

International Journal of PSYCHOLINGUISTICS

Introduction to the Journal

Psycholinguistics (PL), which found its origin in the necessity to study aspects of the human communication process more thoroughly, has expanded greatly in the last five decades. It has progressed simultaneously with linguistics and scientific psychology, and other fields concerning language and communication. The interdisciplinary - even multidisciplinary - possibilities of this field enable it to account for language and communication study in an explanatory perspective, *i.e.* envisaging the modifications of the message, included in the act of communication, due to its relationship with the emitter and receiver, both of them determined by their mutual relations and by the context in which they are communicating.

The *International Journal of Psycholinguistics* was founded in 1972 to meet the increasing need for an independent forum in PL and is now reappearing with the same goal. It is intended to assist in development of this field and to encourage progress of all aspects of the communicating act and its components, suggesting directions of investigations that take into account the message integrated into the context at its various levels. The *Journal* is intended to contribute to a better description of the subject, of the problems to be studied, of the aims of this interdisciplinary field; it will also try to stimulate efforts towards giving PL an autonomous status bridging psychology and linguistics and other sciences.

The basic purpose of this Journal is to publish papers of authors, on a worldwide basis, that will debate theoretical questions in PL and also present experimental research in the field and its results, focusing on both fundamental and applied aims.

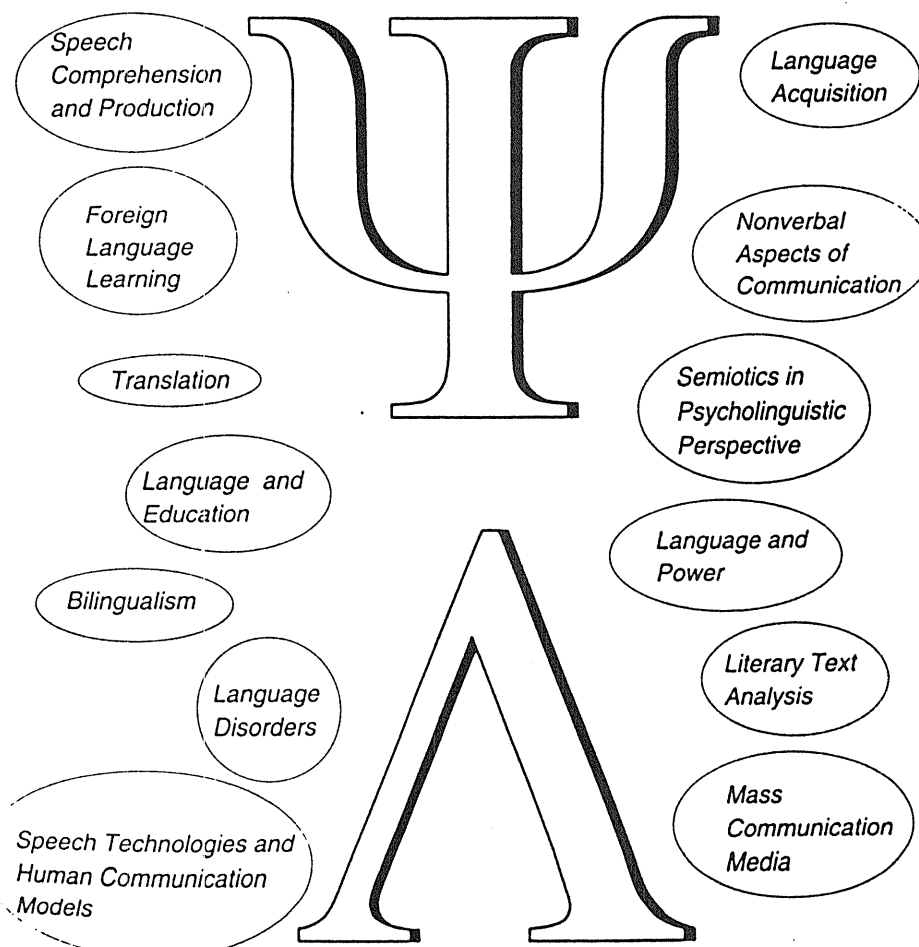
Contributions will not be limited to articles on 'verbal behavior' or 'verbal learning' or on what is in general incorporated into 'psychology of language/speech'. Contributions dealing with *all* aspects of language and communication—including non-verbal aspects of communication—will be welcome. Articles opening broader perspectives for PL will be solicited, benefiting from the contribution of social psychology, sociolinguistics, semiotics, etc. in a complex interdisciplinary integration. With this *Journal* we would also like studies on child language, based on a psycholinguistic point of view, to gain a greater impetus. At the same time the *Journal* will encourage a larger multidisciplinary approach with articles on less treated aspects of connected disciplines in their relationships with PL: *e.g.* literary texts analysis, dialectology, sociolinguistics, semiotics, neuropsychology or speech pathology, translation, mass communication media, educational sciences, speech technologies, as well as foreign language acquisition and bi-/ multilingualism and generally applied linguistics, thus contributing to the development of *applied PL* as well.

The *International Journal of Psycholinguistics* is primarily intended for psycholinguists, psychologists, linguists, foreign language teachers, specialists in language development and speech pathology, phoneticians, scientists involved in machine translation, technicians of speech synthesis and recognition, anthropologists, etc.

