. V. Ivir, "Patterns for English Adjectives and Their Contrastive Correspondents in Serbo-Croatian", ib., pp. 56-84.


37. V. Ivir, "Superlative Structures in English and Their

38. W. Browne, "Notes on Adjectives and Stress", in R.

39. W. Browne, "A Note on Modifiers of Comparatives in
English and Serbo-Croatian", in R. Filipović, ed.,
YSCECP, Reports 9, Zagreb 1974, pp. 3-4.

40. M. Dubravčić, "The English Personal Pronouns and
Their Serbo-Croatian Equivalents", in R. Filipović, ed.,
YSCECP, Reports 5, Zagreb 1971, pp. 11-39.

41. L. Spalatin, "The English IT and Its Serbo-Croatian
Equivalents", ib., pp. 117-130.

42. V. Suzanić, "One: Its Forms and Uses", in R. Filipović, ed.,
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43. V. Suzanić, "Indefinites in English and Serbo-Croatian"
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44. Ž. Bujas, "Demonstratives in Serbo-Croat to English
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45. Lj. Mihailović, "Additional Notes on Noun Phrases in
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On translational conversion see the article by Ž.
Bujas, "On Translational Conversion in English:
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YSCECP, Studies 6, Zagreb 1975.


52. R. Šević, "Verbs with Two Objects in English and Serbo-Croatian", ib., pp. 143-158.


60. M. Vitezid, "Relative Clauses in English and Croa-


64. V. Ivir, "Case Frames and Transformations for Clause-
Expanded Adjectives", ib., pp. 30-45.


67. Th. K. Adayanju, "The Use of Sector Analysis in Con-


74. See: Note 13.


80. M. Vilke, "Teaching the Present Perfect Tense in the SC Speaking Area", ib., pp. 71-82.


82. pp. 27-62.


V. Ivir, "Patterns for English Adjectives and Their Contrastive Correspondents in Serbo-Croatian", Reports 6, Zagreb 1972, pp. 56-84.


RELATIVES IN ENGLISH AND THEIR SERBO-CROATIAN EQUIVALENTS

1. The present paper has been planned as part of a more comprehensive study of relativization in English and Serbo-Croatian for the Yugoslav Serbo-Croatian - English Contrastive Project. It is based on a previous paper and on analysis of a representative sample of the corpus used in the Project. The sample includes every tenth sentence containing one or more relative clauses. The statistical data presented here, however, are meant only to (roughly) indicate distributional traits of the relatives that might be useful for teaching purposes.

1.1. The sample numbered 1,724 relative clauses, of which 1,549 (90%) were linked to the main clause by a relative word, while the relative word was deleted in only 177 (10%) relative clauses. Of all the relative words there were 876 (49%) occurrences of relative pronouns who, which and what, 200 (12%) clauses linked by the relative that, and 472 (27%) by various other relatives, like relative adverbs when, where, wherein, why, how, while, whereby, whence, and the relatives such as and whatever.

1.2. The English relatives to be primarily discussed in this paper, in order of frequency, include: WHICH (496 occurrences in the sample, i.e. 29% of all relatives), WHO (242 occurrences, 14%), THAT (200 occurrences, 12%), deletion of the relative, or ZERO-RELATIVE (177 occurrences, 10%), and WHAT (29 occurrences, 2%). Their SC equivalents are mostly: KOJI (1,189 occurrences, 69%), ŠTO1 (139 occurrences, 9%), ĆIJI (61 occurrences, 3%), GDJE (51 occurrences, 3%), KADA (34 occurrences, 2%), TKO (18 occurrences, 1%), ŠTO2 (16 occurrences, 1%).

2. Relativization in English

2.1. Relative clauses are a type of nominal modifier, subordinated to a noun phrase. The subordination takes place when a sentence is adjoined to another sentence with which it shares a nominal element.
Relativization is realized through a series of processes:

a) The relative marker \( R \) is placed at the beginning of the sentence that is to become a relative clause. Either of the two sentences can undergo relativization.

\( \text{He saw the suitcase.} \quad \text{R Julia was holding the suitcase.} \)

(\( \text{R He saw the suitcase. Julia was holding the suitcase.} \))

b) The shared nominal constituent is pronominalized, i.e. the noun is replaced by an appropriate (personal) pronoun:

- animate - he, she, it, they
- inanimate - it, that, they

\( \text{R Julia was holding it.} \)

c) The pronominal is next marked for case if its position in the sentence (i.e. object of verb or preposition) requires such marking:

- he - him, his
- she - her
- it - its
- they - them, their

d) The constituents are reordered so that the pronominal is attached to the relative marker at the beginning of the clause, thus giving a "relative":

- R - he, she, they = who
- R - him, her, them = whom
- R - his, her, its, their = whose
- R - it, that, they = which, what

\( \text{R it Julia was holding.} \quad \text{which Julia was holding.} \)

e) When whom is in clause initial position its case marking may be optionally deleted in the colloquial style:

\( \text{The leader whom/who I saw left.} \)

f) Thus rearranged, the sentence is adjoined to the noun phrase it is to modify:

\( 49326 \text{He saw the suitcase, which Julia was holding.} \)
Depending on the definiteness or indefiniteness of the antecedent noun phrase, indicated by its determiners, the relative clause can be appositive (with unique noun phrases, e.g. proper names, and those with specified determiners: a, the, \( \emptyset \)) or restrictive (with specified determiners or unspecified determiners: any, all, some, each etc.). Appositive (also called non-restrictive) relative clauses are in writing separated from the main clause by commas, in speech by a pause and intonation. The choice of relative depends on the kind of relative clause it occurs in: who and which are used both in appositive and restrictive relative clauses, that and \( \emptyset \) in restrictive clauses only.

Who and which, but not what, are in fact reduced to the relative that (which coincides with the conjunction that in form, and partly in its function as a link between the subordinate clause and the main clause):

He saw the suitcase that Julia was holding.

from: He saw the suitcase which Julia was holding.

The reduction can be carried even farther by deleting the relative, unless the relative precedes a verb:

He saw the suitcase Julia was holding.

but not:

* It is sex obsesses them, sex is at the basis of their aesthetic creed.

from:

19348 It is sex that obsesses them, sex that is at the basis of their aesthetic creed.

If the relative is reduced along with the copula (is, was), the relative clause becomes a postnominal modifier:

24030 Religion and the churches are institutions which had been created by men.

Religion and the churches are institutions created by men.

2.1.1. Prepositional phrases in the process of relativization can be treated in two ways:
a) The pronoun of the relative clause is attached to the relative marker together with the preposition preceding it.

It requires an omniscient eye to select those on whom we can now rely.

which has been derived from:

R we can now rely on them.

b) The second possibility is for the preposition to remain ("stranded") in the place it occupied before the pronoun was moved to the initial position.

It's not the kind of thing that a man would be proud of.

from:

A man would be proud of it.
It a man would be proud of.
That a man would be proud of.

In relative clauses with that or with deleted (zero) relatives prepositional phrases cannot be brought to the front in the same way as with other relatives. This is accounted for by a rule that does not permit the reduction of who or which to that, nor the deletion of the relative, if it is preceded by a preposition. The reduction, or deletion, is possible only when the preposition is left in its original position in the clause. This position, though verified by grammars and informants for all relative constructions, was not found in the present sample with other relatives than that or zero. In the entire corpus even, it was difficult to find such cases:

It was predicted that those who shifted in their Kohnstamm reactivity would differ significantly from those who did not on the factor, which the investigators refer to as the "inferiority" factor.

With relatives marked for case required by the preposition, the case marking may be optionally deleted, as with the object of a verb (see 2.1.e):

The leader with whom he spoke left.
The leader whom/who he spoke with left.
2.1.2. Several relative clauses can be linked by coordinate conjunctions, but the relative clause itself still begins with a relative:

24101 Then I spoke at the ninetieth birthday party of W. E. Burghardt Du Bois, who embarked on a fictional trilogy at eighty-nine and who, . . ., had created a Negro intelligentsia.

2.1.3. If the noun in the relative clause is preceded by certain determiners such as each, two, any, the noun phrase must first be turned into a prepositional phrase with of, and then pronominalized. The determiners are placed initially together with the pronoun (pronominalized noun) they determine.

24091 There were several men of ninety . . . all of whom were still productive.

can be derived from:

There were several men of ninety. All the men were still productive.

All of the men were still productive.

All of them were still productive.

. . . all of whom were still productive. 8

2.1.4. If the nominal element common to the main and relative clauses is an adverbial or a noun denoting time, place, direction etc., in the relative clause it can be reflected either as a prepositional phrase with a relative pronoun, or as a relative adverb (sometimes preposition + adverb), e. g.

time at which: - time when
place at which - place where, in which - wherein
direction from which - from where, from whence
duration at which - during which - while
means by which - by which - whereby

13810 . . . the time has now come (in which) when the gardens produce delicious long-keeping vegetables.

13558 His esoteric chartings of the voice alert the therapist to areas where (in which) deeper probing may bring to light underlying psychological difficulties.
They threatened constantly to give the British a hold on this region, (from which, from where) from whence they could move easily down the rivers to the French settlements.

2.1.5. A comparison between the two nominal phrase-referents can be expressed by the relative such as, meaning something like "the same kind of":

"P" can be justified as a habitable site only on the basis of unusual productivity such as (the kind of productivity which) is made available by a waterfall for milling purposes.

Such may be attached to the nominal in the main clause, as remaining at the beginning of the relative clause:

2.2. The nominal element common to the conjoined sentences and expressed in the main clause as the antecedent of the relative, can be a noun (1,518 occurrences, 88%), pronoun (155 = 9%), or a clause (22 = 1%). Relative clauses introduced by what (29 = 2%) do not have an antecedent.

2.2.1. If the antecedent has a human referent, the relative referring to it can be:

a) who

From the man who had leaped in from the high bank...

Yet General Suvorov - who had never forgotten hearing his adored Czarina declare that all truly great men had oddities - was mad.

To people who didn't know her she was a gawky, badly dressed kid...

b) whom in object position and prepositional phrases:

I say the late seventeenth century because Racine (whom Lessing did not really know) stands on the far side of the chasm.

Its truth is illustrated by the skill... of the English professor with whom one attends the theatre.
c) whose in possessive constructions:

4272 These are, of course, the same people whose support he has only now rejected to seek the independent vote.

d) which, when the antecedent is superficially inanimate, but actually refers to a group of people, like navy, community, society etc. The verb is in the singular (see however, 2. 2. 2. b):

1896 The jury, which was locked up in a motel overnight, was canvassed...

e) which when the quality or status of the referent is thought of rather than the person:

36506 He knows me as your niece, which of course I am.

f) that as a reduction of who, whom, which:

46326 ... four Eromonga women are more than a match for the strongest male that (who) ever lived.

6284 The party that (which) won used to say something about a new frontier.

g) that when quality of character rather than the person is meant:

Fool that I am.9

h) deleted, as a further reduction:

17968 Mrs. Hosaka is one of the Japanese women 0 (about whom) one reads about.

2. 2. 2. Non-human antecedents are referred to by:

a) which

23008 At the trial which took place later, the Pomham matter was completely omitted.

43080 She had reached a point at which she didn't even care how she looked.10

b) who with non-human surface antecedents such as neighbourhood, number etc., i.e. antecedents used for human referents in the plural (see also 2. 2. 1. d):

7530 ... an audience of at least a couple of thousands who came to Newport...
c) **that**, as a reduction of **which**:

- And she had the kind of crossed eyes **that** (which) shocked.

**d)** **deletion**, as a further reduction:

- I am interested to know **he** is getting mail from all over the country about the "abuse" **which** (which, that) **he** is being subjected to.

**e)** **whose** for the possessive construction:

- ... celestial bodies will be of a subtle, quickened ethereal existence, in **whose** embodiment pure form will be absent...

2.2.3. With antecedents that denote time, manner, place, etc. (see 2.1.4.) and are definite or unique, the preferred constructions are:

a) **that** as a relative (as a reduction of preposition + **which**):

- Thus at the **same** time **that** (when, at which) William Henry Harrison was preparing...

- We are not now afraid of atomic bombs **in the same** way **that** (in which, as) people once feared comets.

b) the relative is deleted as a reduction of **that**:

- It was the last time in history **that** (when, at which) anybody could do something gloriously like that.

c) relative adverbials for definite and indefinite antecedents:

- **during** the years **when** (during which years, during which time) I was on the staff of the "Nation"...

- The vast dungeon kitchens may seem hardly worth using except on occasions **when** (that, on which) one is faced with a thousand unexpected guests...

2.2.4. When antecedents are pronouns it is also important whether they are definite or indefinite, human or non-human for the choice of the relative.
a) With definite pronouns like I and you only who is used (normally):

   I, who am your best friend.9

b) Particularly frequent antecedents are that and those. The former refers to non-human, and the latter to human referents. Thus which refers to that, and who to those. Who can be reduced to that (those that), while which would normally remain unreduced (?that that).

   He always does that which the hour demands, not that which he would fain do.11

   1635 ...there will be facilities at Philmont Country Club for those who would like to bring the bundles on the night of the party.

Those like that can refer to non-human referents if they have been mentioned earlier in the sentence:

   30155 Of all the possible forms of nonverbal expression that which seems best to give release... is laughter.

   23970 The fall of Rome... could only be explained and understood by comprehending the links that preceded and those that followed.

c) It has been claimed12 that with indefinite pronominals like something, anything, everything, one, all, the relative that or the deletion of the relative is preferred to which. With all, in fact, which is not used, while it is possible with other indefinite pronominals:

   24404 Life... should be regarded as sacred and, therefore, as something that neither an individual nor his society has a right to take away.

   24157 Lewis told him what clothes he should bring along, and enjoined him not to buy anything that he did not already own.

   21412 ...Shawn went over all that Ban-Jensen had brought up.

Deletion as a reduction of that:

   5854 But there is nothing Ø we can do to stop them...
... I eagerly wrote down everything she told me...

No, coloring isn't exactly something you teach a child.

Don't start anything you can't finish.

Examples with which were not uncommon in the present sample:

He then said something which struck a chord in my memory.

2.2.5. a) Which is the relative when an adjective is its antecedent:

... it would be 2.0, assuming the five classes were equal in J.N., which approximately they are.

Similarly with nominal phrases denoting quality:

Faulkner's is not the mind of the apologist which Mr. O'Connell implies it is.

With nouns denoting the quality of human character used:

Fool that I was!

b) If the antecedent noun is a superlative, or superlative equivalent, or is qualified by one, that is preferred:

... four Eromonga women are more than a match for the strongest (male) that ever lived.

It was the only meaning of the word he had ever known.

c) Similarly with ordinal numbers:

It was the second (bus) that (Ø) he missed.

2.2.6. There are relative clauses with which as relative referring to a whole clause or clauses:

The prisoners agreed, provided they might speak after the sermon, which was permitted.

... if the enemy were enterprising, they might get two from us, when we would take one of them, which makes me wish General Howe would go on...
2.2.7. a) The antecedent may be unknown and not expressed, in which case what introduces the relative clause. It is called an "independent" relative because it does not occur with an antecedent.

13521 In American romance, almost nothing rates higher than what the movie men have called "meeting cute"...

What can be paraphrased by that which.

b) There are other relatives that can be used without antecedent, and that can be paraphrased by indefinite pronominals + relatives, i.e.:

- anyone who - whoever
- anything which - whichever
- anything that - whatever
- any place which - wherever etc.

Only whatever and whenever have been attested in our sample:

23611 When these chores were finished, only then was she allowed whatever freedom (any freedom which) she could find.

17869 ... the resigned pose of the whipping boy who expects to be kicked whenever (every time when) the master has had a dyspeptic outing with his wife.

2.2.8. The noun of the relative clause need not always be deleted after pronominalization, but can be copied together with its pronominalized form at the beginning of the clause. The relative will thus stand in adjectival position to the noun. The rule applies only to which and what:

5884 But they refuse to support the United Nations' expenses..., which expenses are not covered by the regular budget...

With a noun partly identical with the referent of the antecedent:

1682 ... at midnight at which time...

With independent relatives what and whatever, paraphrasable by "any Noun which":

47674 Stuart had...to go back... taking what salary (any
salary which, that salary which) his father could hand out to him.

(See also example 23611 in 2.2.7. b)

3. **Relatives in SC**

Relativization in SC resembles the process in E.

a) Two sentences sharing a nominal element can be joined by means of relativization:

Čitam knjigu. Ne razumijem knjigu. 13

b) The relative marker is placed before the sentence that is to become the relative clause:

R ne razumijem knjigu.

c) The noun of the relative clause is pronominalized and marked for gender and case:

R ne razumijem nju (je).

d) It is moved to the beginning of the clause:

R nju ne razumijem.

e) and attached to the relative marker to give:

R - masc., fem., neut. - animate, inanimate - koji, 14 koja, koje

R - masc., - human - (t)ko 15

R - masc., fem., neut. - anim., inanim. - što 16

R - neut. - inanim. - što ć (šta)

R - masc., fem., neut. - anim., inanim. - possessive - čija, čije

3.1. Prepositional phrases are obligatorily moved to the initial position:

Čitam knjigu za koju sam čula da je dobra.

not:

*Čitam knjigu koju sam čula za ...

from:

Čitam knjigu. Čula sam za knjigu...
3.2. Deletion of a relative is ungrammatical:

\*Čitam knjigu Že ne razumijem.

A reduction to a relative resembling the E that (uninflected) is possible, but much less frequent in colloquial usage than that. The relative in question is \*što.

Čitam knjigu \*što je ne razumijem.

3.3. Relative clauses can also be further reduced in SC to give postnominal modifiers in a manner similar to the process in E.

Autobus (koji je bio) pretrpan djacima nije stao.
Cvijeće (koje je) za Miru dat će Mari.

3.4.1. Tko and što\textsubscript{1} can be used as independent relatives, without an antecedent, not unlike the E what.\textsuperscript{17}

Tko to tvrći, laže,
Čega se bojim, je laž.

They can be paraphrased by onaj tko and ono \*što (in our example ono čega) respectively.

3.4.2. Tko refers only to pronominal antecedents with human referents (netko, tko, sometimes onaj).

3.4.3. Što\textsubscript{1} is the relative used with pronominal antecedents with non-human referents (to, nešto, ono) and whole clauses. Its eastern variant is sometimes šta.

3.4.4. Što\textsubscript{2} can be used with human and non-human antecedents, but not with clauses as antecedents. As it is not inflected, it is followed by a personal pronoun marked for case when an inflected form is required.

3.4.5. Koji is used with all kinds of antecedents except pronominal antecedents containing tko (*neta koji) and \*što (*nešto koje), sometimes ovo, when it does not refer to a particular referent (ovo /dijete/ koje), but to a whole idea (ovo /da je rano mrak/ \*što).

3.4.6. Čiji denotes possession, and grammars say that it is restricted to antecedents in the singular with male human referents. However, the usage of čiji for female, non-human, and even inanimate referents is now increasingly accepted.
3.4.7. Kakav and koliki are also relatives used for all nominal antecedents in singular and plural, denoting quality or quantity respectively.

3.4.8. Nouns denoting time, place, means etc. can have as a relative either a prepositional phrase with a relative pronoun (vrijeme u kojem živimo), or a relative adverb (vrijeme kada živimo), such as kada, gdje (gde), kako etc.

3.4.9. A set of indefinite and independent relatives is formed from relative pronouns (koji, čiji, kakav, etc.) and the particle god (koji god, štogod, etc.), or phrases like: ma tko, bilo što, tko mu drago etc.

4. **Contrastive Analysis**

4.1. On the present sample, unconditioned translation probability shows the following equivalences:

<table>
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<th>WHICH</th>
<th>THAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>koji</td>
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<td>0.79</td>
</tr>
<tr>
<td>čiji</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>što1</td>
<td>0.07</td>
<td></td>
</tr>
<tr>
<td>što2</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>other</td>
<td>0.07</td>
<td></td>
</tr>
</tbody>
</table>

<table>
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<td>0.72</td>
</tr>
<tr>
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<td>0.02</td>
</tr>
<tr>
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</tr>
<tr>
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<td>0.03</td>
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</table>

<table>
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<th>WHAT</th>
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</tr>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>WHOSE</th>
<th></th>
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</thead>
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<td></td>
</tr>
<tr>
<td>čiji</td>
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<td></td>
</tr>
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</table>

4.2. The E and SC relative constructions correspond in their basic characteristics, and are easily identified. As our sample of the corpus shows, the vast majority of relative constructions
in E were translated into SC relative constructions. Here we propose to examine translation equivalents of the relatives in the two languages.

4.2.1. a) The most frequent E relative which usually has as an equivalent the equally, if not even more commonly used SC relative, koji.

24020 Moreover, stated Day, "He always omits facts which tend to disprove his hypothesis."

24020SC Štaviše, rekao je Dej, "On uvijek izostavlja činjenice koje se pretežno ne slažu s njegovom pretpostavkom."

The antecedent is a noun with a non-human referent. If the antecedent is a pronominal with a non-human referent, the SC equivalent is što:

23004 Here was Gorton's chance to indulge in something at which he was supreme.

SC Tu je bila prilika za Gortona da se upusti u nešto u čemu mu nije bilo premca.

b) što is also the equivalent of which when it refers to an adjectival antecedent:

30484 ... assuming the five classes were equal in n, which approximately they are.

