PHONETIC AND PHONOLOGICAL PROPERTIES OF CHILD LANGUAGE

JAROSLAVA PAČSOVA

Department of Phonetics
Brno University
602 00 Brno, Czechoslovakia

ABSTRACT

The present paper attempts to be a small exploratory study in phonology, adding data from the child's acquisition of his mother tongue, i.e. Czech, with the intention of contributing to our understanding of phonological organization and phonological processes in language development. Particular reference is made throughout to motivating examples from "substitution paths" which children follow in acquiring the phonemes, especially as far as the nature of distinctive features, the active organizational role of marking in determining the structure of child language, the strategies in phonology acquisition and the interrelations between language levels are concerned.

INTRODUCTION

The bulk of linguistically oriented research on child phonology since Jakobson's "Kindersprache" has mostly been concerned with discovering a universal order of phonemic development /1/. The principle of maximum contrast and various priorities, e.g. that of unmarkedness against markedness, stop as against fricative and semi-closed in complex nuclei formations have repeatedly been dealt with in studies in this field /2/. The position of a phoneme in a phonemic system is, however, determined not exclusively by possible oppositions but also by the extent to which alternates with other phonemes and by realization of its potential to be an exponent of linguistic meaning. One kind of individual variation is the apparent chance following of alternate paths in the acquisition of particular sounds /3/. Our study is based on the data dealing with the linguistic development of a Czech-speaking boy recorded since his first utterances at the age of ten months and ending at two-and-a-half years when his phonological system was well established and language use quite fluent. The data were collected daily and notes were made of the context of use. In analyzing them, systematic confrontation with specialized literature and with results gained during our longitudinal research in language development of fifteen children aged from one to three years, most of them being the boy's playmates at the nursery home - was done. The observation in the development of consonants have let us to take the position that there is a consistent phonemic patterning within the speech of each child which is often strictly idiosyncratic. A widely recognized principle is exemplified in our study: that of progress from a simple beginning to greater complexity /4/. An attempt is made to illustrate this at the phonetic and phonological levels, showing at the same time how such development is related to increases in vocabulary size, awareness of grammatical system and amount of language use. In a brief paper of this nature it is not possible to give a full description of the child's phonetics and phonology. Therefore, a restricted aspect, viz. the acquisition of fricative phonemes - with special view to the lateral and vibrants has been selected for consideration. It is generally acknowledged that at the earliest stage of language development, the child's vocabulary is very small and plosives, nasals and vowels are the only sounds used. Most of them are familiar from babbling and their perception and production is thus well practiced. The continuant sounds, on the other hand, require more skill not only in perceptual discrimination but also in production. The articulators have to be in a posture of close approximation to achieve friction, neither completely in contact as in plosives and nasals, nor well clear of each other as in vowels. The appearance of fricatives - at certain stage of phonologic development - is, nevertheless, not seen
as resulting primarily from a production of phonological elements and increased perceptual discrimination, the need for phonological training, a child is able to discriminate and to recognize them as functional and meaningful. The first step was to determine how many different sounds the child can pick up and identify with certainty when the task is to determine the type of sound heard. The child was observed when the sounds /i/ and /e/ were presented. The child identified the sound /i/ and /e/听到. The child was also trained to identify the sounds /a/, /o/, and /u/ when presented in isolation. The child was then trained to identify the sounds /i/, /e/, /a/, /o/, and /u/ heard in a word context. The child was then trained to identify the sounds /i/, /e/, /a/, /o/, and /u/ heard in a word context.

The new sounds, however, imperfectly, brought new consonantal contrasts into use so that a higher level of complexity was achieved. With the simultaneous acquisition of the new contrasts resulted in new sound structures. In addition to the already established structures such as plosive+vowel (e.g., Ibiq6), vowel+stop (e.g., Ipa6), stop+vowel (e.g., Iba6), and vowel+vowel stop (e.g., Iba6), there were now also nasal+vowel (e.g., Iba6), plosive+vowel+stop (e.g., Iba6), plosive+vowel+nasal (e.g., Iba6), and fricative+vowel+nasal (e.g., Iba6) and fricative+vowel+vowel (e.g., Iba6).

As for the frequency of use with fricati- ve+vocalic sounds, they can be used with the same frequency as the plosive+vowel sounds. However, the frequency of use with plosive+vowel+nasal sounds is higher than the frequency of use with fricative+vowel+nasal sounds. The frequency of use with the stop+vowel sounds is lower than the frequency of use with the plosive+vowel sounds.

The child's phonological system had thus a phoneme with very high frequency of use. The second step was the determination of the interrelation of the fricative subsystem. The fricative subsystem was based on the fricative+vowel sounds as a substitute for the fricative+vowel+nasal sounds. The fricative+vowel+nasal sounds were used to represent the fricative+vowel+nasal sounds.

As probably known, Czech is the sole of the phonological structure of the phonological system. The phonological system was developed for the phonological system of the phonological system. The phonological system was developed with the aim of developing a new phonological system. The new phonological system is based on the phonological system of the phonological system.

The basic question was whether the phonological system is a complex of phonological systems. The phonological system was developed to determine the role of the phonological system in the development of the phonological system. The phonological system was developed to determine the role of the phonological system in the development of the phonological system.
tem is manifested. He does not passively borrow word forms from adults but creates his own plurals and diminutives (and of course also other inflections and derivations within given grammatical categories) in accordance with his own grammar the typical feature of which is the high degree of regularity and avoidance of exceptions. The next specimen, viz., the realization of /x/ in the plural form iuxi instead of the correct iuxi' (ears) is explainable not only on the ground of the boy's preference of regular formation, viz. iuxoi = nom. sg. - iuxii = nom. pl. Instead of the proper luxai, but, simultaneously, but also of his ignorance of the adult convention, that is the standard restriction of the word form "ucha" to ear-shaped things, especially handle of a vessel, versus the word form "uši" used in reference to the organ of hearing. To sum up, the child language system is different both for quantity of information and for its organization from that of adult language system at all its levels, and as such should be interpreted.

In concluding our paper we would like to emphasize that - unlike earlier models of phonological acquisition which assumed that the child either passively awaits the maturation of physiological control system /0/ or passively waits until he can inhibit or suppress the natural processes reducing his output to tabulom /9/ - we take the phonology development as an extremely creative process in which the child “intentionally” partakes and uses a variety of strategies as his guide /10/. The fact that he, at one moment, pronounces a phoneme correctly and in its proper position, does not mean that from that time onwards he definitely masters the phoneme. It has been said elsewhere that the acquisition of the phonological system is a process. In this place it should be stressed that this process involves steps both forwards and backwards, although, of course, the general trend is progressive. The child’s language system as a whole is for a certain period in a state of flux and fuzziness with a fairly strong element of unpredictability as regards phonemic distinctions. And, not exceptionally, the actual distinction between two phonemes may be in free variation with the lack of this distinction. There is no doubt, still a long way to go in establishing and in testifying a detailed model of phonological acquisition. Further studies of a larger number of children and in relation to different languages showing the interrelations of development at various levels of language are needed in order to get deeper information on what we have tried to deduce from the language behaviour of a Czech-speaking child.

REFERENCES


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