T. Slama-Cazacu, Editor-in-chief

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The *International Journal of Psycholinguistics* is a forum for interdisciplinary studies throughout the world, devoted to theoretical and experimental research articles and their application to practical fields concerning speech comprehension / production, language acquisition, bilingualism, nonverbal aspects of communication and semiotics in psycholinguistic perspective, language disorders, speech technologies and human communication models, translation, foreign language learning, literary text analysis, mass communication media and other fields of human communication.

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STUDIES AND RESEARCH

The communicative competence of Romani (Gypsy speaking) children in Bulgarian discourse, in a classroom situation

HRISTO KYUCHUKOV

Abstract

The goal of the study is to establish the communicative competence level in Bulgarian of Romani children starting school. Two groups of children are subjected to analysis: group 1 — Romani children and group 2 — Bulgarian children. Both groups consist of children of the same age and in their first year at school. The children's speech is recorded on tapes and then the texts are transcribed and analysed. The children speak about their families. The analysis is based on parameters which are well-known in the literature — utterance, turn, number of words, pauses, repetitions, etc., but are rarely applied to analyses of speech in a second language. The results of the study demonstrate that the Bulgarian children who are native speakers of Bulgarian have a higher degree of communicative competence according to most of the parameters and lower in a few cases. The Romani children who are non-native speakers of Bulgarian tend to have a lower degree of communicative competence according to most of the parameters.

1. 0. Introduction

1. 1. Bilingualism in Bulgaria

The two major minority groups in Bulgaria are the Turks and the Roms (the Gypsies), each numbering approximately a million, which is a substantial proportion of Bulgaria's population (currently 8.5 million). While the only official language is Bulgarian, a number of dialects of Turkish and Romani are spoken at home by the members of the minority groups, which are thus acquired by the Turkish and Romani children as first language (L1). By the time they have reached the age of 6 or 7, these children have most often come into contact with Bulgarian, but the number of them that can be described as completely bilingual is insignificant — the fluency in Bulgarian of Turkish and Romani first

graders usually ranges from mediocre to nonexistent. So in practice they are to acquire Bulgarian as a second language (L2) in the classroom, which places them in a much more difficult position than the Bulgarian children.

This fairly obvious problem was ignored by Bulgaria's former regime in its assimilational policies. There were no studies whatsoever of the difficulties that minority children experience and absolutely no compensatory programs: the children in an upper-class Sofia district and in some distant Turkish village were expected to follow the same syllabus — most often with the consequence of the minority children failing entirely. As for any use of their first language in school or in any other administrative setting, this could be punished severely.

Things have changed dramatically in Bulgaria over the past 2–3 years, also in this respect. The post-totalitarian governments and the minority communities themselves have taken measures to improve the situation described above. On the one hand, the status of the minority languages is rapidly increasing and first-language instruction programs have been started. On the other hand, special attention is devoted to the acquisition of Bulgarian by minority first-graders, both by teachers and applied linguists, with the aim of giving these children the best possible competence in the official language of the country, and thus a proper start in life. One such measure is the introduction of a special preparatory class. Each school in Bulgaria with children from an ethnic minority has since 1990 the right to include as part of the primary school program a special “preparatory class” aiming to compensate above all the lack of knowledge in Bulgarian in the minority children while at the same time providing an “integral linguistic, intellectual, psychological, physical and aesthetic preparation for six-year-old children” (from the Program for preparatory classes, Ministry of Education, Sofia, 1990).

However, even after undergoing such a preparatory class many Turkish and Romani children still experience difficulties when entering the regular 1st grade, which are associated with their insufficient command of Bulgarian. For that reason it is necessary to study in more detail the linguistic difficulties of these children if adequate attention is to be devoted to the improvement of their fluency in Bulgarian.

1.2. *The Romani dialects spoken in Bulgaria*

Romani (also called Gypsy language) is an Indo-European language

from the Indo-Persian group. It has a simplified phonological system (with respect to Sanskrit and the other Indian languages), aspiration is a distinctive feature; it has grammatical features such as free-word order, a case-system (with 8 cases) and a 2-gender system. Despite many influences from the majority languages of the societies where it is spoken — both lexical and morphological — there is mutual understanding by the speakers of most of the Romani dialects. Currently there are efforts towards the standardization of Romani at the Center for Romani Studies at the University of Paris.

There are at least 4 different Romani dialects spoken in Bulgaria;

— *Horahani*, spoken in north eastern and south eastern Bulgaria (the regions where Turkish is spoken), is heavily influenced by Turkish lexically.

— *Erli* is spoken in north and north eastern Bulgaria and has been influenced by Bulgarian.

— *Vlahichki* is spoken by separate groups throughout the whole country, and has borrowings from Bulgarian, Aromanian (or Macedo-Romanian, dialect of Romanian language), Turkish or Greek, depending on the language spoken by the main group in the region.

— *Kalderashi* is spoken in parts of south western Bulgaria bordering on Macedonia and Serbia and in some parts of south eastern Bulgaria (around the city of Jambol).

1.3. *Some difficulties of the Romani children in their acquisition of Bulgarian*

As is well-known, the acquisition of a second language is a complex process associated with a number of difficulties. As we mentioned in the introduction, even those Romani children that go through the preparatory class in Bulgarian often meet difficulties in both comprehension and production when they start school. These difficulties are especially hard during the first months of 1st grade.