SC ... pod pretpostavkom da su pet grupa jednake u n, što približno i jesu.

and whole clauses as antecedents:

23003 The prisoners agreed, provided they might speak after the sermon, which was permitted.

SC Zarobiljenici pristadoile, pod uslovom da mogu uzeti reč posle propovedi, što bi dozvoljeno.

c) što is used very infrequently as a translation equivalent of any of the E relatives; here is an example of što for which:

5146 California Democrats this weekend will take the wraps off a 1962 model statewide campaign vehicle which they have been quietly assembling...
SC Demokrati Kalifornije skinut će potkraj ovog tjedna povoje s modela programa kampanje za 1962, što su ga tiho sastavljali...

d) Prepositional phrases with relatives are frequently translated with relative adverbs in SC, a construction which is a paraphrase of the prepositional phrase in E as well:

32444 ...this was the point at which (when) he finally took the innovation away from Braque...

SC ... to je bio trenutak kada (u kojem) je on konačno preuzeo vodstvo u kubističkim inovacijama od Braka...

15542 ... they were steepest on the shores facing the direction of the seauake from which (whence) the waves had come.

SC ... bili su najokomiti na obalama okrenutim u pravcu podmorskog zemljotresa, odakle (iz kojeg) su talas došli.

19939 For the occasion on which everyone already knows everyone else...

SC U prilici gdje (u kojoj) svatko već pozna svakog...

52426 Moreland sat brooding for a full minute, during which (while) I made each of us a new drink.

SC Moreland je čitav minut razmišljao, dok (za vrijeme čega, za koje vrijeme) sam ja obolici ponovo nasuo piće.

1682 Their majesties... issued invitations for Shrove Tuesday evening at midnight, at which time they will entertain...

SC Njihova veličanstva... zajednički su odaslale pozivnice za Poklade u utorak u ponodi kada će prirediti prijem.

e) Occasionally which has kakav as an equivalent in SC:

26316 It is not essentially different from a memorandum of an attorney in the Department of Justice, of which the Attorney General receives many...

SC On se u suštini ne razlikuje od izvještaja nekog pravobranjaca pri Ministarstvu pravde, kakve državni tužilac prima u velikom broju...

42
4.2.2. a) WHO being a relative referring to humans, and only occasionally to domestic animals, will in SC have as most probable equivalents tko and koji. As can be seen from the statistical data in 4.1., koji is the equivalent of who as a rule, and tko in a much more limited percentage of cases. Tko is limited to use with singular antecedents which are indefinite pronouns containing tko (netko, itko, etc. and optionally onaj), while koji can be used with other antecedents.

19997 But for practical purposes, we have people who can be considered as such.

SC Medjutim, za praktične svrhe imamo ljude koje možemo takvima smatrati.

With pronouns in the plural however:

1933 Those who are sexually liberated can be creatively alive...

SC Oni koji su seksualno oslobodjeni mogu postati stvaralički živi...

2998 ... the soldiers were ordered to knock down anyone who should utter a word of insolence, and run through anyone who might step out of line.

SC ... vojnicima je bilo naredjeno da batinaju svakog ko izusti neku drsku reč, i da probodu svakog ko bi istupio iz reda.

b) WHOM, being an oblique case form, will have as SC equivalent koji or tko in various oblique cases. In many instances it is difficult to distinguish between the two relatives, because they coincide in written form (e.g. koga from tko, and koga from kojega, pronounced "koga"). Koji is definitely more frequent, being applicable to all genders and both numbers.

48360 It requires an omniscient eye to select those if any on whom we can now rely.

SC Treba imati sveznajuće oči da se izaberu oni, ako ih uopće ima, na koje se sada možemo osloniti.

23810 I say the late seventeenth century because Racine (whom Lessing did not really know) stands on the far side of the chasm.
The man whom he would select as our leader for this great task is de Gaulle.

SC

Čovjek koga bi on izabrao za našeg vodju za ovaj veliki zadatak je de Gaulle.

Tko can be used as an independent relative (Tko pjeva zlo ne misli). As who is not used as an independent relative in modern E, such cases were not attested in the present sample.

4272 These are, of course, the same people whose support he has only now rejected...

SC

Ti su, naravno, oni isti ljudiju štati koji podržavaju ono što je odbacio...

24281 ... that utopian literature optimistic about science, literature whose period of greatest vigor... produced Edward Bellamy's Looking Backward...

SC ... sa onom vrstom utopijske literature koja se odnosi sa optimizmom prema nauki, literature koje je najvažniji period... povezivao Belamijevo Gledajući unazad...

The examples with koli are as a rule somewhat free renderings of the E construction:

20802 ... celestial bodies will be of a subtle, quickened, ethereal existence, in whose embodiment pure form will be the dominant component.

SC ... nebeska tela postojace kao razredjena, ubrzana i eterična stanja kojima će čist oblik biti pretežna komponenta.

4.2.3. THAT, a reduction of the relative who and which used in restrictive clauses, preferably refers to non-human antecedents. In SC it is paralleled mostly by koji and to a lesser extent by što (see table in 4.1.).
a) Koji is thus used for human and non-human referents that are defined by the relative clause.

46326 ... but four Eromonga women are more than a match for the strongest male that ever lived.

SC ... ali četiri djevojke iz Eromunge su jače od najjačeg muškarca koji je ikada živio.

4284 The party that won used to say something about a New Frontier.

SC Partija koja je pobijedila, govorila je nešto o Novoj granici.

45632 Moore and Longfellow didn’t have the fate that faces us...

SC Mor i Longfelou nisu imali sudbinu koja stoji pred nama...

b) Što is used with neuter pronominal antecedents such as što, nešto.

52495 I know something that is much more fun that we can do on our little lawn.

SC Znam nešto što je mnogo zabavnije i što možemo da izvedemo na našem malom travnjaku.

4778 Most mail these days consists of nothing that could truly be called a letter.

SC Danas većina pošte ne sadrži ništa što bi se zaista moglo nazvati pismom.

c) Occasionally što is used:

40928 Because I’m looking for the son of a bitch that killed that old man...

SC Jer ja tragam za onim kućnim sinom što je ubio starog...

14532 The economic toll that the device quack extracts is important, of course.

SC Naravno da je obol, što ga patvoritelji izuma izazivaju, važan.
Što₂ can be used as a paraphrase of koji, much as that can be used as a paraphrase of who and which. Što₂ in SC has a more limited distribution than that in E, which is well illustrated by the data given in the table in 4.1.

d) When that is a reduction of a prepositional phrase serving as adverbial, a common SC equivalent is the respective relative adverbial:

24159 On the evening that (on which) they were to sail, Lewis himself gave a party...

SC Sam Luis je priredio zabavu ono veče kada su trebali da putuju...

19089 We are not now afraid of atomic bombs in the same way that (in which) people once feared comets.

SC Sada se ne bojimo atomske bombe onako kako su se ljudi nekad bojali kometa (na onaj način na koji).

or:

19127 We talk about national character in the same way that Copernicus talked of the compulsions of celestial bodies to move in circles.

SC Govorimo o nacionalnom karakteru na isti način kao što (na koji) je Kopernik govorio o nužnosti da se nebeska tijela kreću u krugovima.

Though prepositional phrases with relatives can in E be paraphrased by relative adverbials this is not always grammatical when it is so in SC. Clauses with antecedents like the same way if introduced by how are ungrammatical:

*We are not afraid of atomic bombs in the same way how people once feared comets.

4.2.4. There is no equivalent in SC to the deletion of the relative in E, and several relatives can be used as translation equivalents of the E zero-relative (Ø). Koji is most widely used again (72%), and the other equivalent worth mentioning is što, (11%), but other relatives occur as well (see the table in 4.1.). It is interesting that the percentage of equivalents other than relative pronouns is highest for the deleted relative in E (11%). The translators probably felt more freedom in
choosing various constructions where no relative word was expressed in the original.

a) \textit{Koji} is used for human and non-human antecedents. It stands for the zero-relative when it is in object relationship to the verb of the relative clause. The relative can never be deleted (2.1.f) when it is the subject of the clause.

\begin{itemize}
  \item 24625 Angry because I was that very one \( \emptyset \) somebody was supposed "to be fighting for".
  \item 19371 One beatnik got the woman \( \emptyset \) he was living with so involved in drugs...
  \item 49916 Not for the dollar or so \( \emptyset \) Nadine would give me.
\end{itemize}

b) \( \textit{Sto} \) is used with neuter pronominal antecedents, as with that:

\begin{itemize}
  \item 41505 Reenact everything \( \emptyset \) Beauclerk did.
  \item 44410 That's really all \( \emptyset \) he's got, all \( \emptyset \) he is.
  \item 14134 It has been truly said that anything \( \emptyset \) man can imagine he can produce...
  \item 05128 No, coloring isn't exactly something \( \emptyset \) you teach a child.
\end{itemize}

With antecedents that are superlatives \textit{koji} is used when a specific noun has been mentioned earlier, \textit{sto} if the superlative does not refer to anything in particular:
That’s the last one we did.

To je posljednji koji smo snimili.

This was the worst thing I could have said.

Bilo je to najgore što sam mogao reći.

c) Occasionally što is found:

Hanging over the bar was an oil painting of a nude Al had accepted from a student.

Iznad šanka visjela je uljena slika nekog akta, što je Al dobio od nekog studenta...

Other translation equivalents are:

d) kakav

A Peace Corps official described the editorial as "precisely the message we need to communicate..."

Jedan službenik Poslenika mira opisao je ovaj uvodni članak kao "upravo onaku poruku kakvu treba da saopštimo..."

e) relative adverbs for deleted that, itself a reduction of prepositional phrases:

It was the last time in history anybody could do something gloriously like that.

Bilo je to posljednji put u istoriji kada je neko mogao da napravi nešto toliko veličanstveno.

That may be, but it isn’t authentic the way readers think.

Možda, ali nije autentičan onako kako čitaoci zamisljavaju.

4.2.5.a) The relative what most frequently has as its translation equivalent ono što or to što which in a way reflects the E paraphrase of what, i.e. that which:

In American romance, almost nothing rates higher than what the movie men have called "meeting cute"...
SC U američkom ljubavnom romanu nema ničega što bi imalo takovo značenje kao ono što su ljudi od filma nazivali "meeting cute"...

1356 Mrs Benington admired Gordon’s spirit and did what she could to persuade her husband...

SC Gdja Benington divila se Gordonovoj srčanosti i učinila je što je bilo u njenoj moći da ubedi svoga muža...

As in the last example, the pronominal antecedent to što (ono) can be omitted if it does not refer to one particular item, but is more general, i.e. meaning everything, all (sve). In E all that, what, or whatever are equivalents to the SC sve što or što.19

15364 That much of what he calls folklore.

SC Sve što on naziva folklorom...

b) Relative adverbs as translation equivalents of what:

7303 Mr. Kennan sums up his judgment of what went wrong this way...

SC Kennan ovako sumira svoj sud o tome gdje se pogriješilo...

c) Kakav:

43745 Now under me I could see him for what he really was...

SC Sada poda mnom vidio sam kakav je stvarno...

4. 2. 6. Other independent or indefinite relatives found in the sample were whatever and whenever. They can be paraphrased, and indeed, they most frequently occur paraphrased by any... that (anything that), any time that. Their translation equivalents either:

a) reflect these paraphrases to a certain extent:

23611 When these chores were finished, only then was she allowed whatever freedom she could find.

SC Kad su svi ti poslovi bili svršeni, tek tada, bilo joj je dozvoljeno ono malo slobode koje se mogla domoći.

or:
b) are represented by independent and indefinite relatives in SC:

24651 ... they did whatever nasty thing they could get, in order to eat...

SC ... već su radi li bilo šta prljavo da bi imali što da jedu...

17869 ... the resigned pose of the whipping boy who expects to be kicked whenever the master has had a dyspeptic outing with his wife.

SC ... rezignirani stav onoga koga uvijek za sve okrivljaju, pa očekuje da bude šutnut kad god se gospodar vrati s nepobjedljivog mu izlaska sa ženom.

4.2.7. Relative adverbs are translated with relative adverbs:

WHEN

13810 ... the time has now come when the gardens produce delicious long-keeping vegetables...

SC ... sad je došlo vrijeme kad vrtovi rode finim povraćem koje se dugo drži...

24368 ... during the years when I was on the staff of the "Nation"...

SC ... tokom godina dok sam radio u "Naciji"...

WHENCE

17801 They threatened constantly to give the British a hold on this region, from whence they could move easily down the rivers...

SC Indijanci su stalno prijetili da će dozvoliti Englezima da udju u to područje, odakle bi veoma lako mogli da se spuste rijekama...

WHERE

13381 it ... increases the chance for shop fabrication, where everything can be made better and cheaper.

SC ... povećava se mogućnost izrade u radionici, gdje sve može da se bolje i jeftinije napravi.
WHEREBY

2931 ... that convention of Russian ballet whereby the girls convey the idea that they are all the daughters of impoverished Grand Dukes...

SC ... to ubićajeno držanje ruskog baleta, čime kao da djevojke pokazuju da su sve kćeri osiromašenih Velikih vojvoda...

Relative pronouns are also used as translation equivalents:

16789 In Western Europe and North America, where the level of economic development is higher, grains and other seed products furnish less than one third of the food consumed.

SC U zapadnoj Evropi i Severnoj Americi, koje su ekonomski razvijenije, žito i drugo sjemenje čine manje od jedne trećine prehrambenih tvari.

24685 It was the creation of a monstrous historical period wherein it thought it had to synthetize literature and politics...

SC Bio je to proizvod mostruoznog historijskog perioda u kome je smatrano da časopis treba da spaja književnost i politiku...

4.2.8. Such as is paralleled either by kakav or by koji in SC: kakav has the demonstrative onakav as antecedent, or as modifier of the nominal antecedent, while koji refers directly to the noun:

26745 ... such documentation as the United States may specify

SC ... onakve dokumentacije kakvu budu bliže označile Sjedinjene države.

21432 ... such matters as appear to us to be relevant...

SC ... o stvarima koje nam se čine važne...

19950 "P" can be justified as a habitable site only on the basis of unusual productivity such as is made available by a waterfall for milling purposes...

SC "P" može imati opravdanje kao mjesto stanovanja samo u slučaju neobične produktivnosti, koju omogućuje na primjer vodopad za pogon mlina...
4.2.9. The E relative clauses are in a number of cases translated with other than relative constructions, the more regularly occurring ones being coordinate clauses, nominal modifiers (see 2.1. and 3.1.), and constructions with da.

a) A post-nominal modifier derived from a contracted relative clause can sometimes paraphrase a relative clause in E; restrictions on the use of post-nominal modifiers, particularly adverbials, in this function are many, but the relative clause can easily be reflected as a prenominal (adjectival) modifier of the antecedent noun:

24319 And the second requirement for convincing people without their knowledge is artistic talent to prepare the words and pictures which persuade by using the principles which the scientists have discovered.

SC A drugi način za ubjeditavanje ljudi bez njihovog znanja je umjetnički talent za pripremanje riječi i slika koje ubjeduju upotrebom naučno otkrivenih principa (principi koji su naučno otkriveni).

17860 Tampering with the Post Office may infuriate every voter who can write.

SC Miješanje u poštanske poslove bi moglo razbjesniti svakog pismenog glasača.

24572 Running counter to the destroying forces in the world are all the virtues that are innate in man...

SC Sve vrijećine čovjeka se suprostavljaju razornim svijetu.
(sve vrijećine koje su urodjene čovjeku
sve vrijećine urodjene čovjeku
sve čovjeku urodjene vrijećine)

48342 The aimless milling about of what had been a well-trained, well-organized crew struck Alexander with horror.

SC Bezvezno trčkanje, inače dobro izvježbane i dobro organizirane posade, užasno preplali Alexandre.
(*onog što je bila dobro izvježbana posada dobro izvježbane posade dobro izvježbane from: koja je dobro izvježbana)
b) Coordinate or simple clauses as equivalents to relative constructions:

19934 The completeness of the connections provide that, for 
people, there are lines of communication between the 
pairs, which can become a large number for a party of 
fifty guests.

SC Potpunost veza osigurava postojanje linija komunikacije 
medju parovima, a broj tih linija može postati vrlo 
velik.

19949 The dweller at "P" is the last to hear about a new cure 
... the one who goes farthest to trade...

SCStanar u "P" posljednji sazna za novu metodu liječenja 
... on najdalje ide na sajmove...

19900 In order to exonerate himself, he is compelled to find 
the real criminal, who happens to be his girl friend.

SC Da bi spasio svoju čast, prisiljen je da nadje pravog 
zelčinca, a to je slučajno njegova djevojka.

The noun shared by the two clauses in coordination is 
either repeated (19934), or pronominalized (19949 and 19900).

c) Sentences that are for the sake of emphasis constructed with 
a dummy subject it and the noun as part of the predicate as 
well as antecedent to a relative clause, are frequently rendered 
as simple clauses in SC, although a similar construction to the 
E one is not impossible.

24182 Well, it was your healthy America peasant blood that 
pulled you through...

SCPa tvoja zdrava američka seljačka krv te je izvukla 
(onó što te je izvuklo bila je tvoja zdrava američka 
seljačka krv)

Also with what:21

29025 ... this is what we shall do in the next chapter.

SC ... a to ćemo i učiniti u slijedećem poglavlju, 
(a to je ono što ćemo učiniti...)
54

d) da (and a da):

25189 This tied in closely with the current attempt to upgrade state-owned cars to the extent that vehicles are not retained beyond the point where maintenance costs become excessive.

SC S time se usko povezuje sadašnji pokušaj da se državna kola valoriziraju do te mjere da se vozila ne zadržavaju dalje od trenutka kad troškovi održavanja postaju pretjerani.

5. Teaching Implications

5.1. There are several advantageous circumstances for the SC learner of E as regards relativization.

5.1.1. In the first place there is the fact that both languages have relative pronouns as links between adjoined clauses, as against other languages that may attach the relative marker to other word classes (e.g. Basque where the relative marker is attached to verbs) or that may not have relative transformation rules at all.

5.1.2. Moreover, both in E and SC the relative words and the relativization rules are to some extent parallel to interrogative words, and rules for the interrogative transformation.

5.2. The differences occurring in the two languages are likely to create difficulties mostly at an intermediate and advanced level of learning.

5.2.1. In the first place, the obligatory shifting of the SC prepositional phrase to the beginning of the relative clause together with the relative pronoun that is its object may be expected to induce SC learners to observe the same rule, which, however, is optional with all E relative pronouns except that and Ø. With that, Ø the preposition must remain in its original place. It has been observed that this fact does not produce ungramatical sentences with prepositions preceding that (*It is not the kind of thing of that a man would be proud.) as often as would be expected, but rather too frequent a usage of which preceded by preposition. This is mostly not an error (but see 2.2.3.a, where a reduction of the preposition phrase to that is obligatory), though at higher levels of learning it can produce
undesirable stylistic effects, *inappropriate in colloquial usage.*

(?) It's not the kind of thing of which a man would be proud.

5.2.2. The rule which allows the preposition to remain "stranded" in its original position is important at the stage where reductions of relative pronouns (particularly prepositional phrases with relative pronouns) to *that* and their deletion is taught, because these are cases where the rule must be applied. I imagine that reduction and deletion of the relative would best be taught at an intermediate level for several reasons:

a) the relative *that* is the one relative in *E* that does not have an interrogative counterpart, while all SC relatives have interrogative pairs, which would make *that* appear less natural in its relative function to a SC learner. (At an advanced level however, a parallel may be pointed out between the common *E* relative construction with *that*, and a less used SC construction with *da* or *a da*, a possible paraphrase of relative constructions.)

b) reduction of relatives to *sto* in SC exists, but it is much less used than the reduction to *that* in *E*;

c) deletion of the relative is ruled out in SC;

d) to the above rules has to be added the rule that does not move prepositions to the initial position.

These processes, being either less familiar or totally new to the SC learner, have to be presented at intermediate levels.

The difference between relative reduction and relative deletion rules in *E* and SC again makes the less advanced learner refrain from using the relative *that*, and particularly from deleting the relative word altogether.

5.2.3. The most universal SC relative is *koji* which is easily identified with the most frequently used *E* pronoun *which*. The restrictions on *which* are much greater than on *koji*, and the learners will use *which* to refer to antecedents with human referents:

"To people *which* didn't know her..."

Although *who* has an equivalent in SC, reserved for reference to human antecedents, i.e. *t̄ko*, it is much less commonly used than its *E* counterpart, and *koji* is preferred.
5.2.4. Similarly what and što can be identified on the same grounds as who and tko, but here the restrictions are much heavier with what than with što. The most important difference, creating most trouble too, is the use of što with antecedents (as well as without them), which leads to ungrammatical usage of what with pronominal antecedents, and particularly with clauses as antecedents (in E the first function is filled mostly by that, and the second by which).

