

COMMUNICATION AND DEVELOPMENT OF ARTICULATORY ACTS IN THE PRE- LINGUISTIC STAGE OF VIETNAMESE CHILDREN

Nguyen Huy Can*

I. Pre- linguistic communication of 1- 12 month- old infants.

1. First communications between infants and adults.

In linguistics, communication is defined as a process of exchanging and communicating information. Another view, which is more identified and nearer to our scope of study, states communication as "a process of establishing and maintaining direct or indirect exchanges on purpose through some medium between those who are psychologically related to each other" (A.A. Leontev 1974 a, p. 5- 8).

The earliest communication between infants and adults is done through soothing and fondling by the mother this is true of the earliest communication which takes place in the families of ethnic minorities such as Tay, Nung etc.

Infants of 1- 2 months old begin to communicate with adults (mother) through soothing and fondling. After breast- feeding, the mother usually holds her baby in her hands and lifts its head fairly high. She soothes the baby and makes apico- dental or apico- alveolar sounds, coupled with explosions imitating the smack of a house lizard like: [t] and [ts] or [a: -u], [σ- u], "âu mà", "mờ, mờ", etc. Together with soothing, the mother often looks into the infant's face who attentively listens, smiling sometimes and gradually moving its lips and tongue after this soothing. Probably, soothing acts are the first speaking lessons. Phonetically, infants are trained to operate the movements of the tip of the tongue, gums, lips and the hearing. Infants gradually show more attentions to their neighbours' speech- turning their head and eyes to approaching speakers. Such sounds as "a- u-gừ", "σ- gờ", "u...", "ơ", "gờ gờ", "gừ gừ", "σ- mờ", etc are still made in the absence of someone around. Mothers look fondly at their infants far away, saying, "They are talking to themselves".

Therefore, this communication between infants and their neighbours is purely at sense with no specific expression of any purpose. Here, the articulation is still instinctive for the fact of "taking notice" by all normal infants. Even those who are born deaf can make some apico- alveolar or labial consonants as a normal infant does and prefer to be soothed as well.

2. Functional development of infants' media of motion.

It can be seen that infants gradually use sounds together with the movement of their heads, eyes, hands, legs and whole body; and free from direct as well as purely sensory stimuli. They begin to have relationships with others through some forms of expression. During the formation of communicative media, it is a demand that infants should form their own intentions and needs gained through their contact with the outside world (neighbours, objects, phenomena) and that they should establish forms of expression for these intentions and needs which are directly subject to their interaction with adults.

a. Formation of media of motion.

Stage 1: Before becoming forms of expression, infants' motions involve direct stimuli affecting their senses with no expression of any intention. When an adult, for example, puts his

* Institute of Social Science Information

hand under an infant's back and lifts its head, the infant automatically curves up its own back for holding. This movement appears thanks to the stimuli applied to its back (infants of 2- 3 months old).

Stage 2: 4-5 months old infants begin to establish forms of expressing intentions, clearly recognized by adults in the sense that despite no direct stimuli, infants act in the same way they do. For example, when an adult approaches an infant without putting his hand under its back, the latter curves up. When being held, they look happy.

Stage 3: It is now realized that infants' needs are to be satisfied as they know how to create forms of expressing their intentions to affect adults. For instance, a 6 or 7 month- old infant holds out its hands towards adults to hint that it be taken out. Formerly, infants could only reach for toys hung high above them, but they now turn towards adults looking up at the toys out of reach and making some sounds like [ɔ: u:], [ɔ: u] (Dang 0; 6, 15)(1) to ask for help to get them.

Stage 4: Infants' forms of expressing intentions are of more significance. They know to change from this form to another to have a greater influence on adults. E.g. when some toy is taken from an infant, it cries at first and then crawls towards its mother, pointing at the doer and making a series of sounds like [c? - c?], [pa - pa] (Lien 0; 8, 5). The infant stops crying and becomes happy as soon as the toy is given back.

From the age of about 7 months and onwards, infants can use gestures (hand or eye actions etc), objects and even adults as intermediaries to satisfy some intention. They can even play the game of "pretending" at 9 months of age- e.g. Dang puts a piece of bread into its mother's mouth, takes it out at once and puts it into its own. Then, infants themselves establish the relation of adult- object- infant.

We realize that when infants- usually before the age of 9 months- haven't got any media of expression (language signs and gestures), their communicative media are usually based upon the motions caused by direct stimuli to their sensory organs- e.g. "head- shaking" is Khoi's signal of disagreement. At first, it tries to refuse a spoon of medicine given by its mother; then- at the age of 6 or 7 months- it explodes with discontent when trying distasteful food. At 8- 9 months of age, it shakes its head as some toy it dislikes is "mistakenly" given out. Later on, "head- shaking" is on a par with such orders as "No", "I disagree". For example, when an adult asks an infant: "Shall I hold you?" it shakes its head. Crying for food by infants of 8, 9 months old is at times represented by pointing and devouring the food with its eyes together with some sounds like [p]; [m]; [n], etc.

b. Development of infants' communicative intentions.

