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Lynne Hansen-Bede

ABSTRACT

Three stages of the developing second language of a 3;9-3;11 year-old English-speaking child in an Urdu speech milieu were examined and compared with findings that have been accumulated about the order and process of first language acquisition. The study showed that in the development of many syntactic and morphological features the child used strategies characteristic of mother-tongue learners; an exception, the development of the negative, was interpreted as evidence that knowledge already available to a second language learner from learning a first may contribute to an acceleration of progress in some details of acquisition.

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A CHILD'S CREATION OF A SECOND LANGUAGE

Lynne Hansen-Bede

Recent studies of mother-tongue acquisition have shown that a large measure of creativity enters into the learning of a first language (McNeill 1966; Ervin-Tripp, 1973a, b; Brown, 1973). Children do not simply imitate adult speech; they structure it and create their own rules, less complex than adult rules. The child's competence at a given age is a self-contained structurally cohesive system distinct from the model language towards which it is gradually restructured in successive stages.

Several studies have recognized the relation between first and second language learning and have suggested that the processes involved are essentially the same for both (Cook, 1969; Corder, 1971; Nenser, 1971; Selinker, 1972). These scholars have developed the notion of the spontaneous speech of a second language learner as a separate language, an 'interlanguage' having a genuine grammar. This is defined as being a structurally organised linguistic system distinct from both the source language and the target language which, like a child's mother-tongue, develops through stages during the learning process.

Within this framework the process and order of acquisition

of a second language learner are seen to be similar to those of a child learning his first. In confirmation of this hypothesis a growing number of studies analyzing the speech of children learning second languages show that their strategies while learning certain structures do approximate those of mother-tongue learners. Raven (1969) reports this for the developing negation structures of his two Norwegian children; as does Milon (1974) for a Japanese child's. Dulay and Burt (1974) : analysis of 513 syntactic errors extracted from the speech of Spanish-speaking children who were learning English found that 87.1% of the errors reflected the same developmental structures used by children learning English as a first language; only 4.7% reflected native Spanish interference. Ervin-Tripp's (1974) investigation of English-speaking children learning transitive clauses in French reveals an apparent recapitulation of the acquisitional stages that first language learners pass through. Natalicio and Natalicio (1971) also report first language strategies for the acquisition order of English plural allomorphs by native Spanish-speaking children

This study is an exploration of processes involved in the rapid learning of a child's second language grammar during her initial period in a foreign speech milieu. It attempts to bring additional data to bear on the issue of whether the same processes of development used in the creative construction of a first language are used in the second. The hypothesis is that

they are. We expect that the same innate mechanism which guided the discovery of the rules of the first language will operate in learning the second. We expect to find the same processes at work: overgeneralization, production simplification, growing approximation to target language structures through stages of increasing rule complexity.

Subject and Methods

The subject of the study, Rebecca, was the three-year-old daughter of a Pakistani father and American mother and had been brought up in the United States speaking English. Up until the age of eighteen months she had frequently heard spoken Urdu, but a family move at 1;6 terminated this contact. Beginning at 2;10 for a period of six weeks the child was systematically exposed for about a half hour daily to simple stories and games in Urdu. The purpose of this language 'instruction' was to elicit sufficient output for a study of her second language phonological strategies. At 3;9 Rebecca moved from her English speech milieu to Lahore, Pakistan where she was enrolled in an Urdu nursery school. For several hours of the day at home she also interacted with Urdu speakers, principally with her aya 'nanny' and with neighborhood children of from three to seven years old.

The data for the study consist of three forty-five-minute recordings of Rebecca's interaction with her aya taped at 3;9

on January 20, 1974; at 3;10 on February 10, 1974; at 3;11 on March 19, 1974; two, five and ten weeks after arrival in Lahore. Henceforth these will be referred to as Periods 1, 2 and 3; numbers prefixed to quotations from the data indicate the time each utterance was made. The tapes were transcribed by the investigator, and everything said by or to the child was included, together with contextual notes.

Analysis of the transcripts yielded sufficiently extensive data in some aspects of grammar for contrastive analysis with findings of first language acquisition studies. Possessive constructions, gender, word order, verb forms and negation were chosen because a good deal is now known about their patterns of development in native speaking learners, thus facilitating such comparison. Postpositions and questions were selected for closer scrutiny because of their contrast in word order with equivalent English constructions; possible first language interference being the point of particular interest. As major components of the developing new language, the phonology and lexical borrowing were also examined.