*All what we know about him is...
from: Sve što znamo je...
or:
*The government is destroying its own taxpayers, what is a silly thing
from: Vlada uništava vlastite porezne obveznike, što je ludost.
The overlap of što with what, which and that as well as the overlap of koji with who and which will be the source of a great deal of interference.

5.2.5. As regards that and the deletion of the relative, there is a further important point to pay attention to. Once the learner has become familiar with the reduction and deletion of the relative, he will identify that and for the SC relatives, most frequently (see data in 4.1.) with koji. Difficulties are, however, likely to arise from the fact that koji can be used in both restrictive and non-restrictive relative clauses, while that and for are used in restrictive relative clauses only.

*England, that was "driving forward into uncharted waters"... would be ungrammatical.

5.2.6. A common error arises from rules operating on conjoined relative clauses in SC, where relativization in the second relative clause need not take place, resulting in a superficial structure that is not relative.24

*A country about which we know very little but consider it important.

Zemlja o kojoj malo znamo, ali je smatramo važnom.

- 56 -
The following example from the sample of the corpus shows a translation equivalent of a coordinate relative clause that superficially does not look like a relative. However, it is a case of a deleted pronoun, either the repeated personal pronoun on, or its relativized form koji.

24615 He must become one who knows all about the injustice in the world, but who declines doing anything about it.

SC On mora da postane onaj koji zna sve o nepravdi na svijetu, ali odbija da bilo šta učini povodom toga.

5.2.7. The most persistent interference, as far as relativization is concerned, will probably be stylistic monotony rather than ungrammaticality. In the first place, relative clauses are much more frequent in SC than in E, where various reductions of subordinate clauses by means of infinitival, gerundial, or participial constructions are frequently used in their place. The unlimited use of which for that or Ø can be the second source of stylistic angularity. In order to avoid too great simplicity of expression, attention should be paid to this problem at an advanced level of learning:

For a sentence like:

On nije čovjek koji bi što uradio na pola.

two E sentences should be suggested:

a) He is not a man who would do things by halves.
b) He is not a man to do things by halves.

For:

Djevojka koja se smiješila što je sladje mogla...

suggesting:

a) A girl who was smiling her sweetest...
b) A girl smiling her sweetest...

Or:

problem koji smo spomenuli...

equalling:

a) the problem which (that, Ø) we mentioned...
b) the problem mentioned...
It could be pointed out to the student that there are similar constructions in SC, not always encouraged by normative grammars, yet not infrequently used:

Zamjerili su Harryju zbog izjava datih...  
They took Harry to task for comments he had made...

NOTES


3. Data refer to the distribution within the whole sample.

4. The relative marker is sometimes represented as WH, thus indicating the form of relative pronouns. The same marker is also used for interrogative constructions, which resemble relative clauses in many ways so that their surface structures (particularly those of relative clauses and indirect questions) can often be ambiguous.

5. The position of the relatives is in our sample also characteristically clause initial (in 1,571 clauses, i.e. 91%), unless it is preceded by a preposition (105 clauses, 6%), conjunction (36 clauses, 2%), and determiners such as both, all, none, five, each etc. (12 clauses, 1%).

6. The example is from Klima (see Bibliography). No such examples were found in the Corpus.
7. See: C.S. Smith (1969), and for a different view Ljiljana Mihailović (1973).

8. If pronominalization took place in the usual way:
all the men — all they...
and the pronoun was shifted to the beginning of the clause, the result would be an ungrammatical sequence:
*sveral men of ninety, all who were...

8.a) Example from Reports 3.

9. Note that in prepositional phrases serving as adverbials the preposition cannot be divided from its relative: it has to precede it at the beginning of the clause.

10. Example from Curme, Syntax, p. 221.


12. Here, too, either sentence can undergo the transformation:
Čitam knjigu koju ne razumijem.
Ne razumijem knjigu koju čitam.

13. Koji, gen. kojega, dat. kojemu etc., has also a shorter form:
gen. koga, dat. komu, which is difficult to differentiate from the oblique forms of tko, gen. koga, dat. kome, particularly in the genitive case, where the difference between koga (from koji) and koga (from tko) is marked only by length in speech. It is to be noted that koga is frequently used both by speakers of the eastern and the western variant of SC in the function of the accusative masculine inanimate (instead of koji), which is however, still considered as a mistake by normative grammars:

32764 SC Metod izbora koga From upotrebljava postiže upravo to.

14. The eastern and western variants are ko and tko respectively, normally pronounced /ko/ in both, though tko as a spelling pronunciation by speakers of the western variant is not uncommon.
15. There are two pronouns što, što₂, is inflected for case (čege, čemu etc.), while što₂ is uninflected. In oblique cases the appropriate personal pronoun marked for case is added to što₂ (što ga, što joj etc.).

16. In archaic E who could also be used as an independent relative: Who steals my purse steals trash.

17. The statistical data given express relationships between model and translation equivalent for each relative separately. They do not refer to the sample as a whole.

18. The pronominal antecedent ono is obligatory when it functions as object of prepositions.

19. The example, as so many others with what, is ambiguous; it could be interpreted as an indirect question (Mr. Kennan sums up his judgement of the question of what went wrong this way... SC Kennan ovako sumira svoj sud o pitanju gdje se pogriješilo...)

20. The difference between the two constructions is that there is a noun phrase (your healthy American blood) shared by the main sentence and the relative clause, while there is no such element in the sentence with what, rather it is the indefinite pronoun something that occurs in both sentences:

   This is something.
   We shall do something in the next chapter.

   In the relative transformation both indefinites are replaced by an independent and indefinite what linking the two clauses.


22. See 4.2.9.c.

23. Discussed by Wayles Browne in "On Conjoined Questions and Conjoined Relative Clauses in English and Serbo-Croatian", in R. Filipović (ed.), VSCECP. Studies 3, q.v. The example is also from Browne's paper.
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ON COMPILING PEDAGOGICAL MATERIALS

One of the important goals of the SC - E Contrastive Analysis Project is to improve English-teaching theory and practice in the SC-speaking area.

This work is based upon the systematic contrastive analysis of SC and E structures. The structures in the two languages were analysed on the basis of their formal or semantic correspondence, and the learner's errors resulting from the interference of the mother tongue predicted. The Contrastive Analysis Reports¹ should signal to the writer of "Pedagogical Materials" how to devise teaching techniques in the case of each particular structure, to avoid negative transfer from the mother tongue.

Before starting any work on Pedagogical Materials, the linguists' theoretical statements about the relations of the structures in the two languages and the predicted errors resulting from them had to be examined in the classroom. In order to prove or disprove the results of the Contrastive analysis more was required than just the classroom experience of practical teachers which is bound to be subjective and almost impossible to submit to systematic analysis or statistical processing.

We undertook what Dr Slama-Cazacu, speaking about the Romanian Contrastive Analysis Project, defined as "scientific observation and experimentation in order to give us the possibility of arriving at generalizations on a great number of individuals taken from different contexts, having different teachers".²

The first step was to construct batteries of tests. To choose the most suitable type of tests was a problem. Most of the achievement tests based on taxonomic structuralism popular in language teaching at the moment examine the learner's abilities on the reception level, whereas for the purposes of the Project production achievements were primarily needed.³
After experimenting with different types of objective tests - multiple choice, completion, "choose the correct form" - it was observed that translations from Ls into Lt offered the most relevant results. Practical teachers burdened with the heritage of audio-lingual (including audio-visual) methods based on habit-formation theories objected to translations, stating that in translating the examinees are bound to make mistakes that would never occur in their speech were they not reminded of the interfering system of the Ls.

This objection was abandoned as immaterial for several reasons:

1. The tests were planned for experimental purposes, and it is in the nature of experiment to accelerate the development of phenomena under investigation, rather than waiting for them passively. The translation tests could not possibly create interference if none existed in the contact of the items in question.

2. What the translation tests could and did do was to bring the interference, if any, into focus more directly than could other kinds of tests.

3. The tester can compare the structure of the learner's individual performance of the Lt, be it called either "approximative system"5, or "transitory system"6, or "interlanguage"7 with the structure in Ls and the corresponding structure in Lt.

4. As so many things happening in target language acquisition still remain to be explained from the psycholinguistic point of view, we hypothesized that the process of structural translating from Ls into Lt approximates the one going on in the learner's mind when he wishes to express ideas in a language he is in the process of learning.

The results obtained by the tests either confirmed, supplemented or disproved contrastive analysis predictions of errors. Oversimplifications could not be avoided in the tests, as only one element could be tested at a time, but as this is both an advantage and a shortcoming of any objective tests dealing with language, it need hardly be mentioned.

Advanced adult9 learners have been selected for testing. Our point in selecting them was that if we regard language acquisition as a dynamic process, with the levels of achievement rapidly changing, then, hypothetically, the changes will be less and
less pronounced the more the learner approaches the stage of mastery of performance in the Lt. Besides, our ability to identify the sources of errors at the lower levels of learning is even more limited because of other potential sources of errors which are strongly pronounced there (incomplete learning, interference of other L2 structures, etc.).

We approached the phenomenon of learner's mistakes from two complementary angles. We used contrastive analysis and error analysis: as Stockwell would put it the "predictive variety" and the "diagnostic variety"10 of contrastive linguistics, or as Carl James has it, "a priori" and "a posteriori" detection of error.11

Still, the problem remained of how to systematize the errors found through error analysis and predicted through contrastive analysis.

One recent contribution to the question of systematizing learner's mistakes in the dynamic process of Lt acquisition is the one by L. Selinker in which he introduces the term "fossilizable linguistic phenomena" for the "linguistic items, rules and subsystems which speakers of a particular NL will tend to keep in their IL relative to a particular TL no matter what the age of the learner or amount of explanation and instruction he receives in the TL".12

"It is important to note" - Selinker says - "that fossilizable structures tend to remain as potential performance reemerging in the productive performance of an IL even when seemingly eradicated. Many of these phenomena reappear in IL performance when the learner's attention is focused upon new and difficult intellectual subject matter or when he is in a state of anxiety or other excitement, and strangely enough, sometimes when he is in a state of extreme relaxation."13

If we accept Selinker's statement, the question arises of whether it is worth spending so much time and effort in trying to eradicate mistakes that according to Selinker appear to be an integral part of the Lt performance of 95% of learners.

Selinker attributes re-emergence of what he calls "fossilizable structures" to five processes central to language learning: language transfer, transfer of training, strategies of second language learning, strategies of second language communication, overgeneralization of L1 linguistic material.14
According to this hypothesis only the first of the five processes is in direct connection with the Ls and consequently with the procedures of contrastive analysis. It is interesting to note that the error analysis of oral performance of advanced learners carried out by the Project staff is roughly in accordance with Selinker’s five central processes, as far as the identification of sources of errors goes. But the results of Project error analysis¹⁵ and of tests based on contrastive analysis¹⁶ and the experience of a number of teachers, point to the fact that errors originating in the language transfer are not on the same level as errors originating from the other four processes.

The difference is the following: the mistakes of language transfer are easy to identify, as they are typical of a large percentage of members of a Ls. On the other hand, mistakes originating from the other four processes are not so easily identified as they are not limited to any particular Ls, though some can be fairly common among the speakers of a particular language community because of the identical teaching strategies used for a long period of time. The mistakes of language transfer are much harder to eradicate than mistakes originating from other processes; e.g. mistakes in word order of indirect questions (*can you tell me where is the school) are a "fossilizable item" almost impossible to eradicate for SC speakers of E, as are a hundred and one incorrect uses of the articles. Libuša Dušková found the same problem with the Czech speakers of E, and defined it as interference due to the lack of a frame of reference that could facilitate comprehension; the learners have to build their own system by intuition and this is the cause of deeply-rooted difficulties.¹⁷

Errors originating from other sources than language transfer are much easier to eradicate. Selinker’s example of transfer of training is "a difficulty which Serbo-Croatian speakers at all levels of English proficiency have with the he/she distinction producing in their English IL he on almost every occasion wherever he or she would be called for according to any norm of English." He explains it with the assumption that "textbooks and teachers in this interlingual situation almost always present drills with he and never with she."¹⁸ No one would argue the existence of this difficulty, but any experienced teacher would know that giving a number of exercises and drawing the learner’s attention to this point would suffice to remedy it, which is certainly
not the case with the mistakes originating in the transfer of Ls. (articles, word order in indirect questions, distinction between simple and progressive present, which used for human antecedents, etc).

So, Selinker's neat classification of errors originating from five equally important processes was not in keeping with the findings of our analyses which show that two types of mistakes have to be dealt with: those originating in language transfer which must be given special attention because they are the most frequent and most difficult to eradicate, and those originating in other sources than language transfer. This is why "we have been carrying out research at both levels - contrastive analysis and error analysis". Though aware of all the limitations of a teaching strategy based on contrastive analysis and error analysis, we are convinced that it can facilitate the process of learning, as opposed to a strategy based on intuition which sometimes works but very often does not.

The general idea in writing pedagogical materials was to supply the writers of curricula, textbooks, tests and other teaching materials with illustrative specimens and patterns to draw from. The risk of a teacher's following either the old routines or his own intuition when he has nothing better to rely on, would in this way be reduced to a minimum and a logical development of the total teaching process could be secured.

Pedagogical materials should include all the basic elements of E. grammar on the morpho-syntactic level. To ensure successful learning each element is to be treated by the teaching techniques and procedures most relevant from the point of view of contrastive and error analysis.

The next problem requiring a solution in writing pedagogical materials was which approach and method of teaching to choose for the selection and grading of material. The dilemma was between "habit-formation" and the cognitive approach. The habit-formation, structuralism-based approach had the authority of successful methods such as AVGS (audiovisual global and structural), ASTP (army specialised training programme) and different audio-lingual methods behind it. On the other hand the results of the Gothenburg experiments as well as the experience of hundreds of teachers have proved that the habit-formation approach has very serious limitations and that it cannot be applied to all age groups and all levels of learning.
The results of the Gothenburg experiments as reported by Mats Oskarsson at the 3rd Congress of AILA in Copenhagen 1972, are the following: "The general conclusion ... is that adult students acquire foreign-language grammar better by a cognitive method than by a method built exclusively on habit-forming principles. It also seems safe to say that explanations clarifying the structure of the foreign language are worthwhile even when supplied at the expense of practice. Finally it can be concluded that the cognitive approach results in better motivation and more favourable attitudes than habit-forming approach." In the light of such discoveries no teaching scheme could entirely neglect elements of the cognitive approach in language teaching.

Systematic observation of the classes of learners of different age groups conducted by the Department of English, Zagreb University points to the fact that habit-formation methods succeed with young children and fail with adults. E. Lenneberg gives a biological explanation of this fact, stating that after the onset of puberty it is difficult to master the pronunciation of the second language since a "critical" period in brain maturation has been passed and "language development tends to freeze." Apparently, two different types of processes occur in language acquisition before and after puberty. In the parallel observation of different age groups of learners using the audio-visual method, striking differences have been noticed. They are roughly the following: young children memorize the structures globally when they are connected with visual and auditory stimuli. They can answer memorized questions and carry on a conversation on the basis of the stimulus-response system. Their responses correspond to what W. Rivers calls "parrot-like behavior". They are perfect imitators of the Lt phonetic system, especially intonation patterns which at this age group (6 - 10 years) are especially important for semantic distinctions. They do not connect the system of L₁ with the system of L₅, and therefore they cannot translate messages from L₁ into L₅.

As their age increases a progressive growth of the element of thinking and speculation is introduced into their performance of L₁. The fluency of speech gradually deteriorates, mistakes in grammatical forms begin, due to a conscious effort...
to select the correct ones, and due to presence of thoughts and ideas in Ls they want to express in Lt.

The adult beginners feel self-conscious and helpless in acquiring the phonetic system of Lt but they are interested in the whys and hows of the foreign language.

The only logical conclusion is that the teaching methods and strategies should take the age component very seriously into account. The idea is not entirely new but seems to have been forgotten for some time. Henry Sweet in criticising the "natural method" in 1899 objected that "it puts the adult into the position of an infant which he is no longer capable of utilising, and at the same time does not allow him to make use of his own special advantages, ... the power of analysis and generalization – in short, the power of using a grammar and a dictionary." 27

If we paraphrase Sweet’s words in a kind of present-day applied-linguistics jargon, we can state that the dilemma between the implicit and explicit method need not be a dilemma at all, but that the two approaches can be reconciled, and this on the basis of the age component. Similar conclusions arrived at by a number of applied linguists – D. Wilkins, 28 W. Rivers, 29 A. Marckwardt 30 - have justified the use of both approaches in our Pedagogical Materials. Professor Filipović’s two-degree and five-stage teaching scheme suggested itself as an adequate mould for staging and grading the language material. 31 The first degree represents three habit-formation stages. The second degree represents the creative use of the language which is achieved through stages 4 and 5.

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<td>1. Stage One</td>
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<td>4. Stage Four</td>
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This scheme is far from a universal scheme for teaching Lt, as it is linked with the age factor. Indeed, experience has proved that one ought to be suspicious towards any scheme that claims applicability to all age groups and standards of learning. But we hope that this particular scheme would work in the case of SC learners of E, who according to the structure of our educational system start studying E at the age of ten or earlier. The five-stage scheme covers the process of teaching through a period of ten or more years.

The first three or habit-formation (implicit) stages would roughly cover the period before and during the "maturation of the brain", 13 to 14 years of age, the period in which the ability to imitate Lt phonetic system and memorize structures is alert.

The fourth and the fifth stage, covering the cognitive approach (explicit), correspond to the time of the learner's entering the secondary school, when puberty is mostly over and when a qualitative change in approach to Lt due to the biological changes takes place.

In this way the natural abilities of the learner are always being utilised. Practical teachers know well enough from their daily experience that insisting on correct intonation patterns and subphonemic distinctions with adult beginners is just as useless as imposing abstract reasoning about the language on young children.

So, according to the five-stage scheme those starting Lt before the age of ten or earlier would master the phonetic system and memorize the basic structures on the basis of the habit-formation approach, and enter the stage of cognitive approach with a certain amount of basic structures and vocabulary mastered. By the time they start acquiring more subtle and more complicated usages of the Lt they will already be in command of the phonetic system of Lt, an asset hardly ever achieved at a later stage.

Those that start learning Lt after the age of puberty should follow a scheme that takes into account their diminished ability of imitation and memorization, and instead of insisting on structure drills in artificial situations that may never occur in their lifetime, supplies them with facts about the organization of the language combined with the exercises in meaningful situations.
In organizing E structural items for teaching SC learners, two crucial points have to be taken into consideration: interference of L₁ structures with corresponding L₂ structures and absolute frequency of usage in L₁ in everyday language. (High frequency is taken as a synonym of usefulness for communication purposes). The ultimate target of teaching is performance in standard E in a meaningful situation at a normal speed.

The procedure in working on "Pedagogical Materials" is roughly the following: after studying the linguist's report, identifying the points of interference and other sources of mistakes, and analysing the results of tests, the writer of the pedagogical materials consults the frequency counts for the structural item under investigation. The complete grammatical inventory representing different uses for each item should be divided into five stages (e.g. present perfect, or sequence of tenses, or modal verbs, or relative pronouns should be divided into five stages each, these stages embracing the teaching process from the beginner's up to a very advanced level). The basis for the hierarchy should be the frequency of usage in E. Consequently, the first stage should deal with the most frequent uses of an item. The next point to be taken into consideration is the interference of the item with the L₂ and other identified sources of errors. If possible, in the initial stages positive transfer of the L₂ should be utilised to facilitate learning. But as the frequency of use within a structure and positive transfer of L₂ are often incompatible, frequency should be the decisive element in stating the hierarchy of presentation. E.g. the first stage of teaching the present simple will concentrate on its function of denoting a habitual action as this is the most frequent use of this particular tense, and not on its function with the verbs of sensation in spite of the fact that the positive transfer of the identical structures could be utilised here ("She feels well at the moment"). But this of course has been done earlier, without any help from contrastive analysis. The new element is insistence on relevant drills and exercises whenever mistakes originating in interference or other sources have been identified. So, e.g. in the case of the present simple, much more attention should be paid to building up a frame of reference for distinguishing the function of present simple from that of the present continuous, a constant source of errors for SC learners. A general scheme for the development of five-stage grading and
presentation of grammatical items should be the following:

1. **Stage One**: The most frequent use of the structure.  
   In case of positive transfer, mechanical drills, short dialogues.  
   In the case of negative transfer, repeated, intensive drills.  
   Special stress laid on the phonetic aspect of the material. Phonetic drills containing the problem in question (in simple everyday situations).

2. **Stage Two**: Repetition exercises, intensive pattern practice.  
   Additional frequent uses of the same grammatical item.  
   Insistence on phonetic accuracy.  
   In the case of interference or other identified sources of errors, intensive mechanical drills.

3. **Stage Three**: Medium frequent, but important uses of the same grammatical category.  
   Revision of the material of the first two stages.  
   More complicated pattern drills.

4. **Stage Four**: The beginning of the cognitive approach.  
   Revision of the material learned by an inductive approach to grammatical rules and generalizations. Contrastive comparisons between the structures of the L₁ and L₂.  
   Combinatory exercises, no mechanical drills.