Some of these are due to language transfer from their first language. As Odlin (1989) points out, the constant contact between L1 and L2 makes phenomena such as *language-mixing*, *borrowing* and *code-switching* inevitable. It is common for a Romani child to use a Bulgarian stem with a Romani affix (language-mixing), to “borrow” a Romani word in a Bulgarian narrative.

Code-switching is the consistent use of one language, changing to another language in order to achieve a particular communicative effect or because the situation requires it (e.g. the appearance of a non-speaker of the first language) and afterwards possibly going back to the first language. Code-switching, as described, is not common in the classroom situation in which Bulgarian is being taught (see also next section). This is because there still lies a stigma on the use of minority languages in official institutions (such as school) that is left from the totalitarian period (cf. 1.1).

Overgeneralization (e.g. the over-entention of a given Bulgarian affix to words where another allomorph would be appropriate) is also a common problem among Romani children — as with all beginning language learners.

These and other similar phenomena more or less complicate the educational process, since the average Bulgarian teacher is neither familiar with the local Romani dialect nor does he possess any special training in teaching Bulgarian as L2. It is not sufficient for the teacher to follow the normal principles in language-teaching: *communicativity* (to practice the “material” in actual situation), *systematicity* (to cover the major elements of grammar) etc. Two major types of improper teaching strategies are to (a) over-emphasize grammar at the expense of “language-games” — especially at a period when the children lack elementary communicative skills and (b) to simply say “wrong” every time a Romani child makes a mistake without any effort at explaining the reason for mistake, along the lines of the previous paragraphs.

Our firm belief is that Romani and other minority children can achieve a native-speaker fluency in Bulgarian only through a more group-oriented approach, i.e. through a program that concentrates on the specific difficulties that they meet in their learning Bulgarian.

1.4. *Communicative competence and the classroom situation*

The notion of *communicative competence* (cc) was introduced by Hymes (1972) as a broader notion than Chomsky’s *grammatical competence*. Hymes pointed out that it is not sufficient for a competent speaker of a language to produce “grammatical strings”, one must also know such things as when to speak, when not to, what are the appropriate subjects to talk about with different people and in different settings etc. In other words, one must be aware of all the sociolinguistic conven-

tions of a given linguistic community.

According to Troike (1982, .22) “Communicative competence involves knowing not only the language code, but also what to say to whom, and how to say it appropriately in any given situation. It deals with the social and cultural knowledge speakers are presumed to have to enable them to use and interpret linguistic forms”

S. Savignon (1983) characterizes communicative competence in more detail.

1. Communicative competence is a dynamic rather than a static concept. It depends on the negotiation of meaning between two or more persons who share to some degree the same symbolic system. In this sense, then, communicative competence can be said to be an interpersonal rather than an intrapersonal trait.

2. Communicative competence applies to both written and spoken language, as well as to many other symbolic systems.

3. Communicative competence is context specific. Communication takes place in an infinite variety of situations, and success in a particular role depends on one’s understanding of the context and on prior experience of a similar kind. It requires making appropriate choices of register and style in terms of the situation and the other participants.

4. There is a theoretical difference between competence and performance. Competence is defined as a presumed underlying ability, and performance as the overt manifestation of that ability. Competence is what one knows. Performance is what one does. Only performance is observable, however, and it is only through performance that competence can be developed, maintained, and evaluated.

5. Communicative competence is relative, not absolute, and depends on the cooperation of all participants involved. It makes sense, then, to speak of degrees of communicative competence.

Communicative competence is thus a very broad concept. As pointed out both by Troike and Savignon, it implies different linguistic behaviour in different contexts. In the study reported in this paper we will focus on *only one particular kind of context — a classroom situation with pupil-teacher interaction.*

There are very well-defined (sociolinguistic) conventions for the behaviour of teacher and pupils in the classroom. Some of these are:

— the teacher asks a question and the pupil is expected to give as straight an answer as possible, in fluent Bulgarian, and with “full sen-

tences" which most often involves the spelling out of given information (e.g. teacher: What is the name of your father? Expected answer: The name of my father is...);

— the teacher requests the child to produce a narrative on a given subject;

— all use of anything but standard Bulgarian (e.g. loan words, local dialect, slang etc.) is banned;

— there is no room for leisure talk.

In this study we analyse the ability of native and non-native speakers to deal with these conventions. So when we speak of communicative competence in the following sections, we refer to this *particular kind of communicative competence*.

1.5. General goal of the study

The goal of the study reported in this paper was to analyse aspects of the communicative competence in a classroom situation of a group of 1st grade Romani children in Bulgaria. We intended to compare their performance on a number of criteria (described in 2.4) with the performance of a group of Bulgarian children.

We hoped to find out in which aspects the communicative competence of the Romani children is considerably behind that of the Bulgarian children so that one could pay special attention to these aspects. A practical implication of this study would be a certain improvement in the Bulgarian-language teaching to Romani children.

2.0. The empirical study

2.1. Underlying hypothesis

We take it for granted that the communicative competence (henceforth CC) of the native speakers (the Bulgarian children) is higher than that of the Romani children. In the classroom situation studied, CC includes both grammatical competence and competence pertaining to the conventions described in 1.4. Our hypothesis is that there exist *quantitative measures* in which this could be demonstrated.