The target language

Urdu, the official language of Pakistan, is practically identical with Hindi, the official language of India. Whether a speaker uses Urdu or Hindi is based on cultural considerations, the primary distinction being between Muslims who prefer Urdu and Hindus who prefer Hindi. Urdu depends on Persian and Arabic for its literary and technical vocabulary and is written in a modified form of the Arabic script; Hindi draws its learned vocabulary from Sanskrit and is written in Devanagari.

A few words about the grammar of Urdu are in order. There are two genders, masculine and feminine; and two cases, nominative and oblique. Nouns and pronouns are said to be in the oblique case when followed by a postposition. Postpositions mostly translate English prepositions. Nouns and adjectives are either marked (taking inflections) or unmarked (having the same form in all circumstances). The following classes of nouns have special oblique forms: (1) singular marked masculine nouns, l̥əRka¹ 'boy' nom., l̥əRke ko 'boy-to' obl.; (2) all plural nouns, gher 'houses' unmarked nom., gherōN m̥əyN 'houses-in' obl. Most pronouns have oblique forms, yī 'this, he, she, it' nom., is ko 'it-to' obl. The possessive postposition ka, agreeing in

¹The system of phonemic notation is essentially that of Barker (1967).

gender, number and case with a following noun, is equivalent to English 's possessive, lārkiōN ki billi 'girls-'s cat'. Marked adjectives agree with a modified noun in gender, case and number, bāri kīṣṭi 'big boat' fem. nom. sing.; bāra kūtta 'big dog' masc. nom. sing. Possessive pronouns function as marked adjectives agreeing with the possessed noun, meri beṭi 'my daughter'; mera beṭa 'my son'.

Verb forms consist of a stem with or without one or more suffixes and with or without one or more auxiliary verbs. Verbs are conjugated for person, gender and number, often in agreement with the subject. Past tense transitive verbs require ne following the subject, and the agreement in most cases is then with the object. Word order is freer than in English, but S O V is considered 'normal' for isolated sentences which do not emphasize any particular word. Yes-no questions may be introduced or followed by an optional unstressed kīa, serving as a question marker. In wh-questions the question word comes in the same place as the word which answers the question, often sentence medially, vw kab aegi? 'she when will-come'. In negative sentences the negating particle, nehīN, nā or net, occurs immediately preceding the verb.

Possession

The early expression of possession for Urdu (Dilvi, 1972) and numerous other languages (English; Brown, 1973; Finnish:

Bowerman, 1973; Russian: Gvozdev, 1949) is through a juxtaposition of two inflectionless nouns. For example Daddy chair and dog tail from Brown's English data. In Rebecca's Period 1 the omission of the ka possessive particle results in similar N + N constructions, (1) yi Rebecca house 'this Rebecca house' instead of yi Rebecca ka ghar 'this Rebecca-'s house'; (1) Mama bed 'Mama bed' instead of Mama ki bistar 'Mama-'s bed'. At this time the Urdu possessive pronouns were generally replaced by their English equivalents, (1) yi my school hay 'this my school is' instead of yi mera school hay 'this my school is'; (1) yi mine, yi yours 'this mine, this yours' instead of yi mera, yi tera 'this mine, this yours'.

In the second speech sample the only pronominal possessive forms are two occurrences of the Urdu first person nominative pronoun substituting for the first person possessive, (2) yi meyN and yi meyN krsti instead of yi mera 'this mine' and yi meri krsti 'this my boat'. One notes here the similarity of meyN to English 'my, mine' as a possible influence on her incorrect choice of the form. The ka possessive construction does not occur. There seems to be an avoidance phenomenon operative here of the sort that was reported for the phonological level of the speech of a three-and-a-half year old boy learning Italian. According to Engel (1965) the child was able to pronounce all of the phonemes of Italian except /r/; conscious of the deficiency

he frequently avoided words with /r/ or substituted various other sounds. When expression of possession did occur in this period it was contained in switches to English within the Urdu discourse, (2) yi dekho your finger 'this look (at) your finger'; (2) yi- this is Hassan's kīṭī 'this- this is Hassan's boat'.