5. **Stage Five**: Revision of the four stages.  
   All the subcategories of the grammatical unit not included in the procedure earlier because of low frequency, or strong interference combined with low frequency, should be treated now.  
   Exercises based on free oral and written expressions.  
   Translation exercises from L₁ to L₂ to test the learner’s ability to select the most appropriate form. Explanations and rules in connection with the respective grammatical item should be given on the basis of the linguistic model chosen (transformational, taxonomic).

The category of E relative pronouns has been treated in this way and the teaching conducted on the basis of this scheme proved successful.  

The ultimate aim of the Pedagogical Materials is to systematize each category of E morphology and syntax into five stages. The writers of different teaching materials - textbooks, pedagogical grammars, taped sequences, programmed materials, tests, etc. - will be supplied with reference materials showing the
exact order of presentation of each grammatical category.

We hope that it is not unrealistic to believe that such systematizing can improve teaching and learning of E in two ways: 1) Amateur, intuitive steps which have in the past very often led to pitfalls could be avoided, as the order of presentation here is obtained on the basis of the data studied in the process of communication and teaching, frequency of usage and difficulty for learners. By using this system, at least some blunders repeated in the past can be avoided: exercises and drills above or below the level of the pupils. Besides, more conscious attention can be paid to those items that present sources of errors for SC learners. Pedagogical materials should contain as much information as possible as to what type of drill is necessary at a certain stage of teaching. They should provide teachers in the field with models of drills and exercises, so that, should a teacher find his teaching materials deficient in any way concerning grammar, the pedagogical materials would supply him with additional models of drills and exercises.

Five-degree staging does not necessarily mean that each grammatical item should be treated five times in the course of the study. According to the requirements and intensity of the course, the writers of the teaching materials or practicing teachers will decide whether to treat each stage separately and if so for how long. The important thing is not to change the hierarchy of stages, as it has been arrived at on the basis of frequency counts and contrastive and error analysis.

2) Continuity of teaching can be secured from the beginning to the end of the teaching process, which would be a great help to the writers of curricula and teaching materials. It could be a valuable contribution to schools of different levels and types in assigning requirements in teaching E. A reference in the preface of a textbook as to the number of stages treated in the book should be a sufficient indication to the writers of other teaching materials as to where to begin.

The work on Pedagogical Materials is in its initial stages. Each day brings new results and new experiences. Unexpected discoveries are still causing alterations in our plans.

The task is neither easy nor simple, but the answer to the question raised earlier—whether it is worth while spending so much effort on trying to eradicate constantly re-emerging mistakes—is positive, because of the fact that many mistakes could be avoided or corrected with a proper methodolog-
gical approach to English teaching and a proper grading of the
teaching material.  

NOTES

1. R. Filipović (ed.), YSCECP, Reports 1 - 9, Institute of

2. Discussion on the paper: Tatiana Slama-Cazacu, "Psycho-
linguistics and Contrastive Studies", in R. Filipović (ed.),
YSCECP, Studies 4, Zagreb Conference on English Contrastive

3. Testing on production level is defined by R. Lado as "eliciting
from the student certain key structures which we wish to test".

4. R. Filipović, "Testing the Results of Contrastive Analysis",
paper read at the 3rd AILA Congress in Copenhagen, 1972.
Printed in: Rassegna Italiana di Linguistica Applicata, V, 1973,

5. W. Nemser, "Approximative systems of foreign language
learners", in R. Filipović (ed.), YSCECP, Studies 1, Zagreb,
1969, pp. 3 - 12, and in IRAL, IX/2, pp. 115-123.

6. W. Nemser, "Recent Center Activities in Contrastive
Linguistics", in R. Filipović (ed.), YSCECP, Studies 4, Zagreb
Conference on English Contrastive Projects, Zagreb, 1971,
Institute of Linguistics, p. 25.


9. "Adult" is according to Lenneberg defined as being over the
age of twelve (Eric H. Lenneberg, Biological Foundations
of Language, John Wiley and Sons, 1967, p. 156)

10. R. P. Stockwell, "Contrastive Analysis and lapsed time"
in James Alatis (ed.), 19th Annual Round Table Meeting on
Linguistics and Language Studies, Contrastive Linguistics and
Its Pedagogical Implications, Georgetown University, Monograph
No. 21, 1968, pp. 11 - 25.

74


14. 1. Language transfer - interference of the Lg;
   2. Transfer of training - he used instead of she, because the textbooks present drills with he;
   3. Strategies of second language learning - a tendency to avoid grammatical formatives;
   4. Strategies of second language communication - the speaker realises that he can be understood by native speakers without speaking correct grammatical sentences;
   5. Overgeneralization of Lt linguistic material (*What did he intended to say*).

15. 3 M.A. Theses:
   Vera Andrassy: "Errors in the Morphology and Syntax of the Parts of Speech in the English of Learners from the Serbo-Croatian-Speaking Area",
   Jasna Bilinčić: "Errors in the Morphology and Syntax of the Verb in the Speech of Learners of English in the Serbo-Croatian-Speaking Area",
   Stanka Kranjčević: "Errors in the Syntax of the Sentence in the Speech of Learners of English in the Serbo-Croatian-Speaking Area",

   Their long summaries are printed in R. Filipović (ed.), *YSCECP*, Pedagogical Materials 1, Zagreb, 1971, pp. 7-81.

16. R. Filipović, "Testing the Results of Contrastive Analysis", paper read at the 3rd AILA Congress in Copenhagen, (See Note 4.)


24. In 1972 a hundred students of the English Department, Faculty of Philosophy, University of Zagreb, observed as a part of their teacher-training course classes of pre-school, primary school, secondary school children and adult learners. Some of their findings are used in this paper.


28. D. Wilkins, "The Answer to the question ............ then is mentalism and behaviourism" (Linguistics in Language Teaching, E. Arnold 1972, p. 176.)


32. M. Vilke, op. cit. We have experimented with the E. Relative Pronouns in 1977, in the Language Grammar School, Zagreb. The learners (fifth year of learning) were tested on their ability to use relative pronouns. The tests showed their command of the material of the first three stages of the relative pronouns. The fourth stage was taken up in the class. The results were better than those achieved by traditional approach.

CRITICAL RESPONSE TO THE PROJECT

1. Critical response to the Project has, generally speaking, touched upon two broad issues, a sound theoretical motivation and a practicable pedagogic application, both of which were mentioned as goals at the outset of the Project. With respect to both issues the response has been overwhelmingly favorable. Before proceeding to a review of the individual comments made, it would perhaps be appropriate to examine briefly these two goals. This will then provide a framework for the comments.

1.1 On the one hand, a contrastive analysis, like all other linguistic analyses, must be evaluated in terms of its contribution to the science of linguistics. The analysis must therefore be evaluated from the point of view of the theory adopted and this theory’s application. This is a general criterion against which all scientific, not to mention linguistic, endeavors must be measured; it is quite distinct from the question of practical application. An evaluation from the theoretical viewpoint would involve examining the organization and presentation of the data, the logic of the author’s arguments, the explicitness and comprehensiveness of his description, and similar topics. A theoretical criterion is of considerable importance, given the variety of theories available.
On the other hand, a contrastive analysis can be evaluated from a more practical viewpoint. We can inquire whether the analysis can improve foreign language teaching and teachers. It seems inevitable that contrastive analysis should be viewed in this way; the practical by-products of a contrastive study are so obvious and accessible that there has been little hesitation in using the results in foreign language teaching. Note that these practical results are dependent upon and follow from the theoretical approach chosen. If data are not properly presented, if the theory does not attempt to get below the mass of surface data, then the practical results will suffer.

Both of these aspects of contrastive analysis were recognized at the inception of the Project. Thus the objectives listed in the booklet The Organization and Objectives of the Project include "an examination of all systemic differences and similarities that exist between Serbo-Croatian and English at all levels of linguistic description. . . . The results of the analysis and of the structure comparison obtained with the tools of modern linguistic science will serve as a sound foundation for improved teaching of English in Yugoslavia and of Serbo-Croatian in America and Great Britain." Also included among the objectives is this aim: to make a contribution to the "linguistic theory and practice in this field" and to provide "better insight into the linguistic structure
of the two languages... and a valuable contribution to the growing body of contrastive linguistics."

1.4 The evaluation procedures developed within modern linguistics provide a particularly viable basis for contrastive analysis. The earlier, taxonomic approach, which dominated linguistics throughout the 1950's, offered little possibility for advances in contrastive analysis because of its restriction to surface forms. The infinite number of possible surface sentences implies, at least theoretically, an equal number of possible differences between two languages. Similarly, the underlying competence of native speakers was rarely described using older methods. For the practical application of contrastive analysis, i.e. in foreign language teaching, this shortcoming was especially regrettable, since the native speaker's competence, often of an abstract nature, was not easily accessible to the non-native speaker.

1.5 Since both criteria -- one theoretical, the other practical -- are embodied in the stated aims of the project, we can view critical response from these two points of view. We shall present remarks from several sources: A. de Vincenz, "Das Zagreber Kolloquium über kontrastive Linguistik"; Vilem Fried, review of Zagreb Conference on English Contrastive Projects (Studies 4); M. Goethals, brief review of Studies 5; Mario Wandruszka, "Kontrastive Linguistik in Österreich"; Stig Eliasson, review of Zagreb Conference on English Contrastive Projects (Studies 4); W. Jane Bancroft, "Foreign Language Teaching in
Yugoslavia"; and Horst Raabe (ed.), Trends in kontrastiver Linguistik, Vol. 16 of IDS.

2. The first review offers a good starting point. Ostensibly a report by Prof. A. de Vincenz on the Zagreb Conference on English Contrastive Projects held 7-9 December 1970 (The papers were published in Studies 4.), it actually discusses in broader terms contrastive linguistics and the Yugoslav Project. Prof. de Vincenz feels that "die kontrastive Linguistik steht im Zentrum des sprachwissenschaftlichen Interesses" and that "die Resultate der Forschung auf diesem Gebiet können nicht nur ein Beitrag zur linguistischen Praxis, d.h. zur angewandten Linguistik, sondern darüber hinaus auch ein Beitrag zur linguistischen Theorie sein." These are, of course, the two points mentioned above. The Project's goal of making a theoretical contribution to linguistics was conditioned by the prior question of which theoretical approach to adopt. Two approaches were considered, one the classical structuralist approach, the other the generative-transformational. Prof. de Vincenz sees advantages and drawbacks in both approaches. The classical structuralist approach is easily applied in the classroom, but the generative method reveals most clearly the frequently very abstract linguistic knowledge a native speaker has of his language. Thus he is of the opinion "... dass in einigen Gebieten keine der existierenden Methoden brauchbare Ergebnisse bietet, so man sich für eine Kombination von Methoden entschieden, die anscheinend sowohl zu praktischen Ergebnissen wie auch zu theore-
tischen Fortschritten führen soll." Prof. de Vincenz concludes his review of the Yugoslav Project with the remark that any contrastive project must offer, besides abstract theoretical analysis, results that are accessible to a teacher, results that can find practical use in the classroom. In this way, then, Prof. de Vincenz recognizes the goals of the Project as valid.

3. Prof. R. Derolez, in his brief note on Studies 4, points out a pertinent fact--that very frequently it is the non-native speaker who offers the most valuable insights into the structure of a language. Thus the most comprehensive description of English is probably A Modern English Grammar on Historical Principles by Otto Jesperson, a Dane; the most complete description of Russian phonetics is probably to be found in R. Košutić's Gramatika ruskog jezika, first published in Beograd in 1914. Prof. Derolez expects this "ferment provided by a foreign-language background" to be a kind of intellectual force of its own in contrastive analysis, existing independent of any desire to use it in teaching a foreign language. He also expresses the hope that a generative orientation will make contrastive studies more comprehensive.

4. Another review of Studies 4 was offered by Prof. Vilem Fried. He touches upon three points: the theoretical approach, the corpus, and the practical goals of the Project. Under the theoretical orientation Prof. Fried sees the approach as being "prevailing
traditional, in the good European tradition of Poutsma, Jesperson, Zandvoort, etc." However, he faults the members of the Project for putting too much emphasis on the "formal (surface) representation of the phenomenon" and for not fulfilling its claim to confront the system of the two languages. This criticism is somewhat unjust. The reviewer has, unfortunately read only Series A: Reports among the publications. This series, as pointed out in the pamphlet Organization and Objectives of the Project, contains preliminary reports on work in progress. More in-depth analyses are to be found in Series B: Studies, which Prof. Fried knew about but did not read for his review.

4.1 The corpus chosen for the Project comes in for considerable praise for its size, comprehensiveness (having been translated into more than one Serbo-Croatian variant), and for the fact that it has been extensively computerized for quick retrieval. The reviewer also recognizes the ultimate practical goal of the undertaking: to improve teaching methods and materials. He closes with encouraging words, remarking that the outsider’s criticism would "hardly be justifiable in the light of the enthusiasm and of the assiduous work that underlies this admirable collective endeavor."

5. M. Goethals, in contrast, focuses his attention on the Studies series, specifically on Vol. 5. He recognizes the more theoretical orientation of this series, noting that "a lot of highly valuable articles were published in this 'Studies'
series, in the field of linguistics, contrastive linguistics and applied linguistics." His familiarity with the Studies series further leads him to remark upon the value of Project publications for foreign language teachers and researchers in general. Two papers pertinent to Prof. Goethals' comments could be mentioned from Vol. 5. As he remarks, Vladimir Ivir's "Case Frames and Transformations for Clause-Expanded Adjectives" discusses transformations involved in deriving adjective-plus-complement constructions, and Ljiljana Mihailović's "Existential Sentences in English and Serbo-Croatian" analyzes possible deep structures in non-locative *there*-sentences in Serbo-Croatian. These are precisely the non-superficial analyses that Prof. Fried (see 4. above) was looking for.

6. Mario Wandruszka's "Kontrastive Linguistik in Österreich," despite the title, discusses recent developments in contrastive analysis in several countries. Prof. Wandruszka notes that the Yugoslav Serbo-Croatian - English Contrastive Project, among the many contrastive projects he is aware of, has obtained the greatest success and the most significant results. He follows this comment with a brief review of the organization of the Project and the choice of a corpus. Although he has little further to say about the Yugoslav Project as a whole, later in his paper Prof. Wandruszka pays indirect tribute to the work of Project members by quoting some of their comments about the proper theoretical approach to
take in contrastive linguistics. He finds particularly convincing V. Ivir’s arguments for a blend of taxonomic and generative-transformational theories, and he accepts R. Filipović’s statement that “... in certain areas no present theory can offer a usable method.”

Professor Eliasson discusses the whole of the Yugoslav Project in the context of his review of Studies 4. (This volume contains the papers presented at the Zagreb Conference on English Contrastive Projects.) Prof. Eliasson discusses three familiar issues: the theoretical approach, the corpus, and pedagogical value. Noting that the Yugoslav Project is oriented toward structuralism and generative-transformational grammar, he concludes that an eclectic approach is possible but the different theories must be integrated in some meaningful way.

The problem of theory has been an important one in the recent history of linguistics, and it becomes a vexatious one when a large group of linguists joins together in one project, as is true in the case of the YSCECP. The imposition of one theory on all Project members would no doubt cause some to have misgivings about their participation. Since each scholar works best within the theoretical framework of his own choice, to require him to write within another theory would probably exhaust his patience and no productive work would result. In addition, latitude in choosing one’s own approach allows for the kind of debate that prevents stagnation.

Prof. Eliasson recognises the importance of
the corpus to the YSCECP. He seems to agree with the
decision to use the corpus in such a way as to emphasize
material which is reminiscent of spoken language. He
also remarks upon the pedagogical application of the
program. Of particular interest to him is the research
into error analysis, research which has been closely
tied to the contrastive grammar aspect of the Project.
Not all kinds of errors and the reasons for them, he
notes, can be accounted for within contrastive
linguistics alone.

In her article "Foreign Language Teaching
in Yugoslavia," W. Jane Bancroft of the University of
Toronto, Canada, touches briefly on the pedagogical
value of the Project. She notes in particular the
problem of teaching older students a foreign language.
These students can master the phonological system
of the foreign language only with great difficulty, and
they must spend time consciously memorizing words and
phrases. On the other hand, older students have a
great capacity for analysis and speculation. Thus they
can grasp grammatical explanations based on a contras-
tive approach, since they have already mastered a
native language and will begin to show the interference
problems stemming from this. This aspect of the
Project is understandably of particular interest to
a teacher from North America, either from Canada or
the United States, since in most areas of these
two countries foreign languages do not play an
important role in early education. Frequently a
student encounters a foreign language only during
his studies at a university.
9. The advances of the Yugoslav Project are perhaps most clearly revealed by the publication of Vol. 16 of IDS, which was devoted to the work of the YSCECP. The editor, Horst Raabe, chose for publication twelve papers which appeared in various volumes of the Project. While the republication of the papers itself speaks for the quality of work being done, Dr. H. Raabe offers some of his own views. Calling the Yugoslav Project the first to have a unified theory based on a whole series of methodological and theoretical preliminaries, Dr. H. Raabe notes that the goals include making a contribution to pedagogical work. The Project therefore represents an attempt to increase the range, accuracy and use of the results of contrastive analysis.

10. The comments reviewed above show that contrastive analysis in a sense bridges the gap between theory and practical application in linguistics. It was born of classroom experience but has grown up, and is still growing, as linguistics itself has grown and is growing. Although its exact position in either field is a topic of debate today, activity in contrastive linguistics is on the increase. In 1969 Professor Gerhard Nickel noted that "a world-wide network of research in contrastive analysis seems to be arising." The Yugoslav Project has become an integral part of this network.
NOTES

2. Ibid., p. 4

89
BIIOGRAPHICAL AND BIBLIOGRAPHICAL DATA
ON CONTRIBUTORS TO THE
YUGOSLAV SERBO-CROATIAN - ENGLISH CONTRASTIVE PROJECT

PERSONAL: Ljiljana Bibović, Ph.D.
Year of birth: 1937 Sex: female
Home address: Ulica Veljka Petrovića 6/VI,
stan br. 50, 21000 Novi Sad
Yugoslavia
Phone: 55241

POSITION: Assistant Lecturer in English, Department of
English Language and Literature, Faculty of
Philosophy, University of Novi Sad

UNIVERSITY CAREER SO FAR:
1963 - appointed Assistant Lecturer at the
above Faculty
1966 - received M.A. from University of
Belgrade (A Contrastive Analysis of
Word Order in English and Serbo-
Croatian Inversion)
1969/70 - studied linguistics at Edinburgh
University, Scotland, as a British
Council scholar
1972 - received Ph.D. from University of
Belgrade (The Use of the English
Gerund in Prepositional Phrases
Following Adjectives)

LINGUISTIC INTERESTS:
Problems in the theory of language, syntax,
morphology; the interrelationship between
syntax and semantics

AREAS OF RESEARCH:
Theories of Edward Sapir; English grammar;
contrastive analysis
CURRENT ACTIVITIES:

Contributor to YSCECP; research on a problem in case grammar; work on the delineation of a problem in derivational morphology

FUTURE PLANS:

Research on the systematic peculiarities in English

BIBLIOGRAPHY IN THE FIELD OF CONTRASTIVE LINGUISTICS:


3. "On the Word Order of Subject and Predicate in English and Serbo-Croatian from the Point of View of Functional Sentence Perspective." In YSCECP, Reports 5, Zagreb 1971, pp. 1-10.


6. "The Infinitive as Subject in English and Serbo-Croatian." (To appear)
PERSONAL: Wayles Browne
Year of birth: 1941 Sex: male
Home address: 315 Dryden Rd., Ithaca, N.Y. 14850, U.S.A.

POSITION: Assistant Professor of Slavic Linguistics,
Department of Modern Languages and Linguistics
Cornell University, Ithaca, N.Y. 14853, U.S.A.