2.2. Informants

Two groups of children beginning first grade during the 92/93 school year were used for the study.

Groups 1 included 31 Romani children from the village Gradinarovo

situated in north eastern Bulgaria and the town Rakitovo in southern Bulgaria. The children from Gradinarovo, who were 11 in number, speak the *Horahani* dialect of Romani and those from Rakitovo (20) — the *Erli* dialect as first language. The children for the study were chosen primarily on the basis of the good personal contacts between the investigator and their teachers (which was necessary since unfortunately there are still a lot of prejudices in Bulgaria concerning work with minority groups, even among the teachers.)

Group 2 consisted of 30 Bulgarian children from the town of Provadia (25 children) situated in the same region as Gradinarovo and from Rakitovo (5 children). All of them speak Bulgarian only.

The Romani children from Gradinarovo are Muslim. Their ethnic surrounding in school is almost homogeneous (i.e. with hardly any children from other ethnic groups) since most of the Bulgarian inhabitants in the village are older and without children at school age. Some of the children have gone to pre-school, but most start first grade without being able to speak Bulgarian. The Romani children from Rakitovo are also Muslim and their surrounding is similar to that in Gradinarovo, i.e. the majority of the students are Romani. The children of the other ethnic group: Christian Bulgarians, Muslim Bulgarians, and Vlachs go to other schools. However, most of the children have gone through the preparatory class in Bulgarian (cf. 1.1).

The Bulgarian children from Provadia are from predominantly Bulgarian classes; there are some Romani and Turkish children, but no more than 2–3 per class. The Bulgarian children from Rakitovo are from a school where all the above mentioned ethnical groups are represented.

The age of the children was between 6 and 7.

2.3. Method and design

The data for the study were gathered in the classroom at the beginning of 92–93 school year (September and October 1992) in relation to a UNICEF project.

The method used was an *oral interview* (e.g. Larsen-Freeman, Long 1991).

The interviewers were the Bulgarian-language teachers for the respective classes and informants were the children (in groups of five for each session). Each child was instructed to construct a short narrative

on the subject "My family" and tell it to the other four. The interviews were taped. The aim with this design was to create a somewhat more natural conversation setting, while retaining the basic characteristics of the classroom situation.

The teachers were instructed to help the children as little as possible and when the children could not continue, they were to use the following question:

1. How many members are there in your family?
Do you have a mother/father /grandmother/grandfather/brother/sister?
2. Where do you live?
3. What do you do at home in the evenings?
4. Who do you like to play with?
5. Do you help at home?

In transcribing the taped narratives, we used the Bulgarian alphabet which is fairly phonemic. This was deemed adequate for this study since it is not primarily concerned with phonology. The transcription reflected such phenomena as the reduction of vowels, devoicing of final obstruents and various assimilations.

Each interview was marked according to a notation³ that specified the school of the child, the town etc. but in this presentation we will use a shorter code for each informant such as *I12f* (the 11th informant, 2nd tape, female) which also better preserves the anonymity of the children.

Before presenting the data we wish to point out a few drawbacks with the method and design described above. Using groups of 5 indeed helped to make the communicative situation somewhat more natural, but the main problem was that the children who were not the first to talk would tend to repeat parts of the story of their predecessors.

As to the "helping questions", the teachers would unintentionally ask other questions than those we wished to restrict them to (including of "meta"- type like "Can you give a fuller answer?", "Can you say it with more words?" etc. which directly influences the variables by which we measure communicative competence, see below). Interestingly such questions occurred most often with the Bulgarian children, where the teachers seemed especially keen on showing the fruits of their teaching.

These factors keep us from regarding the speech of the interviewed children as fully and naturally expressing their communicative compe-

tence, so we wish to stress that the results that we obtain from this data should not be regarded as conclusive statements on the linguistic proficiency of 6-7 year old children in Bulgaria.

However we do think the design of the study, despite all its deficiencies, reflects fairly well the way Bulgarian language is taught in actual situations — with its own deficiencies. In this sense it gives a realistic picture of the kind of skills that are required from the first-grade children and according to which their CC in Bulgarian is *graded*. These are the kinds of skills that we have concentrated on in operationalizing CC.

2.4. Operationalizing CC

The first and most important step in analysing the discourse of native and non-native speakers is to establish a basic measuring unit.

A number of researchers have used such measures as "T-unit" and "C-unit". *T-unit* is one main clause plus whatever clauses happen to be attached or embedded within it (Hunt 1966; Crookes 1990). *C-unit* (communication unit) is closely related to the T-unit, but does not require a full sentence and has the advantage that isolated phrases—although not accompanied by a verb (like "With a ball", "Yes"), but which have a communicative value—can be coded.

Another basic unit is the *utterance* defined as *the stream of speech divided by two longer pauses and with a single intonation contour* (e.g. Chaudron 1988). This notion has some advantages, since it is well known that in oral speech it is very hard to determine the boundaries of the sentence. Crookes (1990) claims that the use of the utterance (defined intonationally) as a unit into which discourse could be separated probably antecedes the use of other units of measuring discourse. We use this notion of utterance as the basic unit in analysing the corpus of teacher-child interviews.

The second unit we use is the *turn* which is the speech of a participant in a conversation (in our case the interview) which is bounded by the speech of the other participant(s). However, we also count as turns the long pauses of the informants that follow a question of the interviewer, which function as a kind of "silent turns" since they elicit a new question (turn) from the interviewer.