By Period 3 the use of Urdu possessive forms was established. The child's one instance of a slip into English was immediately corrected, indicating recognition of a violation of her rules for separation of the two systems, (3) my name likha, meri name '(she) my name wrote, my name'. Rules for the ka construction had been acquired, including the change of a noun or pronoun preceding ka to the oblique case, (3) is ka? 'this-'s'; (3) Alice ka name likho 'Alice-'s name write',

Gender

Gender in child language is initially characterized by over-generalization to one gender for all cases. This is exemplified by the order of acquisition in Russian as reported by Popova (1958): first, predominance of feminine gender; second, predominance of masculine gender; third, confusion of both genders; and fourth, correct usage. The feminine gender was thought to be earliest because it has just one type of ending in the nominative (-a or -ya) and is more frequent, while the masculine form has various endings. In Urdu the masculine nominative singular ending is -ā; the feminine -ī. In Rebecca's speech all of the

marked adjectives and most verbs had the masculine form, (2) bəRa kīṣṭi 'big boat' (lack of agreement with feminine noun); (3) bəRa accha bāna 'very well made'. In Rebecca's case also a determining factor in the choice was likely the more frequent occurrence in the target language of the form. The first person possessive pronoun, however, was always feminine, having presumably been learned as a lexical item equivalent to 'my' in English.

Word Order

For languages in which word order is relatively inflexible, such as English, most children always use the dominant order. For languages in which there is more freedom in word order, such as Urdu, two general outcomes have been recorded; 1. selection of one order from among those heard; 2. variation in word order corresponding with the range of variation heard or even going beyond it (Brown, 1973). Rebecca's utterances reflected the SOV order considered 'normal' in Urdu. Table I shows sentence types and their frequency of occurrence for each period. Examples are O + V, (2) blocks le-ke ao 'blocks having-taken come'; Adv + V, (3) ayse likh-karna 'in-this-way write'; Dem + $\left\{ \begin{array}{l} \text{adj} \\ N \end{array} \right\} +$ (cop), (1) yī building, 'this building'; y kh rab h y 'this ruined is'; S + V, (3) khansama c la-g ya 'cook went'; S + O + V, m yN bracelet b na 'I bracelet made'. The following variations from the SOV pattern were noted, all possible in standard Urdu: S + V + O; (3) m yN b nani name 'I made name'; O + S + V, (2) y

TABLE I

SENTENCE-TYPE FREQUENCIES

	Dem $\left\{ \begin{array}{l} \text{adj} \\ N \end{array} \right\}$ (cop)	O + V	Adv + V	S + V	S + O + V
Period 1	84	24	2	0	0
Period 2	27	43	2	11	2
Period 3	13	54	29	39	5

I benao 'this I made'; O + V + S, (3) picture bana Alice 'picture made Alice'.

Verb Forms

The verb in child grammar begins with simple, frequently heard forms. In Rebecca's second language we first see V-stem + -o, the familiar request form which was frequently addressed to her by the aya, (1) building benao 'building make' (bena- caus. stem of benna 'to make'); (1) yi do 'this give' (do fam. imp. of dena 'to give'). In Period 2 this form still occurred most often; the past tense also appeared frequently, though without its -ne construction, (2) māyN kiṣṭi bana 'I boat made' (bana masc. past part.) instead of māyN-ne kiṣṭi bani 'I boat made' (bani fem. past part. agreeing with kiṣṭi). By the last taping session the future tense was also used productively, (3) Alice bhi jaega 'Alice also will-go' (ja- V-stem, ega masc. sing. fut. suffix). In addition a wide spectrum of other Urdu verb forms appeared: present and conjunctive participles; neutral request and conditional forms. The continuous tenses were conspicuously absent.

Postpositions

Interest in Rebecca's use of Urdu postpositions was peaked by their word order contrast with English prepositions, but no first language influence was found. All postpositional

Lexical Borrowing

In Period 1 Rebecca's second language contained the following English elements: nouns and pronouns, okay appended to yes-no questions, the negative particle, and a few verbs. The adjectives, postposition (a few occurrences of mayN 'in') and most verbs were Urdu. In Period 2 the pronouns 'you' and 'I' and most of the nouns were the remaining first language lexical elements. By Period 3 English was limited to nominal forms. Of seventy-three spontaneous noun occurrences on this tape, sixty-six of them were English words. One observes here an unusual coincidence, or possibly a phenomenon with suggestive implications in the area of lexical storage: all of the seven Urdu nouns, with the exception of bambiri 'a paper fan' for which Rebecca had no English equivalent, were among the few lexical items, seemingly forgotten before the visit to Pakistan, that she had been systematically exposed to in the Urdu 'instruction' nine months earlier. A sociolinguistic factor which apparently facilitated the child's retention of English nouns to such an extent was the favorable attitude of her Urdu-speaking contacts toward her first language. Rebecca often told her aya and neighborhood children the English word for an object which they in turn would then use in their conversation with her.