UNIVERSITY CAREER SO FAR:

1964-65 - studied General and Slavic Linguistics
at the Filozofski fakultet, Novi Sad,
under scholarship from the Komisija za kulturne veze, Beograd
1966-68 - Lecturer in Slavic Linguistics, Yale
University, New Haven, Conn.
1968-69 - Lecturer in Slavic Linguistics, Brown
University, Providence, Rhode Island
1969-71, 1972-74 Consultant to YSCECP, Zagreb
(Fulbright fellowship, 1970-71)
1974 - Assistant Professor, Cornell University

LINGUISTIC INTERESTS:

General linguistics, theoretical linguistics

AREAS OF RESEARCH:

Slavic (especially Serbo-Croatian) and English
syntax, morphology and phonology; relative
clauses, questions, word order

CURRENT ACTIVITIES:

Member of the editorial board of Papers in
Linguistics; member of executive board of the
American Association for South Slavic Studies;
member of editorial board of International
Review of Slavic Linguistics

FUTURE PLANS:

To continue research in subjects mentioned
above
BIBLIOGRAPHY IN THE FIELD OF CONTRASTIVE STUDIES:


PERSONAL: Ranko Bugarski, Ph.D.
Year of birth: 1933    Sex: male
Home address: Dalmatinska 11, 11000 Beograd
Yugoslavia

POSITION: Associate Professor of English, English Department, Faculty of Philology, University of Belgrade

UNIVERSITY CAREER SO FAR:

1961    - appointed Assistant Lecturer at the above Faculty
1962/63 - studied at University College London, under the auspices of the British Fund for Yugoslav Scholars
1966/67 - studied linguistics at Columbia University, New York, as a Ford Foundation Visiting Scholar
1969    - received Ph.D. from University of Belgrade (The Prepositions 'over,' 'under,' 'above,' 'below' and 'beneath' in Present-Day English)
1969/70 - Ford Foundation fellow at Linguistics Department, Northeastern Illinois University, and at Slavic Department, University of Chicago
1970    - promoted to Assistant Professor
1974    - promoted to Associate Professor

LINGUISTIC INTERESTS:

General linguistics, including linguistic theory; structure of contemporary English; history of linguistics; sociolinguistics; child language

AREAS OF RESEARCH:

Various subfields of general linguistics; synchronic description of English grammar; transformational grammar; contrastive linguistics; history of linguistics; sociolinguistics
CURRENT ACTIVITIES:

Editor of Godišnjak Društva za primjenu lingvistiku Jugoslavije (Yearbook of the Yugoslav Society for Applied Linguistics); member of the editorial board of Filološki pregled (Review of Philology, Belgrade) and of Historiographia Linguistica: International Journal for the History of Linguistics (Amsterdam); contributor to YSCECP; descriptive and contrastive study of systems of English prepositions; revision and translation into English of some earlier work originally published in Serbo-Croatian

FUTURE PLANS:

Further study of prepositional systems; further study of the historical foundations of modern linguistics; linguistic and sociolinguistic investigation of selected topics in Serbo-Croatian

BIBLIOGRAPHY IN THE FIELD OF CONTRASTIVE LINGUISTICS:

PERSONAL: Željko Bujas, Ph.D.
Year of birth: 1928  Sex: male
Home address: Ulica 8. Maja 81, 41000 Zagreb, Yugoslavia
Phone: 444831

POSITION: Professor of English, English Department,
Faculty of Philosophy, University of Zagreb

UNIVERSITY CAREER SO FAR:

1954 - appointed Assistant Lecturer at the above Faculty
1961/61 - studied general phonetics at Edinburgh
University, Scotland, as a British Council scholar
1965 - received Ph.D. from University of Zagreb
(Problems of Microcontext and Linear Parallelism in Translation of Technical
Texts from English to Croatian - with Special Regard to Machine Translation).
1967/68 - Ford Foundation Fellow (and computer
specialist of the YSCECP) at Linguistic Research Center, University of Texas, Austin
1971 - promoted to Associate Professor
1974 - promoted to Professor

LINGUISTIC INTERESTS:

Computer techniques in concordancing, frequency counts and, generally, all quantitative language analyses; lexicography; machine and human translation

AREAS OF RESEARCH:

Translation problems (including machine translation); contrastive analysis; classification of homographs in English (using punch-card equipment); etymological composition of the English vocabulary; computer concordances of literary texts; English - Croatian and Croatian - English lexicography
traditional, in the good European tradition of Poutsma, Jesperson, Zandvoort, etc." However, he faults the members of the Project for putting too much emphasis on the "formal (surface) representation of the phenomena" and for not fulfilling its claim to confront the system of the two languages. This criticism is somewhat unjust. The reviewer has, unfortunately read only Series A: Reports among the publications. This series, as pointed out in the pamphlet Organization and Objectives of the Project, contains preliminary reports on work in progress. More in-depth analyses are to be found in Series B: Studies, which Prof. Fried knew about but did not read for his review.

4.1 The corpus chosen for the Project comes in for considerable praise for its size, comprehensiveness (having been translated into more than one Serbo-Croatian variant), and for the fact that it has been extensively computerized for quick retrieval. The reviewer also recognizes the ultimate practical goal of the undertaking: to improve teaching methods and materials. He closes with encouraging words, remarking that the outsider's criticism would "hardly be justifiable in the light of the enthusiasm and of the assiduous work that underlies this admirable collective endeavor."

5. M. Goethals, in contrast, focuses his attention on the Studies series, specifically on Vol. 5. He recognizes the more theoretical orientation of this series, noting that "a lot of highly valuable articles were published in this 'Studies'
series, in the field of linguistics, contrastive linguistics and applied linguistics." His familiarity with the Studies series further leads him to remark upon the value of Project publications for foreign language teachers and researchers in general. Two papers pertinent to Prof. Goethals' comments could be mentioned from Vol. 5. As he remarks, Vladimir Ivir's "Case Frames and Transformations for Clause-Expanded Adjectives" discusses transformations involved in deriving adjective-plus-complement constructions, and Ljiljana Mihailović's "Existential Sentences in English and Serbo-Croatian" analyzes possible deep structures in non-locative there-sentences in Serbo-Croatian. These are precisely the non-superficial analyses that Prof. Fried (see 4. above) was looking for.

6. Mario Wandruszka's "Kontrastive Linguistik in Österreich," despite the title, discusses recent developments in contrastive analysis in several countries. Prof. Wandruszka notes that the Yugoslav Serbo-Croatian - English Contrastive Project, among the many contrastive projects he is aware of, has obtained the greatest success and the most significant results. He follows this comment with a brief review of the organization of the Project and the choice of a corpus. Although he has little further to say about the Yugoslav Project as a whole, later in his paper Prof. Wandruszka pays indirect tribute to the work of Project members by quoting some of their comments about the proper theoretical approach to
take in contrastive linguistics. He finds particularly convincing V. Ivir's arguments for a blend of taxonomic and generative-transformational theories, and he accepts R. Filipović's statement that "... in certain areas no present theory can offer a usable method." Professor Eliasson discusses the whole of the Yugoslav Project in the context of his review of *Studies* 4. (This volume contains the papers presented at the Zagreb Conference on English Contrastive Projects.) Prof. Eliasson discusses three familiar issues: the theoretical approach, the corpus, and pedagogical value. Noting that the Yugoslav Project is oriented toward structuralism and generative-transformational grammar, he concludes that an eclectic approach is possible but the different theories must be integrated in some meaningful way. The problem of theory has been an important one in the recent history of linguistics, and it becomes a vexatious one when a large group of linguists joins together in one project, as is true in the case of the YSCECP. The imposition of one theory on all Project members would no doubt cause some to have misgivings about their participation. Since each scholar works best within the theoretical framework of his own choice, to require him to write within another theory would probably exhaust his patience and no productive work would result. In addition, latitude in choosing one's own approach allows for the kind of debate that prevents stagnation.

7.1 Prof. Eliasson recognises the importance of
the corpus to the YSCECP. He seems to agree with the decision to use the corpus in such a way as to emphasize material which is reminiscent of spoken language. He also remarks upon the pedagogical application of the program. Of particular interest to him is the research into error analysis, research which has been closely tied to the contrastive grammar aspect of the Project. Not all kinds of errors and the reasons for them, he notes, can be accounted for within contrastive linguistics alone.

8. In her article "Foreign Language Teaching in Yugoslavia," W. Jane Bancroft of the University of Toronto, Canada, touches briefly on the pedagogical value of the Project. She notes in particular the problem of teaching older students a foreign language. These students can master the phonological system of the foreign language only with great difficulty, and they must spend time consciously memorizing words and phrases. On the other hand, older students have a great capacity for analysis and speculation. Thus they can grasp grammatical explanations based on a contrastive approach, since they have already mastered a native language and will begin to show the interference problems stemming from this. This aspect of the Project is understandably of particular interest to a teacher from North America, either from Canada or the United States, since in most areas of these two countries foreign languages do not play an important role in early education. Frequently a student encounters a foreign language only during his studies at a university.
9. The advances of the Yugoslav Project are perhaps most clearly revealed by the publication of Vol. 16 of *IDS*,¹⁶ which was devoted to the work of the YSCECP. The editor, Horst Raabe, chose for publication twelve papers which appeared in various volumes of the Project. While the republication of the papers itself speaks for the quality of work being done, Dr. H. Raabe offers some of his own views. Calling the Yugoslav Project the first to have a unified theory based on a whole series of methodological and theoretical preliminaries, Dr. H. Raabe notes that the goals include making a contribution to pedagogical work. The Project therefore represents an attempt to increase the range, accuracy and use of the results of contrastive analysis.

10. The comments reviewed above show that contrastive analysis in a sense bridges the gap between theory and practical application in linguistics. It was born of classroom experience but has grown up, and is still growing, as linguistics itself has grown and is growing. Although its exact position in either field is a topic of debate today, activity in contrastive linguistics is on the increase. In 1969 Professor Gerhard Nickel noted that "a world-wide network of research in contrastive analysis seems to be arising."¹⁷ The Yugoslav Project has become an integral part of this network.
NOTES

2. Ibid., p. 4


BIOGRAPHICAL AND BIBLIOGRAPHICAL DATA
ON CONTRIBUTORS TO THE
YUGOSLAV SERBO-CROATIAN - ENGLISH CONTRASTIVE PROJECT

PERSONAL: Ljiljana Bibović, Ph.D.
Year of birth: 1937    Sex: female
Home address: Ulica Veljka Petrovića 6/VI,
               stan br. 50, 21000 Novi Sad
               Yugoslavia
Phone: 55241

POSITION: Assistant Lecturer in English, Department of
          English Language and Literature, Faculty of
          Philosophy, University of Novi Sad

UNIVERSITY CAREER SO FAR:

1963      - appointed Assistant Lecturer at the
          above Faculty
1966      - received M.A. from University of
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          Croatian Inversion)
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LINGUISTIC INTERESTS:

Problems in the theory of language, syntax,
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AREAS OF RESEARCH:

Theories of Edward Sapir; English grammar;
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Contributor to YSCECP; research on a problem in case grammar; work on the delineation of a problem in derivational morphology.

FUTURE PLANS:

Research on the systematic peculiarities in English.

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Cornell University, Ithaca, N.Y. 14853, U.S.A.

UNIVERSITY CAREER SO FAR:

1964-65 - studied General and Slavic Linguistics  
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under scholarship from the Komisija za kulturne veze, Beograd

1966-68 - Lecturer in Slavic Linguistics, Yale University, New Haven, Conn.

1968-69 - Lecturer in Slavic Linguistics, Brown University, Providence, Rhode Island

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(Fulbright fellowship, 1970-71)

1974-  Assistant Professor, Cornell University

LINGUISTIC INTERESTS:

General linguistics, theoretical linguistics

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CURRENT ACTIVITIES:

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FUTURE PLANS:

To continue research in subjects mentioned above
BIBLIOGRAPHY IN THE FIELD OF CONTRASTIVE STUDIES:


PERSONAL: Ranko Bugarski, Ph.D.  
Year of birth: 1933   Sex: male  
Home address: Dalmatsinska 11, 11000 Beograd  
Yugoslavia

POSITION: Associate Professor of English, English  
Department, Faculty of Philology, University of Belgrade

UNIVERSITY CAREER SO FAR:

1961 - appointed Assistant Lecturer at the above Faculty  
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1974 - promoted to Associate Professor

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Editor of Godišnjak Društva za primenjenu lingvistiku Jugoslavije (Yearbook of the Yugoslav Society for Applied Linguistics); member of the editorial board of Filološki pregled (Review of Philology, Belgrade) and of Historiographia Linguistica: International Journal for the History of Linguistics (Amsterdam); contributor to YSCECP; descriptive and contrastive study of systems of English prepositions; revision and translation into English of some earlier work originally published in Serbo-Croatian

FUTURE PLANS:

Further study of prepositional systems; further study of the historical foundations of modern linguistics; linguistic and sociolinguistic investigation of selected topics in Serbo-Croatian

BIBLIOGRAPHY IN THE FIELD OF CONTRASTIVE LINGUISTICS:

PERSONAL: Željko Bujas, Ph.D.
Year of birth: 1928  Sex: male
Home address: Ulica 8. Maja 81, 41000 Zagreb, Yugoslavia
Phone: 444831

POSITION: Professor of English, English Department,
Faculty of Philosophy, University of Zagreb

UNIVERSITY CAREER SO FAR:

1954 - appointed Assistant Lecturer at the above Faculty
1961/61 - studied general phonetics at Edinburgh University, Scotland, as a British Council scholar
1965 - received Ph.D. from University of Zagreb (Problems of Microcontext and Linear Parallelism in Translation of Technical Texts from English to Croatian - with Special Regard to Machine Translation).
1967/68 - Ford Foundation Fellow (and computer specialist of the YSCECP) at Linguistic Research Center, University of Texas, Austin
1971 - promoted to Associate Professor
1974 - promoted to Professor

LINGUISTIC INTERESTS:

Computer techniques in concordancing, frequency counts and, generally, all quantitative language analyses; lexicography; machine and human translation

AREAS OF RESEARCH:

Translation problems (including machine translation); contrastive analysis; classification of homographs in English (using punch-card equipment); etymological composition of the English vocabulary; computer concordances of literary texts; English - Croatian and Croatian - English lexicography
CURRENT ACTIVITIES:

Contributor to YSCECP; work on a Croatian-English dictionary (ca. 120,000 entries); revision of a Croatian-English dictionary (by M. Drvodelić); principal researcher in the following projects:

a) English-Croatian Lexicography (use of computers to produce a bilingual lexicographical file,

b) Computational Analysis of Croatian Literary Texts (compilation of computer concordances of 11th-18th century texts)

FUTURE PLANS:

To compile a Croatian synonym dictionary and a Croatian thesaurus (using computers); to compile a Croatian frequency dictionary (using computers); to continue work on computational concordances of Croatian literary texts; to analyze contrastive lexical and word-formation patterns (English and Croatian)

BIBLIOGRAPHY IN THE FIELD OF CONTRASTIVE LINGUISTICS:


zur angewandten kontrastiven Linguistik, Institut für Deutsche Sprache, Mannheim 1974, pp 129-137.


PERSONAL: Maja Dubravčić, M.A.
Sex: female
Home address: Kušlanova 52A, 41000 Zagreb, Yugoslavia
Phone: 642 304

POSITION: Senior Lector in English, English Department,
Faculty of Philosophy, University of Zagreb

UNIVERSITY CAREER SO FAR:
1960 - appointed Lector at the above Faculty
1965/66 - studied linguistics at Oxford University
1966 - received M.A. from University of Zagreb

(Some Aspects of Emphasis in Present-Day English)
1968/69 - studied linguistics at University of London
1974 - promoted to Senior Lecter

LINGUISTIC INTERESTS:

English grammar (particularly tenses and personal
pronouns) from the contrastive standpoint; con-
trastive English - Serbo-Croatian phonology and
phonetics with special reference to suprasegments;
pedagogical implications of contrastive
studies

AREAS OF RESEARCH:

Contrastive analysis; English suprasegmentals

CURRENT ACTIVITIES:

Preparing a contrastive study

FUTURE PLANS:

Research in contrastive phonology and phonetics with
special reference to pedagogical implications

BIBLIOGRAPHY IN THE FIELD OF CONTRASTIVE LINGUISTICS:

1. "The English Present Perfect Tense and Its Serbo-
Croatian Equivalents." In R. Filipović, ed., The Yuco-


PERSONAL: Radmila Djordjević, M.A.
Year of birth: 1934     Sex: female
Home address: Ulica Braće Nedića 2, 11000 Beograd, Yugoslavia
Phone: 439 082

POSITION: Assistant Lecturer on TEFL methodology; English Department, Faculty of Philology, University of Belgrade

UNIVERSITY CAREER SO FAR:
1970 - received M.A. from University of Belgrade (Culture as a Factor in Teaching English as a Foreign Language)
1971 - appointed Assistant Lecturer at the above Faculty

LINGUISTIC INTERESTS:
TEFL methodology; contrastive analysis; syntactic ambiguity

AREAS OF RESEARCH:
TEFL methodology; contrastive analysis; textbook materials

CURRENT ACTIVITIES:
Editor of English Language Teaching Information; contributor to YSCECP

FUTURE PLANS:
To work on a Ph.D. dissertation

BIBLIOGRAPHY IN THE FIELD OF CONTRASTIVE LINGUISTICS:


PERSONAL: Rudolf Filipovid, Ph.D.
Year of birth: 1916  Sex: male
Home address: 42 Moše Pijade, 41000 Zagreb, Yugoslavia
Phone: 37468

POSITION: Professor of English, English Department, Faculty of Philosophy, University of Zagreb

UNIVERSITY CAREER SO FAR:

1945 - appointed Assistant Lecturer at the above Faculty
1945/46 - attended the Postgraduate Course in English at University of Sheffield
1948 - received Ph.D. from University of Zagreb (Anglo-Croatian Literary Relations in the 19th Century)
1950 - promoted to Assistant Professor
1957 - promoted to Associate Professor
1961 - promoted to Professor

LINGUISTIC INTERESTS:

Languages in contact; contrastive analysis; lexicography; phonetics and phonology; syntax of modern English; semantics

AREAS OF RESEARCH:

The English element in European languages (on the phonological, morphological, and semantic levels); the English element in the South Slavic languages in the U.S.; contrastive analysis: general aspects; contrastive analysis: the phonological level; contrastive analysis and lexicography; language contact: theory and application; linguistics and foreign language teaching; place names in English travel accounts; English-Croatian and Croatian-English lexicography

CURRENT ACTIVITIES:

Director and chief researcher of the projects:
The English Element in European Languages and
Croatian Place-Names in English Travel Books 15-19 centuries; coordinator of the Serbo-Croatian-French, German, Italian, Russian, Spanish Contrastive Project. Director of the projects: YSCECP and ZESCCP; Editor of the YSCECP publications: Reports, Studies and Pedagogical Materials; editor of the ZESCCP publications; editor of the publications of the project the English Element in European languages; editor of the journals: 

Studia Romanica et Anglica Zagrabienisia and Strani jezici (Foreign Languages); member of the editorial board of the journals: Suvremena lingvistika (Contemporary Linguistics, Zagreb) and Filološki pregled (Review of Philology, Belgrade); writing a monograph on the English element in European languages; compiling an etymological dictionary of English loan-words in European languages; revision of English-Croatian Dictionary

FUTURE PLANS:

A two-volume monograph on the YSCECP; a contrastive grammar of English; a survey of Croatian dialects spoken in the U.S.; analysis of Croatian place-names in English travel accounts

BIBLIOGRAPHY IN THE FIELD OF CONTRASTIVE LINGUISTICS:


2. "Uloga kontrastivne analize u lingvističkom istraživanju" (The Role of Contrastive Analysis in Linguistic Research). In Filološki pregled, VI, 3-4, Beograd 1968, pp. 1-10.


15. "The Use of a Corpus in Contrastive Analysis." In SRAZ, 33-36, Zagreb 1972, pp. 489-500, and in Horst

17. "Od nauke do prakse u nastavi stranih jezika - Kontrastivna analiza" (From Theory to Practice in Teaching Foreign Languages - Contrastive Analysis). In Odjek, XXV, 3, Sarajevo 1972, p. 4.


PERSONAL: Zorica Grdaniški, M.S.
Year of birth: 1929   Sex: female
Home address: Ulica Kolarčeva 9/I,
                      11000 Beograd, Yugoslavia
Phone: 338089

POSITION: Senior Lecturer in English, Department of
English Language and Literature, Faculty of
Philosophy, University of Priština

UNIVERSITY CAREER SO FAR:

1961/62 - received I.C.A. scholarship to do
graduate study in linguistics in
the United States
1963 - received M.S. from Georgetown
University, Washington, D.C.,
Morphological Analysis of Serbo-
Croatian Nouns, Adjectives and
Verbs for Purposes of Machine
Translation
1968 - appointed Senior Lecturer at the
above Faculty
1971/73 - Lector in the English Department,
Faculty of Philosophy, Niš

LINGUISTIC INTERESTS:

Linguistic theory and grammatical analysis;
transformational linguistics; the structure
of modern English

AREAS OF RESEARCH:

Contrastive linguistics

CURRENT ACTIVITIES:

Contributor to YSCECP; preparing a study
based on the results of contrastive analysis
of subject clauses in Serbo-Croatian and
English; outlining a comprehensive treatment
of subject NP complements within the framework
of current theory of sentential complementation
in English.
FUTURE PLANS:

To write a Ph.D. dissertation on subject NP complements (as above)

BIBLIOGRAPHY IN THE FIELD OF CONTRASTIVE LINGUISTICS:

2. "Subject Complementation in English and Serbo-Croatian." (To appear).
PERSONAL: Vladimir Ivir, Ph.D.
Year of birth: 1934    Sex: male
Home address: Kuničak 61/I, 41000 Zagreb
                 Yugoslavia
Phone: 572326

POSITION: Associate Professor of English, English
Department, Faculty of Philosophy, University
of Zagreb

UNIVERSITY CAREER SO FAR:

1960    - appointed Assistant Lecturer at the above Faculty
1962/63 - attended the Postgraduate Course in English Linguistic Studies at
          University College London
1964    - received the Postgraduate Diploma in English Linguistic Studies
1965    - received Ph.D. from University of Zagreb (Adjectival and Verbal
          Elements in Predicative Position in Modern English)
1966    - promoted to Assistant Professor
1969/70 - IREX Research Fellow at Center for Applied Linguistics, Washington,
          D.C.; University of California, San Diego; Ohio State University,
          Columbus
1973    - promoted to Associate Professor

LINGUISTIC INTERESTS:

Syntax of modern English; theory and practice of translation; contrastive analysis (syntactic and lexical levels); lexicology

AREAS OF RESEARCH:

Problems of transformational theory; syntactic analysis of English adjectives; problems of translation theory; models and procedures of contrastive analysis; contrastive analysis and translation; English - Serbo-Croatian contrastive analysis of adjectives; English - Serbo-Croatian
contrastive analysis of number agreement;
linking verbs in English and Serbo-Croatian;
English - Serbo-Croatian contrastive analysis
of sentence relators (linkers); Serbo-Croatian -
English false pair types; Serbo-Croatian-Eng-
lish glossary of management terms; English-
Croatian and Croatian-English lexicography

CURRENT ACTIVITIES:

Contributor to YSCECP

FUTURE PLANS:

A full-scale analysis of internationalisms in
Croatian and English; an analysis of colloc-
tional patterns in English and Croatian and,
possibly, a dictionary of collocations; a
monograph on theoretical and practical problems
of translation (with special reference to
English and Croatian)

BIBLIOGRAPHY IN THE FIELD OF CONTRASTIVE LINGUISTICS:

1. "Serbo-Croat - English False Pair Types." In Studia
Romanica et Anglica Zagrabiensia, 25/26, Zagreb
1968, pp. 149-159.