The third unit is the *word*. It is of course notoriously difficult to define "word" without any indeterminacy (cf. Brown, Miller 1991, 155-58) but since our transcriptions follow the established practice of

Bulgarian orthography concerning word-boundaries we count as a word any linguistic item between two empty spaces. "Filled pauses" like "aaaaa...", "hmmm...", are counted as *pauses* instead.

Finally, we look at the number of *pauses* — both "silent" and "filled" — within an utterance, (not what we called above "silent turns") and of the repetitions, i.e. when a certain phrase is uttered two or more times in succession.

On the basis of the notions of (a)*turn*, (b)*utterance*, (c)*word*, (d)*pause* and (e)*repetition* we define a number of criteria with the help of which we operationalize communicative competence (CC) for our purposes. These are:

2.4.1. Independence

- Average number of utterances per turn⁴

We treat this factor as proportional to CC. The intuition behind this is that the more utterance a child produces per turn, the more fluent and "independent" its narrative will be.

2.4.2. Interviewer-initiative

In this study we do not focus on the speech of the interviewers/teachers, but because (as mentioned in 2.3) they participated actively in the interview — which on its part influences the responses of the children — we include two measures of the verbal activity of the investigator.

- (a) Average number of utterance per turn (for the interviewer)
- (b) Average number of turns (for the interviewer) per interview

Since we instructed the interviewers to say as little as possible a large number of utterances on the part of the interviewer (in general, and per turn) and many turns are indications that the child has been reluctant to respond or simply confused. Thus we treat these measures as indicating a lower CC.

2.4.3. Verbosity

- (a) Average number of words per utterance
- (b) Total number of child-utterances/
Total number of utterances of the interviewer

These measures are also treated as *proportional to CC*. the item (b) was expected to reflect the "verbosity" of the child, in relation to that of

the interviewer.

2.4.4. Correctness

- Percent "correct" utterances

This measure is proportional to CC, and by "correct" we count utterances in which neither of the following are present:

- *interruptions*, e.g. "Djado mi se kazva..."
[My grandfather is called...]
- *lexical substitutions*, e.g. "Praseta saglezda" (instead of *gleda*)
[(he) *watches* pigs (instead of *keeps*)]
- *grammatical errors*, e.g. utterances with wrong word order, agreement etc.

2.4.5. Complexity

The complexity of every utterance was coded as follows:

- C = 1 - for every utterance that is *not* a full sentence
- C = 2 - for every utterance that is a simple sentence
- C = 3 - for every utterance with one subordinate sentence
- C = 4 - for every utterance with two or more subordinate sentences
- *C total* (= *C for all utterances/Total number of utterances*) was thought to reflect the level of syntactic complexity and was also considered proportional to CC.

2.4.6. Hesitation

A larger number of pauses and repetitions were considered to indicate uncertainty and "hesitation" on the part of the children, so we included two measures which we thought would point toward a lower CC.

- (a) Average number of pauses per utterance
- (b) Average number of repetitions per utterance

To summarize the criteria we introduced in this section we present them in the following table, which signifies their relation to the subject of study — communicative competence (CC).

High CC	Low CC
Independence	Interviewer-initiative (a) (b)
Verbosity (a) (b)	Hesitation(a) (b)
Correctness	
Complexity	

Thus we could make more precise our initial hypothesis as presented in 2.1. If these criteria are indeed indicators of a higher (left column) and lower (right column) CC and the Bulgarian children as a whole possess a higher CC than the Romani children, then we can predict the following:

The children from group 2 should score better on the criteria in the left column in the table above while the children from group 1 would have higher "score" on the factors in the right column.

By separating the different criteria we also hoped to find aspects in which the CC of Bulgarian children *differed most* from the CC of Romani children, and thus to point in which direction the efforts of Bulgarian language teaching to minority children should proceed.

2.5. Results

In this section we will present the results of comparing the communicative competence of the children from group 1 and group 2 according to the factors presented above. The "raw data" according to which these measures were estimated, i.e. the number of utterances, turns, words, pauses and repetitions for each child from the two groups is given in Appendix A.

2.5.1. Independence

We discovered a very large difference between the two groups according to this factor. Dividing the total number of utterances with the total number of turns for each group shows that Romani children used significantly fewer utterances per turn (almost 3 times less!):

$$\text{g1 } 490 \text{ utt} / 304 \text{ turns} = 1.6$$

$$\text{g2 } 488 \text{ utt} / 119 \text{ turns} = 4.1$$

This appears to be a quantitative expression of the fact that the Bulgarian children were more fluent in their narrative and did not have to be stimulated by the interviewer as often as the Romani children in order to proceed.

2.5.2. Interviewer-initiative

The number of turns for the interviewers was approximately equal to that of the children (303 for 304 children turns for group 1; 115 for 119

children turns for group 2). The number of interviewer-utterances in the two groups is 389 (group 1) and 130 (group 2). Estimating the average number of utterances per turn (a) and the average number of turns per interview (b) gives us the following figures:

(a)

$$\text{g1 } 389 \text{ utt} / 303 \text{ turns} = 1.28$$

$$\text{g2 } 130 \text{ utt} / 115 \text{ turns} = 1.13$$

(b)

$$\text{g1 } 303 \text{ turns} / 31 \text{ int} = 9.77$$

$$\text{g2 } 115 \text{ turns} / 30 \text{ int} = 3.83$$

Again the major difference between the two groups in terms of interviewer-initiative is due to the much longer number of turns in group 1. The difference reflected in (a) is much smaller, but still noticeable: the interviewers in group 1 talked not only more often, but also somewhat more in each turn.