Conclusions

The three periods of the 'interlanguage' described in this study are summarized in Table IV. The evidence cited here lends support to the hypothesis that first and

an end-rising intonation to differentiate an otherwise statement pattern, (2) prar hay? 'pleasing is'; meri bambiri? 'my paper-fan'.

Negation

The first strategies used by children in the development of negation have been shown to be similar across languages. The Stage 1 rule for English negation formulated by Klima and Bellugi (1966) merely states that a Sentence Nucleus can be followed or preceded by a negative element. This rule also accounts for Rebecca's A and B type utterances presented in Table II. In Period 1 the negative element is English no; in Periods 2 and 3 no was replaced by neiN, the panjabi-ized form of nahin the representative negative particle in Urdu, or by na which in certain constructions is required and in other constructions is a stylistic variant of nahin. The third Urdu negative particle, net, is used with imperative verbs, and did not occur. There is some question about the interpretation of some of the utterances in column B because of an optional rule in Urdu which deletes the copula following a negator. This rule generates sentences of the type marked with an asterisk. The question is whether the child employed the primitive S + Neg strategy in these instances or did she understand yi neiN as yi neiN hay with the copula deleted. No support is given the latter interpretation in the data by comparable utterances with the copula present.

TABLE II

NEGATIVE SENTENCE-TYPES

A	B
(1) <u>no yi</u> 'not this'	(1) <u>yi no</u> 'this not'
(2) <u>ni kīṭī</u> 'not boat'	(2) <u>yi naīN*</u> 'this not'
<u>naṁ mayN banao, you banao</u> 'not I make, you make'	<u>is mayN naīN*</u> 'this-in not'
(3) <u>na aṁṁe likh-karna</u> 'not like-this write'	(3) <u>ek naīN*</u> 'one not'
<u>naīN picture banao</u> 'not picture make'	<u>yi dekho naīN</u> 'this look not'

C	D
(1) <u>yi no accha</u> 'this not good'	(2) <u>aṁṁe naṁ banao</u> 'like-this not make'
<u>yi no building</u> 'this not building'	<u>is mayN naīN banta</u> 'this-in not makes'
(2) <u>Mama naṁ gandi</u> 'Mama not dirty'	(3) <u>abhi naīN banaega</u> 'now not will-make'
<u>yi naīN Berkeley hai</u> 'this not Berkeley is'	<u>Eric naīN ata</u> 'Eric not comes'
(3) <u>yi naīN kharab hai</u> 'this not ruined is'	<u>Mowry naīN dekha</u> 'Mowry not saw'
<u>mayN naīN building bana</u> 'I not building made'	<u>mayN dudh naīN piuṅga</u> 'I milk not will-drink'

In Klima and Bellugi's next stage the Stage 1 rule still operates. In addition there is a new system with a basic structure NP - Neg - VP. In Urdu this structure produces a NP - Neg - Obj - V pattern accounting for Rebecca's type C sentences.

In her Period 2 Rebecca began applying a new rule which produced utterances exemplifying normal placement of the negative element in Urdu, immediately preceding the verb. The type D sentences typify these. Table III gives the frequencies of negation types in each period. Rather than using a sequence of strategies for negation as first language learners do, from the beginning Rebecca simultaneously employed several. This is an important point which will be discussed at length in the conclusion.

Phonology

By the time of her arrival in Pakistan at 3;9 Rebecca had largely mastered the phonological oppositions of English. Exceptions were occasional substitution of /w/ for initial /r/, (1) ə big wābit 'a big rabbit' (but also (2) yi rābit 'this rabbit'); and of /d/ for initial and medial /ð/, (2) də əðərz ər main 'the others are mine'; also positional instability in the voiceless stops, (1) dont cəc it 'don't touch it'; (2) iks going 'it's going'. A study of the child's production of Urdu sounds at 2;11 had shown a separation of systems in which features differentiated in one language were differentiated in the other. Distinctions which evidenced instability in English had also been problem areas in her second language. This does not hold

TABLE III

FREQUENCY OF NEGATIVE SENTENCE-TYPES

	A	B	C	D
	Neg + S	S + Neg	N + $\left\{ \begin{array}{l} \text{Adj} \\ \text{N} \end{array} \right\}$ (cop)	N (N) Neg + V
Period 1	2	6	10	0
Period 2	4	5	5	4
Period 3	4	4	2	11

true for the later period, however. The phonological deviations in her English at 3;9-3;11 did not reflect the productive discriminatory ability which was brought to the new learning task.