2. "Contrasting via Translation: Formal Correspondence
vs. Translation Equivalence." In R. Filipović, ed.,
YSCECP, Studies 1, Zagreb 1969, 13-25.

3. (with W. Nemser) "Research Guide for Project Workers.
In R. Filipović, ed., YSCECP, Reports 1, Zagreb
1969, pp. 3-8.

4. "An Outline for the Contrastive Analysis of English
and Serbo-Croatian Adjectives." Ibidem, pp. 31-38.

In YSCECP, Studies 2, Zagreb 1970, pp. 14-26, and
in Horst Raabe, ed., Trends in kontrastiver Linguis-
tik I, Das Zagreber Projekt zur angewandten kontras-
tiven Linguistik, Institut für Deutsche Sprache,
Mannheim 1974, pp. 93-104.

6. "Predicative Patterns for English Adjectives and
Their Contrastive Correspondents in Serbo-Croatian."


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POSITION: Associate Professor of English, English Department, Faculty of Philosophy, University of Zagreb

UNIVERSITY CAREER SO FAR:

1957 - appointed Assistant Lecturer at University of Sarajevo
1958/59 - attended the Postgraduate Course in English at University of Durham
1961/62 - attended the Postgraduate Course in English Linguistic Studies at University College London
1963 - received the Postgraduate Diploma in English Linguistic Studies
1964 - appointed Lector at the above Faculty
1965 - received Ph.D. from University of Zagreb (The Use of the Anomalous Verb Forms SHALL, WILL, 'LL, SHOULD, WOULD, 'D in Present-Day Literary Conversational English)
1966/67 - Visiting Lecturer, Speech Department and Slavic Department, Pennsylvania State University
1969 - promoted to Assistant Professor
1974 - promoted to Associate Professor
1973-75 - Lector, School of Slavonic and East European Studies, University of London

LINGUISTIC INTERESTS:
Modern English grammar and usage; English and Serbo-Croatian as foreign languages; contrastive studies; sociolinguistics

AREAS OF RESEARCH:
Use of modal verbs in English, based on cor-
pora of spoken and written English; interpretation of certain sociolinguistic phenomena in the dialects of Serbo-Croatian; how to present certain grammatical problems to learners of English

CURRENT ACTIVITIES:

Making a comprehensive survey of the use of modal verbs in English and their equivalents in Serbo-Croatian, with special regard to their time reference, negation etc.; collecting material and observing students' progress in order to outline contrastive and other problems of English-speaking students of Serbo-Croatian

FUTURE PLANS:

Continued work in contrastive linguistics

BIBLIOGRAPHY IN THE FIELD OF CONTRASTIVE LINGUISTICS:


2. "Lexico-grammatical Features of MUST, SHOULD, and OUGHT TO and Their Equivalents in Serbo-Croatian." In YSCECP, Reports 2, Zagreb 1970, pp. 120-134.


6. "Predvidjanje interferencije i analiza pogrešaka u upotrebi engleskih modalnih glagola" (Predicting Interference and Error Analysis in the Use of English Modal Verbs). In Strani jezici 4, II, Zagreb 1972, pp. 244-252.
7. (with A. Kolka) "Izražavanje budućnosti i oblik going to" (The expression of Future and the Form GOING TO). In Strani jezici 3, III, Zagreb 1973, pp. 183-188.
PERSONAL: Dora Maček, M.A., Ph.D.
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POSITION: Assistant Lecturer in English, English Department, Faculty of Philosophy, University of Zagreb

UNIVERSITY CAREER SO FAR:

1961 - appointed Assistant Lecturer at the above Faculty
1963/64 - studied history of the English language at Edinburgh University, Scotland, as a British Council scholar
1964 - received M.A. from University of Zagreb (English Loanwords in Serbo-Croatian, 1832-50)
1972/73 - Ph.D. dissertation research at Edinburgh University, Scotland, as a British Council scholar
1975 - received Ph.D. from University of Zagreb (Periphrases With SHALL and WILL as Future Markers in the Development of English)

LINGUISTIC INTERESTS:

Historical studies; computer techniques in linguistics; contemporary English syntax and semantics; language contact

AREAS OF RESEARCH:

Linguistic borrowing; Middle English graphemics; contrastive analysis of English and Serbo-Croatian; Middle English syntax; computer techniques in linguistic study; English-Croatian lexicography

CURRENT ACTIVITIES:

Contributor to YSCECP

115
FUTURE PLANS:

Continued work in contrastive linguistics; work on textbooks about the history of English; translation of medieval English and Icelandic texts.

BIBLIOGRAPHY IN THE FIELD OF CONTRASTIVE LINGUISTICS:


PERSONAL: Ljiljana Mihailović, Ph.D.
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POSITION: Professor of English, English Department,
Faculty of Philosophy, University of Niš

UNIVERSITY CAREER SO FAR:

1957  - appointed Lector in English at
University of Belgrade
1959/60  - studied at Edinburgh University,
Scotland, as a British Council
scholar and received the Diploma
in Applied Linguistics
1961  - promoted to Senior Associate for
English grammar
1965  - received Ph.D. from University of
Belgrade (The Use of Passive Verbal
Forms in Contemporary English)
1968/69  - Ford Foundation Fellow at Center for
Applied Linguistics, Washington,
D.C.; University of Chicago; and
University of California, San Diego
1971  - appointed Professor at the above
Faculty

LINGUISTIC INTERESTS:

General linguistic theory; English grammar;
contrastive analysis of English and Serbo-
Croatian; applied linguistics with special
reference to teaching English to Serbo-Croatian
speakers

AREAS OF RESEARCH:

English textbooks for adult learners, with la-
boratory exercises; English grammar for language
learners; the passive in English, including
notional passive, pseudo-passive, the agent in
passive constructions; the category of number
in English nouns; contrastive analysis of Eng-
lish and Serbo-Croatian
CURRENT ACTIVITIES:

Preparing a contrastive study of English and Serbo-Croatian tense systems; preparing a study on the perfect from a contrastive point of view

FUTURE PLANS:

Continued work in contrastive linguistics

BIBLIOGRAPHY IN THE FIELD OF CONTRASTIVE LINGUISTICS:


3. "Additional Notes on Noun Phrases in the Function of Subject in English and Serbo-Croatian." In YSCECP, Reports 4, Zagreb 1971, pp. 73-84.


6. "Relativne klauze i njihova uloga u ostvarivanju hipotaksičkih odnosa u rečenici" (Relative Clauses and Their Role in the Building Up of Hypotactic Relations in Sentences). In Zbornik Filozofskog fakulteta u Nišu, Godina 1, Niš 1973, pp. 159-176.


PERSONAL: Ljubomir Mihailović, Ph.D.
Year of birth: 1925     Sex: male
Home address: Topličin venac 14,
              11000 Beograd, Yugoslavia
Phone: 626716

POSITION: Professor of English, English Department,
Faculty of Philology, University of Belgrade

UNIVERSITY CAREER SO FAR:

1956 - appointed Assistant Lecturer at
        University of Novi Sad
1957/58 - studied general, experimental and
         English linguistics at University
         College London, as a British
         Council scholar
1960 - received Ph.D. from University of
        Belgrade (Use of the Verbs CAN and
        MAY in Modern English), promoted
        to Assistant Professor at Novi Sad
1963 - appointed Assistant Professor at
        University of Belgrade
1966/67 - Fulbright Scholar at Linguistics
         Department, University of California,
         San Diego
1969 - promoted to Associate Professor
1972 - promoted to Professor

LINGUISTIC INTERESTS:

Experimental and general phonetics; linguistic
theory and methods; English and Serbo-Croatian
phonetics

AREAS OF RESEARCH:

General and applied linguistics; general and
Serbo-Croatian phonetics; phonemic elements
of modern English; English grammar; beginning
and intermediate English textbooks

CURRENT ACTIVITIES:

Work on a study of the American English verb
forms; preparing a monograph on the Serbo-
Croatian translation equivalents of English
verb structures

FUTURE PLANS:

Studies in English and general linguistics

BIBLIOGRAPHY IN THE FIELD OF CONTRASTIVE LINGUISTICS:

1. "Odnos stranog jezika prema materinjem jeziku u
srednjoj nastavi" (The Relation of a Foreign Lan-
guage to the Native Language in Secondary Education).
In Pedagoška stvarnost, II, Novi Sad 1956, pp.
375-379.

2. "Problem učenja glasova stranog jezika" (The Problem
of Learning the Sounds of a Foreign Language). In

3. "Progressive pronunciation drills." In Le Maitre

4. "Postupnost u nastavi engleskog izgovora" (Grading
in Teaching English Pronunciation). In Pedagoška

5. "Težina gradiva u nastavi stranog jezika" (Difficulty
of Materials in Foreign Language Teaching). In Pe-
dagoška stvarnost, VIII, Novi Sad 1962, pp. 183-188.

6. "Znanje stranog jezika" (The Knowledge of a Foreign
1-4.

7. "Učenje stranog jezika" (The Knowledge of a Foreign
Language). In Pedagoška stvarnost, X, Novi Sad 1964,
pp. 623-627.

8. "Kontrastivna analiza fonoloških sistema" (Contrast-
tive analysis of Phonological Systems). In R. Filppović, ed., The Yugoslav Serbo-Croatian - English
Contrastive Project, Prilozi i radja 1, Zagreb 1969,
pp. 30-34.

9. "Kontrastivno proučavanje jezika" (Contrastive Study
of Languages). In Književnost i jezik, XVII, 3-4,

10. Ogledi iz primjenjene lingvistike (Studies in Applied
PERSONAL: Mladen Mihajlović
Home address: Lava Tolstoja 6, 26000 Pančevo

POSITION: Assistant Lecturer, Faculty of Philology,
University of Belgrade

UNIVERSITY CAREER SO FAR:

LINGUISTIC INTERESTS:

AREAS OF RESEARCH:

CURRENT ACTIVITIES:

FUTURE PLANS:

(did not reply to questionnaire)

BIBLIOGRAPHY IN THE FIELD OF CONTRASTIVE LINGUISTICS:

1. "Elliptical Sentences in English and Their Serbo-
Croatian Equivalents", in R. Filipović, ed., YSCECP,
PERSONAL: Draginja Pervaz, Ph.D.
Year of birth: 1925   Sex: female
Home address: Ulica Matica srpske 19,
               21000 Novi Sad, Yugoslavia
Phone: 25086

POSITION: Associate Professor of English, Department of
           English Language and Literature, Faculty of
           Philosophy, University of Novi Sad

UNIVERSITY CAREER SC FAR:

1950   - appointed Assistant Lecturer at
       University of Belgrade
1953/54 - studied history of the English
         language at Edinburgh University,
         as a scholar under the British
         fund for Yugoslav scholars
1955/56 - Ph.D. dissertation research at
         Edinburgh University, as a British
         Council scholar
1958   - received Ph.D. from Edinburgh
       University (The Survival of Gram-
       matical Gender in Layamon's Brut,
       The Southern Legendary and Robert
       of Gloucester's Chronicle)
1959   - promoted to Assistant Professor
1961   - appointed Assistant Professor at
       University of Novi Sad
1965/66 - Fulbright Research Associate at
          University of California, Berkeley
1972   - promoted to Associate Professor

LINGUISTIC INTERESTS:

Middle and Early Modern English; word formation;
semantics; lexicography

AREAS OF RESEARCH:

Malory's language; contrastive analysis of
English and Serbo-Croatian; English suffixation;
commentary and glossary for Chaucer's General
Prologue to the Canterbury Tales; English-Serbo-
Croatian lexicography
CURRENT ACTIVITIES:

Contributor to YSCECP; further research on English suffixation; work on a history of Old and Middle English literature

FUTURE PLANS:

To analyze changes in the English language since the 17th century; to write a history of English; to take part in the revising of Enciklopedijski englesko-srpskohrvatski rečnik

BIBLIOGRAPHY IN THE FIELD OF CONTRASTIVE LINGUISTICS:


PERSONAL: Midhat Ridjanović, Ph.D.
Year of birth: 1935
Sex: male
Home address: Socijalističke revolucije 10/II
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POSITION: Assistant Professor of English, Department of English Language and Literature, Faculty of Philosophy, University of Sarajevo.

UNIVERSITY CAREER SO FAR:
1964: appointed Assistant Lecturer at the above Faculty
1967: received M.A. from University of Michigan, Ann Arbor, USA
1969: received Ph.D. from University of Michigan (A Synchronic Study of Verbal Aspect in English and Serbo-Croatian)
1970: appointed Assistant Professor at the above Faculty

LINGUISTIC INTERESTS:
General linguistics, contrastive linguistics, syntax

AREAS OF RESEARCH:
Contrastive analysis; English grammar; socio-linguistic research in Serbo-Croatian

CURRENT ACTIVITIES:
Contributor to YSECP; member of the editorial board of Radovi, Filološki pregled, and Književni jezik

FUTURE PLANS:
Research in English syntax; linguistic problems of Serbo-Croatian
BIBLIOGRAPHY IN THE FIELD OF CONTRASTIVE LINGUISTICS:


Leonardo Spalatin, Ph.D.
Year of birth: 1923  Sex: male
Home address: Hirčeva 6, 41000 Zagreb,
       Yugoslavia
Phone: 646752

Professor of English, English Department, Faculty of Philosophy, University of Zagreb

1951 - appointed Assistant Lecturer at the above Faculty
1956/57 - Ph.D. dissertation research at Durham, England
1962 - received Ph.D. from University of Zagreb (Relational Verbs in Educated English Usage - Phonetic Realization) promoted to Assistant Professor
1967 - promoted to Associate Professor
1968/69 - research on problems of contrastive linguistics at Center for Applied Linguistics, Washington, D.C.
1973 - promoted to Professor

Contrastive linguistics; lexicography

Verb systems of English and Serbo-Croatian; phonetic realization of some grammatical words; how linguistics helps one in appreciating poetry; contrastive linguistics and contrastive analysis; English-Croatian and Croatian-English lexicography

Collecting material for a Serbo-Croatian-English dictionary; compiling an English-Serbo-Croatian and Serbo-Croatian-English natural history dictionary; writing a series of articles on the uses of the English definite
article from the standpoint of the Serbo-Croatian speaker

FUTURE PLANS:

A large, mostly collocational, Serbo-Croatian-English dictionary; a Serbo-Croatian thesaurus; a study of distribution of one-word adverbs in English and Serbo-Croatian

BIBLIOGRAPHY IN THE FIELD OF CONTRASTIVE LINGUISTICS:


PERSONAL: Vjekoslav Suzanić, B.A.
Year of birth: 1932 Sex: male
Home address: Ulica B. Valjina 4/X,
57000 Zadar, Yugoslavia
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POSITION: Senior Lecturer in English, Department of
English Language and Literature, Faculty of
Philosophy, Zadar, University of Split

UNIVERSITY CAREER SO FAR:
1958 - appointed Assistant Lecturer at the
above Faculty
1960/61 - studied applied linguistics at
Edinburgh University, Scotland,
as a British Council scholar
1966 - promoted to Lecturer
1972 - promoted to Senior Lecturer

LINGUISTIC INTERESTS:
Grammar; translation

AREAS OF RESEARCH:
Translation problems; first language teaching;
English syntax; contrastive analysis

CURRENT ACTIVITIES:
Contributor to YSCECP

FUTURE PLANS:
Continued work in contrastive linguistics

BIBLIOGRAPHY IN THE FIELD OF CONTRASTIVE LINGUISTICS:
1. "The Nominal Group in English and Serbo-Croatian."
   In R. Filipović, ed., The Yugoslav Serbo-Croatian-
   English Contrastive Project, Reports 1, Zagreb 1969,
   pp. 51-62.
2. "One: Its Forms and Uses." In YSCECP, Reports 6,
   Zagreb 1972, pp. 89-102.
PERSONAL: Radmila Šević, M.A.
Year of birth: 1941    Sex: female
Home address: Ulica Maksima Gorkog 64,
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POSITION: Assistant Lecturer in English, Department of
          English Language and Literature, Faculty of
          Philosophy, University of Novi Sad

UNIVERSITY CAREER SO FAR:

1968     received M.A. from University of
          Belgrade (Word Order in Chaucer’s
          Prose)
1969     appointed Assistant Lecturer at
          the above Faculty

LINGUISTIC INTERESTS:

Contrastive analysis; history of the English
language

AREAS OF RESEARCH:

Word order; contrastive analysis

CURRENT ACTIVITIES:

Analyzing the use of adverbials in English and
Serbo-Croatian; compiling material for a Ph.D.
dissertation on the syntax of three Middle
English poems ("Pearl", "Patience", "Purity");
compiling material for a paper on word order
in Chaucer’s prose and poetry

FUTURE PLANS:

A Ph.D. dissertation on the history of the
English language

BIBLIOGRAPHY IN THE FIELD OF CONTRASTIVE LINGUISTICS:

1. "Verbs with Two Objects in English and Serbo-Croatian."
   In R. Filipović, ed., The Yugoslav Serbo-Croatian-
PERSONAL: Mirjana Vilke-Prebeg, M.A., Ph.D.
Year of birth: 1931  Sex: female
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POSITION: Senior Lecturer on methods of teaching English,
English Department, Faculty of Philosophy,
University of Zagreb

UNIVERSITY CAREER, SO FAR:
1968 - appointed Lecturer at the above Faculty
1970 - received M.A. from University of Zagreb (The English Element in
Serbo-Croatian Technical Terminology)
1973 - promoted to Senior Lecturer
1975 - received Ph.D. from University of Zagreb (The Influence of Linguistic
Theories on the development of Method in Teaching English)

LINGUISTIC INTERESTS:
Applied linguistics, contrastive analysis
applied to pedagogy; technical English

AREAS OF RESEARCH:
Teaching methods; English textbook for students
of engineering; pedagogical applications of
contrastive analysis; applied linguistics

CURRENT ACTIVITIES:
Contributor to YSCECP; research on acquisition
of English by learners of different age groups;
advisor to institutions dealing with various
aspects of teaching English

FUTURE PLANS:
A pedagogical grammar of English morphology and
syntax, based on the principles of contrastive
analysis; further research on the acquisition of English by learners of different age groups

BIBLIOGRAPHY IN THE FIELD OF CONTRASTIVE LINGUISTICS:


3. "Engleski kontrastivni projekt i nastava engleskog jezika" (English Contrastive Project and the Teaching of English). In Strani jezici 1, Zagreb 1974, pp. 3-12.


PERSONAL: Mira Vlatković, B.A.
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Home address: Švarcova 22/X, 41000 Zagreb Yugoslavia
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POSITION: Senior Lector in English, English department, Faculty of Philosophy, University of Zagreb

UNIVERSITY CAREER SO FAR:
1958 - appointed Lector at the above Faculty
1966/68 - worked in Slavic Catalog Department of Memorial Library and attended English lexicography and morphology courses at University of Wisconsin, Madison
1974 - promoted to Senior Lector

LINGUISTIC INTERESTS:
Contemporary English grammar, syntax of the verb; etymology; technical English; translation and interpreting; translation in teaching; error analysis

AREAS OF RESEARCH:
English idioms; contrastive analysis of English and Serbo-Croatian, including scientific language; error analysis in English scientific writing by Croatian authors

CURRENT ACTIVITIES:
Contributor to YSCECP; making a contrastive study of English and Croatian imperatives; contrastive study of verbal aspect

FUTURE PLANS:
Contrastive analysis; a handbook for Croatian authors of English scientific papers
BIBLIOGRAPHY IN THE FIELD OF CONTRASTIVE LINGUISTICS:


PERSONAL: Ljubica Vojnović  
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71000 Sarajevo  
Phone: 37443

POSITION: Senior Lecturer, English Department, University of Sarajevo

UNIVERSITY CAREER SO FAR:

LINGUISTIC INTERESTS:

AREAS OF RESEARCH:

CURRENT ACTIVITIES:

FUTURE PLANS:

(did not reply to questionnaire)

BIBLIOGRAPHY IN THE FIELD OF CONTRASTIVE LINGUISTICS:

ON TRANSLATIONAL CONVERSION IN ENGLISH:
SERBO-CROAT CONTRASTIVE ANALYSIS

1.1. One of the contrastive-analysis procedures employed in this project has been: (1) surveying and outlining patterns in English and, separately, Serbo-Croat; (2) comparing these patterns in terms of functional correspondence or divergence; (3) using the regularities observed in this comparison to arrive at a new, contrastive, linguistic description of the languages analyzed (primarily of English as the target language).