2.5.3. Verbosity

Estimating the average number of words per utterance for the two groups shows a noticeable advantage for group 2 (the Bulgarian children):

(a)

$$\text{g1 } 1541 \text{ words} / 490 \text{ utt} = 3.14$$

$$\text{g2 } 2164 \text{ words} / 488 \text{ utt} = 4.43$$

In comparing the number of child-utterances with interviewer-utterances we get an even greater difference: in group 1 the interviewer spoke almost as much as the child, while in group 2 the ratio (3.75) shows more cooperation on the part of the child:

(b)

$$\text{g1 } 490 \text{ utt} / 389 \text{ interviewer utt} = 1.26$$

$$\text{g2 } 488 \text{ utt} / 130 \text{ interviewer utt} = 3.75$$

2.5.4. Correctness

The following two tables (Table 1 and Table 2) present the results for the two groups concerning the factor "correctness":

Table 1. *No. of correct utterances, and utterances with interruptions, lexical errors and grammatical errors for each child from group 1 (Romani).*

informant	interrupt.	lexical	gramm.	correct utt	Total
11f	2	-	4	16	22
21f	1	3	1	18	23
31f	1	1	-	21	23
41m	-	3	2	14	19
51f	-	2	4	16	22
61f	1	3	1	23	28
71f	1	4	1	18	24
81m	-	-	1	19	20
91m	1	1	-	23	25
101f	1	3	3	23	30
101f	1	2	2	12	17
124f	-	-	-	10	10
134f	-	-	2	6	8
144m	-	1	1	5	7
154f	-	-	1	7	8
164f	-	-	-	9	9
174f	-	-	2	11	13
184f	-	1	1	10	12
194f	-	1	1	9	11
204m	1	-	-	8	9
214m	1	1	-	11	13
225f	-	-	-	13	13
235f	2	1	-	15	18
245f	3	-	-	11	14
255m	1	-	1	6	8
265f	2	-	1	10	13
275f	1	-	1	11	13
285m	-	-	-	10	10
295m	2	-	2	13	17
305m	1	-	2	14	17
315m	1	-	-	13	14
Total	24	27	34	405	490

Table 2. *No. of correct utterances, and utterances with interruptions, lexical errors and grammatical errors for each child from group 2 (Bulgarian).*

informant	interrupt.	lexical	gramm.	correct utt	Utterances
12m	-	-	-	9	9
22f	2	-	1	9	12
32f	-	-	-	9	9
42f	2	-	-	12	14
52f	-	-	-	10	10
62f	4	-	1	11	16
72f	3	-	1	13	17
82m	-	-	-	11	11
92m	1	-	1	10	12
102m	-	-	-	13	13
112m	1	-	1	21	23
122m	2	-	-	15	17
132f	1	-	-	11	12
142f	1	-	-	16	17
152f	2	1	-	16	19
162f	1	-	2	11	14
172m	-	-	-	18	18
182m	-	-	-	22	22
192m	2	-	-	13	15
202f	-	-	-	24	24
212m	2	-	-	14	16
222f	-	-	-	14	14
232f	-	-	-	15	15
242f	1	-	-	13	14
252m	1	-	-	6	7
263f	-	-	-	3	3
273m	1	-	-	4	5
283f	-	-	-	3	3
293m	1	1	-	3	5
303m	-	-	-	2	2
Total	28	2	7	451	488

First we can notice that there is a 10% difference in the percentage of correct utterances between the two groups, with an advantage for group 2:

g1:82.6% correct utterances

g2:92.4 % correct utterances

However, much more striking is the difference in the kinds of errors that are typical for the two groups. The most common type in g1 is *grammatical*. An example is

“Tuka na *detskata* sa gradina”, instead of “Tuka sa, v detskata gradina” [They in the *pre-are* school”]

Lexical errors (which are not always easy to distinguish from grammatical ones) are second most common.

In group 2, however, the errors of these two kinds are least typical. when they do occur, they are in general more subtle than in group 1. For example, one of the 2 lexical errors recorded among the Bulgarian children is

“*Nauchavam* si domashnite”, instead of “*Napisvam* si domashnite”

[I *study* my homework” instead of “I *do* my homework”]

The errors we refer to as “interruptions” which constitute 75% of the errors in group 2, and 28% in group 1 are much more readily interpretable as “performance errors”: e.g. they may be due to forgetting, lack of world-knowledge, uncertainty etc. (cf. the example in 2.4.4.)

2.5.5. Complexity

The “scores” for the syntactic complexity of the utterances of the children are presented in the following two tables (Table 3 and 4).