The main distinctions found in Urdu that are missing in English are between dental and retroflex stops; between aspirated and unaspirated stops, voiced as well as voiceless; between oral and nasalized vowels; between short and long vowels. Clusters of two or three vowels are common. There are velar fricatives, voiced and voiceless, and a velar stop.

The Urdu voiceless back velar fricative /x/ presented difficulty. Medially, Rebecca tended to substitute /h/ for it, (2) bəhada for bəxara; initially the phoneme was realized as the aspirated stop /kh/, (3) khwda for xwda. In one instance she corrected herself, yəhərab- khərab həy. The other velar sounds did not occur. The voiced aspirates and the retroflex sounds which are notoriously difficult for English-speaking adult learners were no problem; nor were the vowel clusters and nasalised vowels. What was more striking than points of deviation from the target language was the lack of deviation. By Period 3 English loan words were mapped onto the Urdu phonological system and her accent was perceived as 'native' by native speakers.

Lexical Borrowing

In Period 1 Rebecca's second language contained the following English elements: nouns and pronouns, okay appended to yes-no questions, the negative particle, and a few verbs. The adjectives, postposition (a few occurrences of mayH 'in') and most verbs were Urdu. In Period 2 the pronouns 'you' and 'I' and most of the nouns were the remaining first language lexical elements. By Period 3 English was limited to nominal forms. Of seventy-three spontaneous noun occurrences on this tape, sixty-six of them were English words. One observes here an unusual coincidence, or possibly a phenomenon with suggestive implications in the area of lexical storage: all of the seven Urdu nouns, with the exception of bambiri 'a paper fan' for which Rebecca had no English equivalent, were among the few lexical items, seemingly forgotten before the visit to Pakistan, that she had been systematically exposed to in the Urdu 'instruction' nine months earlier. A sociolinguistic factor which apparently facilitated the child's retention of English nouns to such an extent was the favorable attitude of her Urdu-speaking contacts toward her first language. Rebecca often told her aya and neighborhood children the English word for an object which they in turn would then use in their conversation with her.

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TABLE IV

SUMMARY OF THE THREE PERIODS

	Period 1	Period 2	Period 3
	Age: 3;9 MLU: 1;85 ²	Age: 3;10 MLU: 1;98	Age: 3;11 MLU: 2;34
Possessives			
<u>ka</u> construction	N + N, <u>ka</u> omitted	avoided by switches to Eng. (usually masc.)	adult model (usually masc.)
pronouns	all English	<u>mayN</u> 'I' for 1st pers., others En	adult model (<u>meri</u> always fem.)
Gender	mostly masc.	(no change)	(no change)
Word order	relatively inflex. (no change)	(no change)	(no change)
Verb forms	familiar request	familiar request past	familiar request past future
Postpositions	<u>mayN</u> 'in' approp. order	(no change)	<u>mayN</u> 'in' <u>per</u> 'on' approp. order
Questions			
wh-	<u>kic</u> , neologism approp. order	<u>kia</u> 'what' <u>kidhar</u> 'where' approp. order	(no change)
yes-no	<u>okay</u> appended	rising intonation (no change)	
Negative	Neg initial, med. and final	Neg initial, med. and final Occas. pre-V	Neg initial, med. and final Pre-V predominate
Phonology	Eng. pronun. for Eng. loans	near-native pronunciation	native pronunciation
Lexical borrowing	nouns and pron. neg. part. <u>no</u> <u>okay</u> with yes-no a few verbs	<u>you</u> , <u>I</u> most nouns	most nouns

²The MLU's given for each period refer to mean length of utterance, a concept used by Brown (1973) in segmenting the continuous language acquisition process so that samples of children's speech may be analyzed and compared.

second language learning in the young are similar in natural situations. Although the English equivalents of the syntactic structures examined were well established, neither word-for-word translation nor L¹ interference was found in the new language. The postpositional and wh-question constructions which display sharp word order contrasts between Urdu and English offered no examples of first language order. The child's first strategy for expressing possession was one of the first mother-tongue learners use. The initial overgeneralisations to one gender (masculine) and to a simple frequently occurring verb form (familiar imperative) exemplify a common process seen in first language acquisition.