1.2. The same procedure, when applied mechanically in a contrastive study of Conversion patterns operating in the two languages, ends with predictably meagre descriptive results: Predictably, because the linguistic phenomenon under investigation, Conversion - defined as "the conscious use of a lexical item in a function beyond its original or 'proper' part-of-speech limits" - is a widely functioning and important syntactico-lexical device in English, while practically negligible in Serbo-Croat. Thus, the ultimate teaching value of the findings cannot be much more than outlining a few routines, designed to remind the Yugoslav learner to make more frequent, or regular, use of certain helpful devices in the target language, for which he has no acquired habit in his native system since they are practically absent there.

1.3. The meagre results, however, could have been predicted for entirely different reasons. Conversion, as defined here, is primarily a vocabulary-expanding device. As a result, Serbo-Croat translation of a restricted number of conversion-illustrating sentences in English will tend to contain few significant morphosyntactic patterns. Instead, most Serbo-Croat translation equivalents will simply be representatives of the word classes aimed at by the
conversion process - nouns, adjectives, etc. - or some descriptive phrase. In brief, we will encounter semantic rather than structural equivalents.

1.4. This certainly does not mean that no significant patterning (lexical or structural) can be discovered even among the semantic equivalents. One only has to discard the self-limiting approach outlined in 1.1., where patterns resulting from two separate, monolingual investigations of a language phenomenon were matched and a much wider, though less obvious, base of linguistic material missed.

1.4.1. The missed approach that I have in mind is matching extensive parallel two-language texts (English and Serbo-Croat, alternating in the roles of original and translation). It is through investigating the translation equivalents embedded in the wide contexts offered by such large linguistic corpora that one feels one comes closer to what should be the ideal basic material for research aiming at contrastive-analysis statements. The ideal material, in my view, is totally matchable segments of text - on any level between morph and sentence - in the two languages, each being entirely spontaneous (indeed, two parallel "originals") and each carrying exactly identical semantic load (of meaning, mood, cultural backdrop, etc.). If these conditions have not been met, we will simply not be comparing two equal, independent and commensurable linguistic systems, but one integral and authentic system with an incomplete and degraded one. The one is natural and total in its spontaneity and unfettered in drawing on its own resources (the original). The other is subordinate, as often as not influenced and contaminated by the former's structure, hamstrung, as it were, in the full use of its own means of expression (the translation).

1.4.2. Naturally, these ideal conditions cannot simply be met under normal conditions of linguistic research, though this is to some degree offset by certain good points of ordinary translation equivalents in large parallel texts. Arising from the confrontation of two language systems, translation equivalents often manage - in good translations - to avoid reflecting directly structures of the source language (the original). They also transfer semantic content through an array of linguistic devices of the target language (the language of translation).
1.4.3. In doing so, one of the devices not least employed is conversion, specified as "translational conversion", which term will be systematically used in this paper. Crossing the boundaries of part-of-speech categories is often the translator's best way to effect spontaneously the total transfer of meaning - always the aim of a competent and responsible translator. After the same type of conversion has been used a number of times (spontaneously or deliberately) opposite some pattern in the original, we may speak of a contrastive pattern emerging. True, such patterns are translational contrastive patterns, but no less indicative of contrastive-description potential, i.e. no less usable for contrastive-analysis statements, than those observable in confronting outlines of usage of specific structural items in two languages (the ordinary procedure).

1.5. Finally, the direction of translation within which Translational Conversion occurs may well be an issue. This project's corpus is unidirectional (English to Serbo-Croat) since its strategy and, consequently, methodology is based on the English item. The approach via Serbo-Croat items - that is, using a corpus obtained through Serbo-Croat-to-English translation - is, of course, linguistically equally valid. One is, naturally, aware of the difficulties involved in this approach, such as the fact that all English teaching courses in use in Yugoslavia are based on English grammatical units. One must, however, admit some psychological advantages of using the Serbo-Croat item as the point of departure in teaching English in this country.

2.1. A few examples - certainly overdue - will illustrate Translational Conversion as outlined so far:

(1) Ne može se vrednost i važnost jedne zemlje meriti po tome kako se u njoj oseća konsul neke strane države.  
(I. Andrić, Travnička hronika, p.127)

(1E) The worth and value of a country were not to be assessed by the way the Consul of a foreign power happened to feel here.  
(I. Andrić, Bosnian Story, 131)

(2) Po mom glasu sigurno je osetio da ne verujem.  
(D. Ćosić, Daleko je sunce, 325)
He must have sensed from my voice that I don't believe it.  
(D. Ćosić, Far Away Is the Sun, 269)

Samo nije znao kako da prevede i objasni stvar svome konsulu, a da ga ne uvredi.  
(Travnidka hronika, 93)

Only he did not know how to interpret and explain the matter to his Consul, without offending him.  
(Bosnian Story, 98)

2.1.1. The label Full Conversion may certainly be used for the above examples. They all illustrate a clear shift beyond the part-of-speech limits:

(1) DEM + ADV → N  
(2) ADV → Vb (Mod + Aux)  
(3) CONJ + Neg → PREP

2.2. More intriguing, however, are the issues raised by translation examples of the following type:

(4) To je bio kratak i pun čovek, bez brade i brkova.  
(Travnidka hronika, 179)

(4E) He was a short, stout man, without beard or moustaches.  
(Bosnian Story, 181)

(5) Govorio je bez pakosti ali i bez respekt i mnogo razmišljanja.  
(Travnidka hronika, 83)

(5E) He spoke without malice but also without respect or very much thought.  
(Bosnian Story, 88)

2.2.1. What we have here are instances of what may be termed Quasi Conversion: a shift from one sub-category to another, within the same part-of-speech category. Thus, in example 4, the Serbo-Croat to, changing to he in its English equivalent, has shifted from the sub-category of Demonstrative Pronoun (in Serbo-Croat) to Personal Pronoun (in English) - though staying within the original part-of-speech category (Pronoun). The psychological importance of this shift (in terms of the learner's awareness of it) is evident. Indeed, it can be argued - from the point of view of psychological effect (and, ultimately, of teaching implications) - that any such
shift is in fact as complete a conversion as the process labelled a Full Conversion.

2. 2.1.1. The intuitive quality underlying some sub-categories possible within Quasi Conversion is best illustrated by example 5. At first glance, these sentences may strike one as containing no shift whatsoever. After all, the Serbo-Croat coordinator i equals English and; and as both and and or are coordinators there should be no shift. Still, a Serbo-Croat learner of English does not expect to find or as a translation equivalent of his "sastavni" (coordinating) conjunction, because he instinctively links or to his "rastavni" (disjunctive) conjunction ili. The sub-category shift here, though elusive to a speaker of English, is quite real to a Serbo-Croat learner.

2. 3. Finally, comparing an original text and its translation, one very soon encounters items from the original which simply fail to reappear in the translation text, having been "lost" in the process of translation. For instance:

(6) Tek kad je ostao sam, Davilu izidje pred oči sva strahota onoga što je maločas čuo.

(6E) As soon as he was left alone, there passed before Devine’s eyes all the horror of what he had just heard.

(7) Ako ja ne vjerujem, onda će propasti odred.

(7E) If I don’t have faith the company is finished.

(8) Ustvari, mi i živimo od teškoća.

(8E) In fact we live on difficulties.

Without the provision of a Nil Equivalent category it would be impossible to account for all items of the original, as they go through the process of translation.
2.4. Though, evidently, what we have here is a pragmatic category, it may not be entirely amiss to argue theoretically for the necessity of such a category. We could thus postulate a general division of translation items into two preliminary classes: Equivalent Present and Equivalent Absent (or Nil Equivalent). With the former class broken down further, we obtain a system like the following:

Table 1.

![Diagram of translation items classification]

3. The examples quoted so far (1 through 8) certainly keep alive the old issue of contrastive analysis: Which occurrences are to be regarded as illustrative of obligatory patterns; which, on the other hand, should be relegated to the status of "variants possible" or of downright "loose translation". Sentences 1, 2, 3, 6 and 8 represent, no doubt, obligatory Translational Conversion patterns. In all of them the English pattern used appears as a spontaneous, automatic, normally inevitable solution, completely within and natural to English as a language system. These patterns are eminently the most valuable to teach. Examples 4, 5 and 7, being all high-frequency (therefore near-obligatory) variants, also have a considerable teaching potential, a fact repeatedly recognised and illustrated in this project.
Four exploratory, pilot analyses of Translational Conversion have been launched by the present author thus far. Heavily favouring the Serbo-Croat to English direction of translation (85.5% of items analyzed), and each investigating one part of speech, they are presented in the following survey. (see Table 2.)

The figures presented in Table 2 reveal the extent of Conversion as a linguistic device in translation. Thus, it is interesting to note the fairly steady share of the category Full Conversion (11.6, 13.7 and 15.3%) of item pairs analyzed in the major part-of-speech categories, where one out of seven to nine items is fully converted. Even if as many as one-half of all full-conversion occurrences were due to loose translation, or happened to be downright "nonce" translation, the proportion of items likely to undergo conversion in translation would still remain a significant share - and an intriguing new contrastive statement possible about Serbo-Croat and English.

Separate reports are required to deal exhaustively with each of the four parts of speech listed in Table 2. The preliminary distribution figures reported in the table for the Full Conversion, Quasi Conversion, and Nil Equivalent categories are a clear encouragement to proceed, breaking them down further into subcategories. Subcategory frequencies and, where necessary, other criteria may then be used to single out potentially useful, near-obligatory, and obligatory patterns (cf. paragraph 3). A number of both theoretically intriguing and practically applicable (for teaching purposes) contrastive statements about Conversion items in translation are sure to be made possible by these prospective analyses.
NOTES


3. Though other terms are, no doubt, possible and have been used, such as "transposition" (by J. P. Vinay & J. Darbelnet in *Stylistique Comparée du Français et de l'Anglais*, Didier, Paris, 1964, 16). I am indebted for this information to V. Ivir.

4. They are in fact B.A. theses written under my supervision by undergraduates of the English Department, Zagreb University, in 1967-1970:
   a) Valnea Bressan, Conversion of Nouns in Serbo-Croat: English Contrastive Analysis (completed in 1968)
      Texts analyzed: H. Fast, Freedom Road (Put slobode, translator I. Lipovićak)
                     W. Faulkner, Light in August (Svjetlo u augustu, S. Balen)
   b) Biserka Kruljan, Contrastive (Serbo-Croat to English)
      Pronominal Conversion (1970)
      Text analyzed: I. Andrić, Travnička hronika (Bosnian Story, K. Johnstone)
   c) Renata Ulrich, Conversion of Adverbs in Contrastive Analysis of Serbo-Croat and English (1969)
      Text analyzed: D. Ćosić, Daleko je sunce (Far Away Is the Sun, M. Heppel & M. Mihajlović)
      Text analyzed: I. Andrić, Travnička hronika (Bosnian Story, K. Johnstone)
Table 2.

<table>
<thead>
<tr>
<th>Part</th>
<th>Direction</th>
<th>Total of No. of Item Pairs Conver-</th>
<th>Conver-</th>
<th>in Target Lang.</th>
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<table>
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<tr>
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<th>Analyzed Item Pairs</th>
<th>Cover</th>
<th>Cover - Cover In Target</th>
<th>Full Guess</th>
<th>Total of Direction Part</th>
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</thead>
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</table>

*Table 2.*
ON SERBO-CROATIAN COMPLEMENT SENTENCES

This paper deals with verbal complement sentences in Serbo-Croatian.

It presents first the verbs which take an infinitival construction, regrouping them under the headings of verbs of desire, modal-like verbs, verbs expressing the stages of a process, and verbs of intention and realization.

Then the case of a group of verbs requiring a particular choice of aspect in their complement sentences will be introduced.

Considering next the question of the tenses of the embedded verbs, two kinds of embeddings will be defined, one which allows for all tenses and one which takes only the present tense.

Finally a note will be made of the way Serbo-Croatian handles the contrast between factive and non-factive complements by the choice of complementizer.

1.0 Let us first make some preliminary remarks on the status of the Serbo-Croatian language, which constitutes the source of data of this paper. The question of whether we are dealing with one or two "languages", or to be more specific, with two dialects of the same language or two separate languages, cannot and will not be resolved by linguistic expertise, for it has become a political issue that involves strong nationalistic feelings. But let us say that, for the purpose of this paper, an explicit distinction must be made between the two variants of Serbo-Croatian, the western-Croatian form and the eastern-Serbian form. The field work done for this study was conducted entirely in Zagreb, the capital of Croatia. The informants were all natives of Zagreb, and speakers of the standard štokavski jekavski dialect.

The area of syntax under observation, the verbal form of complement sentences, is one of the areas where the Serbian variant and the Croatian one happen to behave differently. The difference resides in the fact that Croatian makes more extensive use
of the infinitival construction than Serbian does. So, while
Croatian will prefer the construction:

(1) a. Želim idi.
    I want to go

Serbian will more normally use a complement sentence introduced
by a complementizer da:

   b. Želim da idem.
       I want that I go
       'I want to go!'

Another example of this difference would be:

(2) a. Počela sam zaradjivati prije deset godina. (Croat
    begun I have to earn living before 10 years

   b. Počela sam da zaradjujem prije deset godina. (Serbian)
       'I began earning my living ten years ago.'

Beside this dialectal variation along mostly geographical
lines, one has to take into consideration the variation which exists
between colloquial and standard (or literary) forms within Croatian.

(3) a. Nastojim naći stan. (Standard)

   b. Nastojim da nadjem stan. (Colloquial)
      'I am trying to find an apartment.'

What follows is a presentation of the verbs that command
the infinitival construction in Croatian.

1.1 The first group of such verbs, which under no circum-
stances will take a da construction in Croatian if their subject is
coreferential with the subject of the embedded verb, includes the
verbs which express wishing or desiring.

They are željeti: to want, voljeti: to like, and htjeti: to want¹:

(4) Želim govoriti s tobom.
    'I want to talk with you.'

(5) Volim piti.
    Četati po kiši.
    'I like to drink.'
    'to walk in the rain.'

148
On hoće zaboraviti svoju nesreću.
'He wants to forget his misfortune.'

The three verbs nastojati: to strive, nadati se: to hope, žudjeti: to be eager, which are related to this semantic group, were classified in this same group by most of the informants:

(7) Žudim započeti s radom.
'I am eager to start with the work.'

(8) Nastojim napisati pismo.
'I am trying to write this letter.'

(9) Nadala sam se završiti.
hoping I was reflexive to finish
'I was hoping to get finished.'

1.2 The second is composed of modal-like verbs. They are best defined as corresponding to the French verbs pouvoir: moći (to be able to) and devoir: morati (to have to):

(10) Možemo idić zajedno.
'We can go together.'

(11) Moram idić zubaru.
'I have to go to the dentist.'

They can also be used in an impersonal form with se:

(12) Može se reći... can refl. say
     \{impers.
     'One can say...'

(13) Mora se reći...
     has refl. say
     \{impers.
     'One has to say...'

1.3 Partly comparable to these modal-like verbs are the verbs trebati and valjati, to need and to be worthwhile. There are two verbs trebati in fact: trebati of:

(14) a. Ja trebam knjigu.
I need a book.
b. Ja trebam raditi.
I need to work.

c. Trebamo pronaći nove ljude.
We need to find new people.

d. Trebamo doći u školu u osam sati.
We have to come to school at eight o'clock.

This *trebati* can appear in the impersonal construction with se:

e. Treba se raditi mnogo brže ako se želi uspjeti.
'One needs to work much faster if one wants to succeed.'

and *trebati* of:

(15) a. Treba mi knjiga.
is necessary for me a book.

'I need a book.'

where *knjiga* is the subject of *treba* and *mi* the indirect object.

b. Treba raditi.
it is necessary to work.

c. Treba pohvaliti njegov rad.
it is necessary to praise his work.

'His work should be praised.'

where *raditi* and *pohvaliti* are the subjects of *treba*.

To *trebati* corresponds also the construction:

d. Treba da radim.
it is necessary that I work.

'I have to work.'

where the *da* construction with its personal verb is the subject of *trebati*. In this construction a topicalization operation can apply that moves the subject pronoun of the embedded sentence up to the main clause:

(16) a. Treba da mi pitamo iskusnije ljude.

b. Mi treba da pitamo iskusnije ljude.

'We should ask more experienced people.'
(17) a. Treba da vi dodjete u školu u osam sati.
   b. Vi treba da dodjete u školu u osam sati.
   'You should come to school at eight o'clock.'

Both trebati and trebati are heard in Zagreb. Trebati is a more central, classical form of the verb, the one recommended by the grammarians of Croatian, and trebatil is a form more typical of the subdialect of Zagreb.

The verb valjati: to be worthwhile is also an impersonal verb which takes an infinitival complement:

(18) Valja govoriti pošteno ako želimo doći do cilja.
    it is worthwhile talking honestly if we want to get to our goal
    'One should talk honestly if one wants to get to one's goal.'

(19) Ne valja biti prorok u svojoj zemlji.
    it is not worthwhile being a prophet in your own country
    'One should not be...'
    'Il ne faut pas...'

Contrary to what happens to the impersonal trebati in Croatian, valjati does not appear at all in a personal construction:

(20) a. Valja da se brinemo o našoj omladini.
    it is needed that refl. we take care of our youth
    '(We) need to take care of our youth.'

b. *Valjamo brinuti se...

(21) a. Valja da raskidimo ta pitanja.
    it is needed that we solve these questions
    '(We) need to solve these questions.'

b. *Valjamo raskidavati...

1.4 The third group is composed of verbs expressing the different stages of a process: početi: to begin, prestati: to stop, nastaviti: to continue.

(22) Počeo je zaradjivati prije deset godina.
    begun has to earn his living before ten years
    'He began to earn his living ten years ago.'
1.5 The fourth group taking infinitival complement sentences could be partly described as expressing intention and accomplishment:

(23) Jučer je prestao puštati.
    'He stopped smoking yesterday.'

(24) Nastavio je pjevati.
    'He continued to sing. He went on singing.'

(25) Odlučio je čekati.
    'He decided to wait.'

(26) Namjerava opustovati.
    'He intends to leave.'

(27) Obćala sam kasno ustajati.
    'I promised to get up late.'

(28) Uspjela sam uloviti vlak.
    'I succeeded in catching the train.'

(29) Dospjeli su je vidjeti.
    'They managed to see her.'

(30) Stigla sam naučiti lekciju.
    'I had enough time to learn my lesson (and did learn it).' 

(31) Navikla sam kasno ustajati.
    'I am used to getting up late.'

1.6 In all the groups of verbs so far, the infinitive construction can be seen as the result of the application of an Equi-NP deletion rule applying only in case of coreferentiality of the subjects:

```
  S
   NP
    I
     V
      NP
        N P      VP
          ja        idem
            želim

  S
   NP
    I
     V
      NP
        N P      VP
          ja        idem
            želim

  S
   NP
    I
     V
      NP
        N P      VP
          ja        idem
            želim
```
I want to go.

If the subject of the main clause is not coreferential with the one of the embedded clause, a rule of complementizer insertion operates:

b. Želim da (ti) ideš.
I want that you go
'I want you to go.'
c. *Želim ti ići.
Nom.
d. *Želim te ići.
Acc.

1.7 There are a few cases where the subject of the embedded clause, which is coreferential with the object of the main clause, undergoes an Equi-NP deletion rule. This happens with the two verbs pomagati: to help, and naučiti: to teach:

(33) Pomagao sam Jasni raditi.
helped I have Jasna (Dat.) to work
'I helped Jasna work.'

(34) Naudio sam ga plivati.
taught I have him (Acc.) to swim
'I taught him to swim.'

Their corresponding structures are:

The same structure exists with the verbs of perception, but the embedded clause shows up as a da construction then:
(35) Čujem Ivana da pjeva.
   I hear Ivan (acc.) that he sings
   'I hear Ivan sing.'

(36) Vidim Jasnu da pleše.
   I see Jasna (acc.) that she dances
   'I see Jasna dance.'

The infinitival construction exists also in a more literary form:

(37) Čujem Ivana pjevati.
   'I hear Ivan sing.'

(38) Vidim Jasnu plesati.
   'I see Jasna dance.'

2.0 Croatian, like other Slavic languages, has the characteristic of distinguishing between two verbal aspects, the imperfective and the perfective. With a few exceptions, all verbs fall into either one of the two aspect categories. So one identifies the verb gledati: to look at as an imperfective, and the verb sjesti: to sit down, as a perfective. The language also has a combination of derivational processes by which to turn an imperfective into a perfective and vice-versa.