Comparing the measure *C total* we defined in the previous section for the two groups shows, as expected, a higher score for group 2.

g1 *C total* = 1.58

g2 *C total* = 2.18

But as in discussing correctness above, it seems more adequate to look in more detail at the relative distribution of the different types of scores. The highest percentage in both groups are the “utterances that are simple sentences (51.8%, 70.1%, respectively). But while the Bulgarian children have many utterances with 1 subordinate clause (18.4%) and some with more (3.7%), the percentage of these utterance-types in

Table 3. *The complexity scores for the children in group 1 (Romani); 1 (an utterance that is not a complete sentence), 2 (an utterance that is a simple sentence), 3 (an utterance that is a sentence with one subordinate sentence), 4 (more than one subordinate sentence).*

informant	score 1	score 2	score 3	score 4
11f	15	7	-	-
21f	16	7	-	-
31f	18	5	-	-
41m	12	7	-	-
51f	17	5	-	-
61f	18	10	-	-
71f	8	12	4	-
81m	6	11	3	-
91m	12	13	-	-
101f	9	18	1	2
101f	5	11	1	-
124f	3	7	-	-
134f	-	8	-	-
144m	3	4	-	-
154f	1	7	-	-
164f	2	6	1	-
174f	2	10	1	-
184f	2	10	-	-
194f	1	10	-	-
204m	2	7	-	-
214m	4	9	-	-
225f	3	10	-	-
235f	10	8	-	-
245f	10	4	-	-
255m	2	6	-	-
265f	9	4	-	-
275f	4	9	-	-
285m	2	7	1	-
295m	5	12	-	-
305m	9	8	-	-
315m	12	2	-	-
Total	222	254	12	2
Percent	45.3%	51.8%	2.4%	0.4%

Table 4. The complexity scores for the children in group 2 (Bulgarian); 1 (an utterance that is not a complete sentence), 2 (an utterance that is a simple sentence), 3 (an utterance that is a sentence with one subordinate sentence), 4 (more than one subordinate sentence.)

informant	score 1	score 2	score 3	score 4
12m	1	5	2	1
22f	1	9	2	-
32f	-	8	-	1
42f	-	5	9	-
52f	-	6	4	-
62f	4	6	5	1
72f	3	10	4	-
82m	1	7	3	-
92m	3	7	2	-
102m	-	10	3	-
112m	2	15	6	-
122m	2	11	4	-
132f	3	7	2	-
142f	1	14	2	-
152f	2	15	1	1
162f	1	8	5	-
172m	-	8	9	1
182m	2	14	4	2
192m	1	7	5	2
202f	-	17	4	3
212m	4	8	2	2
222f	1	9	3	1
232f	-	9	5	1
242f	1	7	4	2
252m	1	6	-	-
263f	-	3	-	-
273m	1	3	-	-
283f	-	3	-	-
293m	3	2	-	-
303m	-	2	-	-
Total	38	342	90	18
Percent	7.8%	70.1%	18.4%	3.7%

group 1 is very small. On the other hand, there are a huge number of utterances that are not complete sentences among the Romani children (45.3%) and only (7.8%) for group 2.

2.5.6. Hesitation

The number of (within-utterance) pauses and phrase-repetitions in proportion to the total number of utterances was small:

g1 490utterances 87 pauses 15 repetitions

g2 488utterances 104 pauses 32 repetitions

Thus, using the measures we described in the previous section, *average number of utterances per pause and average number of utterances per repetition* yielded very small figures which could not be intuitively compared. So we "reversed" the equations and estimated in how many utterances there was a pause / repetition on average. The results are:

(a) pauses

g1 490 utt / 87 pauses = 5.6

g2 488 utt / 104 pauses = 4.7

(b) repetitions

g1 490 utt / 15 reps = 32.7

g2 488 utt / 32 reps = 15.3

This was the only results that went entirely against our expectations. With respect to both pauses, and especially with respect to repetitions, group 2 superseded group 1 considerably. Since we thought that these measures would reflect (communicative) uncertainty, we considered that this would indicate a lower CC. However, this clearly goes against the results from the other measures. The reason for this discrepancy, on which we will elaborate in the next section, we believe, is that what characterized the speech of the children from group 2 in comparison to the Romani children was a *generally higher ability to produce independent discourse*, and pauses and repetitions follow as natural by-products of such an ability.

2.6. Discussion

Most of the measures introduced in 2.4 showed a significant difference when applied to the performance of the two groups. Considering the lower "score" for 100%, the following table shows the proportion of the higher score in relation to it. The measures are ordered according to the degree of difference.

verbosity (b)	297 % higher score for B(Bulgarian)
independence	256 % higher score for B
interviewer-in (b)	255% higher score for R(Romani)
repetitions	213% higher score for R
verbosity (a)	141% higher score for B
complexity	138% higher score for B
pauses	119% higher score for R
interviewer-in (a)	113 % higher score for R
correctness	112% higher score for B

There are several important conclusions to be made regarding these results:

(1) All criteria except *repetitions* (hesitation-a) and *pauses* (hesitation-b) are correlated with the higher CC of the Bulgarian children as predicted.⁵

(2) Some of the criteria seem more significant than others. Interestingly those in which the difference in performance is greatest can also be described as the ones which are most related to the aspect of CC concerned with the production of independent speech. As to the much higher proportion of repetitions exhibited by the Bulgarian children, one possible interpretation is that this is a side effect of the ability to perform in public, i.e. the same aspect of independent production.