In the learning of negation, however, Rebecca's strategies do not seem to confirm our L² = L¹ hypothesis. Rather than passing through the well-documented early stages of negation in sequence, she simultaneously applied several rules that she had used and discarded on the way to English proficiency. This is in marked contrast to the case of a seven year old Japanese boy learning English reported by Milon (1974). The boy's stages of English negation occurred in exactly the same sequence and within almost identical syntactic parameters as did the English mother-tongue learners whose development of negation was characterized by Bellugi and Klima (1966).

A crucial factor in the difference in strategies used by

the two children may be the comparatively simple syntax of negation in the boy's first language. The surface structure of a negative Japanese sentence is NP NP V Neg and, as opposed to English, there are no order-changing transformations required to carry the negative aspect to the surface. Thus, as reported by McNeill and McNeill (1968), first language Japanese learners did not produce grammatically deviant negative sentences; presumably since their primitive negative utterances, S + Neg, are correct in their language. Perhaps the larger number of rules initially experimented with by the English speaking child in the negation of her second language was influenced by the larger number of rules traversed in learning her first. This then would illustrate that knowledge already available to a second language learner from acquisitional processes in his mother-tongue may contribute to an acceleration of progress. Herein lies the implication that all details in order of acquisition of first and second language learners are not the same.

REFERENCES

- Barber, Muhammad Abd-al-Rahman; Hasan Jahangir Hamdani; Khwaja Muhammad Shafi Dihlavi; and Shafiqur Rahman. 1968. A Course in Urdu. Montreal: McGill University Press.
- Bowerman, Melissa. 1973. Syntactic development. London: Cambridge University Press.
- Cook, Vivian J. 1969. The analogy between first- and second-language learning. *IRAL*.7.207-16.
- Corder, S. Pit. 1971. Idiosyncratic dialects and error analysis. *IRAL*.9.147-59.
- Dilvi, Abdul Sitar. 1972. BacchoN ki Urdu: t̄ahsil-e-z̄aban ka ek mutal̄aba. *Hindustani Zaban*.5.5-27.
- Dulay, Heidi C. and Marina K. Burt. 1974. Errors and strategies in child second language acquisition. *TESOL Quarterly*.8. 129-36.
- Engel, Walburga von Raffler. 1965. An example of 'linguistic consciousness' in the child. *Orientamenti Pedagogici*.12. 631-33.
- Ervin-Tripp, Susan M. 1973a. Some Strategies for the First Two Years. *Language Acquisition and Communicative Choice*, ed. by Anwar Dil, 204-38. Stanford: University Press.
- Ervin-Tripp, Susan M. 1973b. Structure and Process in Language Acquisition. *Language Acquisition and Communicative Choice*, ed. by Anwar Dil, 92-129. Stanford: University Press.
- Ervin-Tripp, Susan M. 1974. Is second language learning like the first? *TESOL Quarterly*.8.111-27.
- Klima, Edward S. and Ursula Bellugi. 1966. Syntactic regularities in the speech of children. *Psycholinguistics papers*, ed. by John Lyons and R. J. Wales. Edinburgh: Edinburgh University Press.
- McNeill, David. 1966. The creation of language by children. *Psycholinguistic papers*, ed. by John Lyons and R. J. Wales. Edinburgh: Edingurgh University Press.
- McNeill, David and Nobuko B. McNeill. 1968. What does a child mean when he says 'no'? *Proceedings of the conference on language and language behavior*, ed. by E. Zale. New York: Appleton-Century Crofts.

- Milon, John P. 1974. The development of negation in English by a second language learner. *TESOL Quarterly*.8.137-43.
- Natalicio, D. C. and L. F. S. Natalicio. 1971. A comparative study of English pluralization by native and non-native English speakers. *Child Development*.42.1302-6.
- Nemser, William. 1971. Approximative systems of foreign language learners. *IRAL*.9.115-23.
- Popova, M. I. 1959. Grammaticheskiye elementy yazyka v rechi detey preddoshkolnogo vozrasta. *Vopr. psikhol.*4.106-17. (English translation: Grammatical elements of language in the speech of pre-school children. Printed in *Studies of child language development*, ed. by Charles A. Ferguson and Dan Isaac Slobin. New York: Holt, Rinehart and Winston, Inc., 1973)
- Ravem, Roar. 1969. Language acquisition in a second language environment. *IRAL*.6.175-85.
- Selinker, Larry. 1972. Interlanguage. *IRAL*.10.209-31.
- Slobin, Dan Isaac. 1966. The acquisition of Russian as a native language. *The genesis of language: a psycholinguistic approach* ed. by F. Smith and George A. Miller. Cambridge, Massachusetts: M. I. T. Press.