2.1 Imperfectives are changed into perfectives by addition of a prefix, which generally narrows the meaning:

<table>
<thead>
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<th>Imp:</th>
<th>Perf:</th>
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<tbody>
<tr>
<td>piti:</td>
<td>popiti:</td>
</tr>
<tr>
<td>gledati:</td>
<td>pogledati:</td>
</tr>
<tr>
<td>plakati:</td>
<td>zaplakati:</td>
</tr>
</tbody>
</table>

Perfectives are made into imperfectives ("secondary imperfectives") by adding a suffix.

If one wants to study whether certain main verbs require a particular aspect in their complement sentences, and wants to isolate a con- straint that could be written in terms of a (syntactic) feature like "imperfective", one has to disregard the primary imperfective verbs, the perfective correspondents of which undergo a change in meaning. A pair of perfective/secondary imperfective verbs like (pisati: imperfective, to write)

potpisati: perfective to sign
potpisivati: imperfective to sign
will permit us to consider the syntactic facts more straightforwardly.

2.2 One group of verbs was observed to impose a particular aspect on their verbal complement. It is the group of verbs marking the different stages of a process:

(39) Počela sam prodavati (I2) svu moju imovinu.
    *prodati (P)
    'I began to sell all my property.'

(40) Počeo je kupovati (I2) stare satove prije deset godina.
    *kupiti (P)
    'He began to buy old clocks ten years ago.'

(41) Prestao je spominjati (I2) njeno ime.
    *spomenuti (P)
    'He stopped mentioning her name.'

(42) On mu je prestao pomagati (I2).
    *pomoći (P)
    'He stopped helping him.'

(43) Nastavio je potpisivati (I2) indekse.
    *potpisati (P)
    'He continued to sign indexes (students' books)
    'He went on signing indexes.'

(44) Nastavila sam zavaravati (I2) protivnika.
    *zavarati (P)
    'I continued to mystify the opponent.'

This constraint on the aspect of the verbal complement is to be construed in terms of a semantic feature of the main verbs. It is not unlike what happens in other languages:

?*Il a commencé à naître la semaine dernière.

?*He began to be born last week.

Il a commencé à marcher la semaine dernière.
He began to walk last week.

155
3.0 When considering the possible combinations of tenses that can be found in embedded clauses, a distinction has to be made between two kinds of constructions. One construction accepts all tenses; the other one is limited to the present tense.

3.1 Let us consider first the complement sentences in which all tenses can appear. All these verbs fall in the category of verbs of reported speech and thought, like kazati: to say, dokazivati: to argue, očekivati: to expect, isticati: to point out, misliti: to think, znati: to know, shvaćati: to realize, etc. The way reported speech is embedded in Croatian is by simple juxtaposition of what could be an independent clause. Therefore whatever is possible in an independent clause is also possible in an embedded clause. This holds for the reverse situation, too, which explains the fact that no present perfective verbs are to be found in embedded clauses since they never appear in independent clauses:

(45) a. Mislim da uvijek dolazi kasno. Imperf. present
b. je uvijek dolazio kasno. past
c. će uvijek dolaziti kasno. future
   'I think that he always comes late.'

(46) a. Mislim da *dodje kasnije Perfective present
b. je došao prekasno past
c. će doći prekasno future

3.2 The da construction in which only the present is used corresponds to the following deep structure:

```
NP       S             VP
  V            NP1         NP1
```

The subject of the embedded clause is coreferential with the object of the main verb.

(47) Kiša nas je spriječila da odemo. P
   rain us has kept that we go out.
   'The rain kept us from going out.'
(48) Podsjetio me je da ne zaboravim.
reminded me has that not I forget
'He reminded me not to forget.'

(49) On nam je predložio da idemo u kino.
he us has suggested that we go to the movies I
'He suggested (to us) that we go to the movies.'

(50) Sprečavala sam ga da ne puši.
kept I have him that not he smoke
'I (fem.) kept him from smoking.'

(51) Dozvolili su nam da uradimo.
allowed they have us that that we do
'They allowed us to do that.'

(52) Molit ču ask I will ga da mi posudi kola.
Molila sam him that me he lends a car ask I have
'I will ask him to lend me a car.'

(53) Navela sam ga da ostane.
P
Nagovorila persuaded I have him that he stay
'I persuaded him to stay.'

(54) Naredjujem mu da dodje.
'I order him to come.'

(55) On nam je preporučio da ne putujemo.
he us has advised that not we leave
'He advised us not to leave.'

(56) Zamolio sam ga da ostane.
begged I have him that he stay
'I asked him to stay.'

The object of the main verb can also be found in a
prepositional phrase.

(57) Tražio je od oca da mu kupi odijelo.
he demanded from his father that him buy suit
'He asked his father to buy him a suit.'
When the object is the impersonal se, it gets deleted from the upper sentence (taking with it the preposition).

(58) a. Tražila sam da se poštuje moja odluka - Present
I demanded that "on" respect my decision
I demanded that my decision be respected

b. *Tražila sam da se je poštivala moja odluka - Past
*Tražila sam da če se poštivati moja odluka - Future

Corresponding to the tree:

3.3. Observe that both presents, the imperfective and the perfective one, can be found in these constructions. So, while the present perfective is ungrammatical in independent clauses like

On dodje. < doći < ići
come

On ode. < otići < ići
go out
go

and in reported speech:

*kaže da dodješ
he says that you come

*kaže da odeš
he says that you go out

it is an acceptable form in the construction here:

(47) Kiša nas je spriječila da odemo.
'The rain prevented us from going out.'
The case has been made that the present perfective of Slavic languages is ungrammatical and unobtainable on semantic grounds. The perfective aspect of a verb cannot be expressed in the very open-ended present tense. The fact that it appears in these embedded clauses indicates that this present tense, always found in clauses embedded in a particular construction, is a cover tense in the same way the infinitive is a neutralized tense in English.

4. The way Serbo-Croatian marks the difference between factive and non-factive complement sentences is through the choice of complementizer. As was presented in Bibović’s article (1971) the complementizer što corresponds to factive verbs, as in:

(59) Žao mi je što sam poslušao njegov savet.
   (it is regretful to me...) 'I regret that I followed his advice.'

(60) Ne svidja mi se što je toliko lijen.
   (it does not please me...) 'I dislike it that he is so lazy.'

(61) Radovao se što je dobio prvu nagradu.
   'He rejoiced that he had won the first prize.'

(62) Vrijedja se što je nitko ne shvata ozbiljno.
   'She resents it nobody takes her seriously.'
   (feels offended)

(63) Sretan sam što te vidim.
   'I am glad to see you.'

(64) Krivo mu je što je Ivan bogat.
   'He resents John’s being rich.'

The use of što is more widespread in Serbian than in Croatian but is still functional in Croatian. Observe how the choice of complementizer in the following examples can make explicit whether the complement sentence is a factive or non-factive one:

(65) a. Ne volim što mi se miješaju u posao.
   (factive: they did)
b. Ne volim da mi se miješaju u posao.
   (non-factive: if they interfere)

(66) a. Drago mi je što te vidim.
       I am glad to see you.

   b. Uvijek mi je drago da te vidim.
       I am always glad to see you (i.e. if I see you).

N O T E S

1. *Hti*ti is also used as an auxiliary in the formation of the future. In this case it appears in its short form:

   ... ću idi: I will go
   ... ćeš govoriti: you will talk
   hoću: I want
   hoćeš: you want

   This short form is also the one the verb to want takes in a negative sentence. The negative form is therefore potentially ambiguous:

   neću... I will not (future + neg.)
   I do not want (present + neg.)

   But in this case the verb to want will be followed by a *da* construction:

   neću idi: I won't go
   neću da idem: I do not want to go

   Serbian, which has a future in ću + *da*, has the ambiguous sentence:

   neću da idem: I will not go.
   *{I do not want to go}*

2. The Matica Hrvatska (1971) is explicit about the "ungrammaticality" of the infinitival construction:

   Ne treba da ideš onamo.
   'You do not need to go that way.'

   *Ne trebaš ći onamo.

   Lj. Jonke (1965:396) also notes as incorrect the form:

   *Trebate doći.

   and gives as the only acceptable one:

   Vi treba da dodjete.
3. But the verb *svrgiti*: to finish does not fall into this category. It takes a verbal noun instead of an infinitive.

- Sršio je *s pisanjem knjige.*
  He finished (with the) writing (of) the book
- Oni će završiti *s ispitivanjem djaka kroz pola sata.*
  They will finish examining the pupils in half an hour (with the examination of)

4. This verb *obećati*: to promise and the following *nadati se*: to hope show an alternation between the infinitive and the *da* construction. In the past, they take the infinitive as seen in the example, but in the present they tend to take a verb in an overt future form.

- *?Obećajem doći*
  - Obećajem *da ću doći uvečer.*
    'I promise that I will come tonight.'

as opposed to

- *Obećala sam doći.*
  'I promised to come.'

and

- *?Nadam se završiti uvečer.*
  - Nadam se *da ću završiti uvečer.*
    'I hope that I will finish tonight.'

- *Nada la sam se završiti.*
  'I was hoping to finish.'

5. Another interesting distribution of aspects was observed in the negative imperative sentences. Serbo-Croatian, unlike Russian, has two negative particles, *ne* and *nemoj*. Russian has only *ne*, which is always followed by the imperfective aspect, as is also the case in Croatian. *Nemoj*, on the other hand, can take either aspect.

- *Nemoj otvoriti bocu!* Perf.
- *Nemoj otvarati prozor!* Imp.
  Don't open the bottle window
6. Actually, the present perfective is sometimes used in Croatian with a subjunctive or conditional value.

7. Note the parallel between the present perfective and the infinitive in Croatian itself in the sentences:

Mislim da je trebalo da se požurimo.  
\{ žuriti se. \}  
' I think that it was necessary to hurry.'

Mislim da je potrebno da se požurimo.  
\{ žuriti se. \}  
' I think that it is necessary to hurry.'

which the informants preferred to the complementary forms
Mislim da je trebalo požuriti se.
je trebalo požuriti se.
je trebano da se žurimo.

Wayles Browne pointed out to me that the factive što corresponds to the da + all tenses construction, while the non-factive da introduces a construction with the neutralization of tenses in the present.

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ON PSYCHOLINGUISTICS AND ITS ASSUMED RELEVANCE TO CONTRASTIVE ANALYSIS

The main concern of psycholinguistic studies -- theoretical and empirical -- is the question of how language is acquired by children and how it is created and understood by adults, the question of the psychological mechanisms that underlie our use of language. Since these psychological mechanisms and learning processes are presumably operative, to some extent at least, in foreign language learning, we may be well advised to look into the more recent theoretical assumptions and empirical findings in the domain of psycholinguistics, and see what implications they may have for contrastive analysis and second language learning.

In the past decade or so linguists have increasingly concerned themselves with the underlying cognitive structures which become realized as sentences of a language. Since these basic structures are presumed to reflect properties common to all languages, i.e., universals, they must be prior to (and conditions for) the acquisition of language.

The linguistic theory advanced by Chomsky (1957, 1965) includes the notions of deep and surface structures and stresses a competence/performance distinction. Within this theoretical framework the rules of grammar that relate underlying deep structures to surface structures, and that are part of the linguistic competence of speakers of language, are known as transformational rules. The grammar is a description of the linguistic competence, the underlying generative principles internalized by those who acquire the language.

Under the strong impact of this generative theory of language, psycholinguists of the early 1960's set themselves the task of showing how a generative grammar is acquired by the child and how a generative grammar functions in speaking and understanding language. The early "Chomskian" period of psycholinguistic research was therefore characterized by an attempt to demonstrate a direct
correspondence between the formal features of derivations and the psychological complexity of sentences (e.g., Miller, McKeen and Slobin, cf. Miller 1962; Savin and Perchinock, 1965). However, other experiments (e.g., Slobin, 1968; Mehler, 1964; Mehler and Bever, in press) often showed that added transformations did not necessarily produce added psychological difficulty, and it was suggested that "an acceptable theory of the relation between competence and performance models will have to represent that relation as abstract, the degree of abstractness being proportional to the failure of formal features of derivations to correspond to performance variables" (Fodor and Garrett, 1966, p. 152). This merely substitutes a vague and variable notion of "abstractness" for the facts of non-correspondence.

Bever (1970) has explicitly rejected the centrality and independence of syntax. He has found that behavioral processes ("perceptual strategies") used in interpreting sentences, influence the development of linguistic structures, as do the learning experiences of the child when acquiring language. He argues that this interaction of the nonlinguistic factors and the linguistic system indicates that the linguistic system must reflect some more basic cognitive structures and that linguistic competence is therefore in no way prior to or independent of other cognitive and behavioral systems. Bever's 1970 paper marks an important change in psycholinguistics.

In the late 1960's and almost parallel to the above mentioned developments in psycholinguistics there emerged new trends in linguistics itself, typified by the works of C. Fillmore, G. Lakoff, J. McCawley, and J. Ross. These "generative semanticists" have advanced a semantically based model of transformational grammar. The main thrust of their arguments lies in the rejection of syntactic "deep structure" as defined by Chomsky. For generative semanticists the generative power of the grammar must lie in the semantic component. They see a need for the existence of semantic and surface syntactic representations, but no justification for the postulation of an intermediate level--"deep structure"--between these two levels.

With their commitment to semantic structures, generative semanticists have taken a new turn in modern linguistic theory. In doing so, they have come closer to the views held by some psychologically oriented linguists (e.g., Chafe, Halliday) and some psycholinguists (e.g., the Clarks, Olson, and Osgood). These theorists argue that language use is much easier to explain on a
semantic basis simply because, when we use language, we necessarily start with something we want to say, i.e., with meanings (cf., in particular, Osgood, 1968).

The perspectives in the study of language behavior are rapidly shifting. The narrow conception of "transformational" psycholinguistics, itself only recently a new perspective, is being abandoned. It is now generally recognized that the major shortcoming of models of language performance based on transformational grammar is that in such models the pre-syntactic phases have been largely ignored. This is evident from the recent writings of psycholinguists like Bever (1970), H. Clark (Clark and Clark, 1968), Olson (1970) and Slobin (1971) as well as linguists like Chafe (1970), E. Clark (1970; Clark and Clark, 1968), Halliday (1970) and Morgan (1972). Presyntactic, and indeed pre-linguistic, phases have also been incorporated into the model developed by Osgood (1971a, 1972; Osgood and Richards, 1973; Osgood and May, 1972).

As early as 1963 Osgood had stated that the major shortcoming of the generative grammar model was that it put the syntactic "cart" before the semantic,"horse"; in the standard (Chomskian) grammar of that time, even in sentence creating the semantic component was assumed to operate on the output of the syntactic component. Contrary to both the Chomskian theoretical framework, with its "deep" linguistic structures, and the notions of generative semanticists, whose underlying semantic structures are still linguistic in nature, Osgood argues that the underlying structures of language are pre-linguistic (cognitive) in nature. He assumes that "...what is transformed into a surface sentence is not another 'sentence' (hyper or otherwise) but rather a momentary cognitive state which is not linguistic at all yet has its own complex semantic structure (1971a, p. 519)."

Osgood's account of the relation between "cognizing" and "sentencing" includes an explicit theory of meaning, thus making it a likely candidate for answering the basic psycholinguistic question: how is language created and understood?

In his theorizing about the structures that underlie the use of language, Osgood (1972) makes the following assumptions: (a) that the cognitive structures which interpret sentences received and initiate sentences produced are essentially semantic in nature and are established in prelinguistic experience with perceived entities and their interactions in perceived events or states; (b) that
single events or stative relations are perceived and represented in terms of simple cognitions which are signed, directed relations (\(\sim\)(M) \rightarrow 1\) between two meaning elements \((M_1\text{ and } M_2)\) representing the entities participating in the event or state; (c) that such simple cognition is represented in short term memory (cognitive "operator") such that the three components are semantic representations (feature code-strips) of \(M_1\), \(M_2\) and the relation between them (\(\sim\)(M) \rightarrow 1); and (d) that the sequence of entering information into and extracting information from the three components in the "operator" corresponds to the sequence which most frequently occurs in pre-linguistic perception of events—thus \(M_1\) ("Source" or "Figure"), \(\sim\)(M) \rightarrow 1 ("Action" or "State") and \(M_2\) ("Recipient" or "Ground"), \([M_1 \sim\)(M) \rightarrow 1 M_2\]

In the event relation JOHN HIT THE BALL, \(M_1\) ("Actor") is typically perceived prior to \(M_2\) ("Recipient"); in the stative relation THE CUP IS ON THE TABLE, \(M_1\) ("Figure") is cognitively prior to \(M_2\) ("Ground"). In linguistic terms, \(M_1\) would roughly correspond to subject NP, \(\sim\)(M) \rightarrow 1 to VP, and \(M_2\) to object NP in deep structure.

The cognitive structures presumed by Osgood to underlie the creation and understanding of sentences may be either simple or complex. A complex cognition is defined as two or more simple cognitions conjoined via some mode (m); thus \([M_1 \sim\)(M) \rightarrow 1 M_2]\ m \([M_3 \sim\)(M) \rightarrow 1 M_4]\ m \ldots \) When the notion of the assumed sequence of components within a simple cognition is extended to complex cognitions, the following assumption is made: that the normal (natural) underlying ordering of cognitions will correspond to that which most frequently occurs in pre-linguistic experience with perceived events. For example, in an observed situation, JOHN PEELS THE APPLE/JOHN THROWS AWAY THE APPLE, the cognitive structure which most closely corresponds to this perceptual sequence would map the sentence into: John peeled the apple but (then) threw it away. Reversing the order of the two cognitions, which are interlocked here in an antecedent-subsequent mode of conjoining, would result in an anomalous sentence, since such an ordering would be impossible on the perceptual level (for a detailed discussion on complex cognitions, see Opadić, 1973).

Osgood's theorizing leads to the following predictions: (1) the linguistic (sentence) complexity is an inverse function of the degree of correspondence between the surface structures of sentences (either received or produced) and the perceptually based normal structures of simple and complex cognitions; (2) the less the correspondence between surface structures of sentences and the normal
(perceptually based) structures of cognitions, (a) the later the stage of development of imitation, comprehension and "acting out" in children, (b) the greater the difficulty of comprehension and recalling by adults, (c) the more frequent will be errors in normal cognitive structures, (d) the less frequent will be the surface structures in "simply describing" perceived events, (e) the more delayed will be the appearance of the sentence structures in development cross-linguistically, (f) the lower should be the evaluation of the grammar by the criterion of "naturalness" (cf., Osgood, 1972).

The findings of some studies (Clark and Clark, 1968; E. Clark, 1971) are quite consistent with Osgood's assumptions, and other studies (Opačić, 1973; Hoosain, 1973), testing these very assumptions, have confirmed their validity.

If we accept Osgood's account on the relation between cognizing and sentencing as theoretical basis, and if we accept the postulation of the "approximative system" of a second language learner, then the following prediction with regard to areas of interference in second language learning can be derived: (1) points of contrast between two linguistic structures will carry more weight--cause more difficulty in learning--when the second language structures are more remote from the cognitive structures than those of the base language, and vice versa. We could actually speak of two classes of interference, first-order interference and second-order interference, respectively; (2) grammatical categories that have clearer semantic correlates will cause less difficulty in learning than the ones whose nature is arbitrary, nonsemantic (cf. also Slobin, 1966). Notice, for instance, that SC learners of English do not encounter serious problems with regard to the usage of English pronouns he, she, it, presumably because these refer to concepts that have clear semantic distinctions (semantic features such as animate, inanimate, male, female). But the reverse is not true due to the very arbitrary nature of the SC gender system.

Osgood's most recent theorizing opens up new perspectives in the study of language behavior in general, and presumably offers possibilities for a more adequate understanding of the processes of second language learning. Therefore, in order to shed some light on the psycholinguistic nature of contrastive factors in second language teaching and learning, it is suggested that the existing studies--e.g., those based on error analysis--be examined for possible correlation of the nature and frequency of errors and the
degree of remoteness of particular linguistic sequences from underlying semantically-based cognitive structures. This way, it is believed, it would be possible to see to what extent the data of learner behavior can be explained in terms of the principles derivable from the above presented theoretical considerations. This approach, which would also incorporate some well-designed experiments, would have pedagogical implications which may not be quite consistent with those based on linguistic contrastive analysis alone.

NOTES

1. According to Osgood's model of representational mediation process, his neo-behaviorist theory of meaning (cf., Osgood, 1953, 1963, 1971b), the mediating reaction to a sign (perceptual or linguistic) is represented as an ordered set of behavior-based mediator components, that is, a set of distinctive features \( r_{m1}, r_{m2}, \ldots, r_{mn} \). For convenience in exposition the symbol \( M \) (rather than \( r_m \)) is used to represent the componential feature code-strips \( (r_{m1}, r_{m2}, \ldots, r_{mn}) \) assumed in theory to characterize the meanings of perceptual and linguistic signs.

2. Such cognitive structures can represent either perceptual events or linguistic sequences.

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174
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