(3) Those criteria that seem more related with grammatical competence, i.e. *correctness* and *complexity* show a noticeable, but less significant difference in performance. This could mean either that they fail to demonstrate important difference or that simply the CC of Bulgarian and Romani children differ less in those respects. As we showed in 2.5.4, if we concentrate on grammatical and lexical errors alone, the differences between the two groups become more obvious, so if "interrupted utterances" (which could be considered a performance rather than competence error) were excluded from the measure it would be a better indicator of grammatical competence differences.

(4) *Verbosity (b)*, i.e. how many words per utterance a child utters, and in part *complexity* seem to be associated with the situation-specific requirement to "use complete sentences". The difference between the two groups in this respect are important, though less significant than in the independent-discourse aspect.

On the basis of these results we can conclude that there are aspects of CC that can be quantitatively measured (as also pointed out by e.g.

Pietilä 1989) and that these measures can be associated with particular linguistic skills. This gives the opportunity to use them as "diagnostic tools" in differentiating the abilities of different groups with regards to communicative competence.

3. Conclusions

The study reported in this paper showed not only that the communicative competence of Romani children with respect to classroom performance is lower than that of Bulgarian children (which is not controversial in itself) but that various aspects of CC differ in the performance of the two groups. One of the most important among those aspects turned out to be the one related with the children's ability to produce independent discourse.

There may be several different reasons for this state of affairs:

- insufficient contact with the target language (in this case Bulgarian) in various communicative situations.
- inadequate training in Bulgarian in pre-school i.e. the method used does not take into consideration the specific needs of the Romani children, for example, to utilize L1 knowledge in the teaching of L2, compensatory programs in Bulgarian etc.
- the lack of any consistent program for the teaching of Bulgarian as L2 in pre-school as well as in primary school.
- the lack of pedagogical toys and games (such as those developed by Monika Arstma in the Netherlands).

All this suggests a number of ways in which the training of Romani children can be improved in the setting of Bulgarian pre-schools and primary schools so that the above mentioned deficiencies would be remedied.

Notes

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agement sent indefatigably from 2000 miles away. To my mother, brother and sister for the long-distance support.

- 2 This project, *The child and the Rom family in Bulgaria*, aims, to improve the understanding of Bulgarian language and culture among Rom children; to encourage their interest in education and raise their self-esteem.
- 3 For instance; II 5 2 A f / 07 Pr.
 II - the 2nd school investigated
 5 - the 5th child in that school to be interviewed
 2A - tape 2, side A
 f - female
 07 - the age of the child
 Pr. - Provadia
- 4 Unless explicitly mentioned when we consider turns, utterance, word, pauses and repetitions we mean those of *the children only*, not including the discourse of the interviewer.
- 5 Note that by "pauses" and "repetitions" in the table above we compare how many utterances the Bulgarian and the Romani children made for 1 pause or repetition, respectively. So 213% for repetitions means that the Romani children uttered more than twice as much as the Bulgarian children per pause. In other words they made approximately two times fewer pauses.

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Appendix A

Table 5. No. of turns (with "silent turns" within parenthesis), utterances, words, pauses and repetitions for each child from group 1 (Romani).

informant	turns	utterances	words	pauses	repetitions
11f	15	22	51	9	1
21f	17	23	49	5	0
31f	19	23	49	4	0
41m	16(3)	19	47	3	0
51f	19	22	31	5	0
61f	20	28	70	4	1
71f	12	24	87	4	1
81m	14	20	76	0	0
91m	20	25	54	3	1
101f	11	30	138	2	2
101f	7	17	71	3	1
124f	3	10	20	0	0
134f	2	8	35	0	0
144m	4	7	24	0	0
154f	3	8	34	0	1
164f	5	9	38	1	0
174f	4	13	77	7	1
184f	3	12	52	1	1
194f	5	11	52	3	0
204m	3(1)	9	38	1	0
214m	6	13	41	1	1
225f	9	13	60	1	0
235f	9	18	44	3	1
245f	10(1)	14	26	2	0
255m	3	8	33	2	0
265f	11	13	22	5	0
275f	9	13	47	2	1
285m	4(1)	10	35	0	0
295m	8	17	77	10	2
305m	12(1)	17	39	2	0
315m	14	14	24	4	0
Total	297 (7)	490	1541	87	15

Table 6. No. of turns (with "silent turns" within parenthesis), utterances, words, pauses and repetitions for each child from group 2 (Bulgarian).

informant	turns	utterances	words	pauses	repetitions
12m	8	9	67	2	0
22f	6	12	54	6	0
32f	2	9	63	6	2
42f	3	14	95	5	1
52f	2	10	82	2	0
62f	4	16	101	6	2
72f	3	17	72	7	0
82m	2	11	57	5	0
92m	6(1)	12	56	5	0
102m	6	13	81	5	0
112m	2	23	119	3	6
122m	6(1)	17	97	8	0
132f	4	12	75	4	1
142f	2	17	80	4	2
152f	6	19	94	6	3
162f	4	14	95	5	5
172m	6	18	97	5	2
182m	5	22	124	0	0
192m	7	15	82	9	1
202f	11	24	114	1	0
212m	8	16	73	2	4
222f	4	14	73	1	0
232f	2	15	76	0	0
242f	4	14	80	2	0
252m	2	7	45	4	0
263f	1	3	26	0	1
273m	2	5	26	0	1
283f	1	3	23	0	0
293m	2	5	16	1	1
303m	1	2	21	0	0
Total	117(2)	488	2164	104	32

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