The development of communicative intentions has a direct influence on the functional development of media of intention- expressing, the older of which are at first used in an attempt to express new intentions and gradually more or less changed by infants. All the infants of 8, 9 months old observed can point at toys or adults with their forefingers. Such actions are meant not only as an identification of some thing in terms of "where?", "who?", "what?" (I.e. "This is Mum, that is a doll. This is a cake" etc), but also as a manifestation of infants' communicative needs with these objects (infants want to have them to eat or play etc).

We realize that each infant is of its own bias towards intentions in its familiar way. These first communicative media are, however, volatile, fragile and arbitrary. The volatility in the forms of expressions and the contents (intention) of media from time to time bar infants and their neighbours from communicating with each other. Infants' intentions are sometimes "misunderstood", which intensifies their attempts to find out a more effective form of expression. This helps them come nearer to the construction of more stably- formed and implied media of communication. In spite of the statement from E. Bates (1976) that "they are just the senses of motion rather than spiritual entities", these first media are gradually free from direct stimuli. It is hereby necessary to stress that infants' sense- motions are not only the basis for some form of communicative acts to be shaped, but also an impetus to form infants' purposes of

communication. Later, these first communicative media may get lost, or be transformed by another, or are integrated into and renovated in a new system- i.e. the system of language signs.

II. Evolution of infants' articulatory acts.

It is realized from the observations of infants' articulatory acts at the pre- linguistic stage (1- 12 months old) that based upon only one of the properties of infants' articulation without any link between the articulation of the former stage and that of the latter, it would not be sufficient enough to rate the roles and characteristics of infants' articulatory varieties. The reason why there are different explanations of the issue is, in our opinion, due to the absence of the fullest possible explanation about infants' articulatory varieties.

There are 3 different explanations about the roles and characteristics of infants' articulatory varieties as follows:

Firstly, it is assumed that infants' articulation is regarded as a means of communication (Vygostkij 1984, Llorach 1968, Mc lean Snyder- Mc lean 1978, Isenima 1986, etc), or as a training of speech organs (Kolsova 1979, Tikhieva 1972, etc), or as the basis for the later foundations of infants' narrative sentences and command sentences (Bates 1976).

Secondly, it is assumed that infants' articulation contains no influence on their later linguistic development (Jakobson 1971), so it is not considered to be a means of communication (Nakazima 1975).

Lastly, it is assumed that infants' articulation has a small effect on their articulation practices (Lenneberg 1967).

We realize that the above ideas originally stem from certain assumptions about pre-linguistic articulation as being totally subject to environmental influences. Infants are able to make this or that sound thanks to their contact with neighbours. Others go against this. The former maintain that neighbours' speech and communication have changed the articulation forms of infants whose sounds come nearer and nearer to their neighbours'. The latter argue, however, that infants who are born deaf can still make some similar sounds which is good evindence to suggest that infants' pre- linguistic articulation is independent of environmental influences (cf. Lenneberg 1967, Nakazima 1975, Lewis 1957).

Articulation by infants at 1-12 months of age, in our opinion, is complex, arbitrary but coincident with the natural operation of speech-organs and gradually becomes purpose- oriented. Infants don't casually make all sounds available but those that are similar to the ones they have heard. This means that infants' articulation converges by and by at sound stereotypes in the speech of neighbours who are guided to meet their requirements. Suffice to say that infants' development of articulatory acts is, by nature, that of a purpose- oriented, act- adjusting mechanism aimed at establishing the relation between the sound stereotypes and the sound construction of speech organs.

The fact that different sounds are made at different times is not only the training of speech organs but also the first stage in the construction of sound stereotypes. Infants gradually adjust their articulation and turn to sound models acquired through their contact with neighbours. "The speech development in substratum begins with infants' attention to the sound environment in utterances, which is considered to be the first stages to perceive the phonetic aspects of words in terms of psycholinguistics" (Snakhnarovich, Ivanova, 1988, p.130).

The articulation- adjusting mechanism of Vietnamese infants appears at the age of 2- 3 months. When being soothed, infants look into adults' mouth, moving slightly their lips and throat and repeating the latter' sounds. This mechanism is, however, shown more clearly at 6 months old and is described as follows:

a. Infants not only make sounds thanks to physiologic stimuli or the natural operation of speech organs but also try others through the changes of sound differences (in methods or places of articulation). Cutting infants(1), for example, make at first aspirated labial sounds like [p'],

then unaspirated labial sounds like [b], dento- dorsal voiceless consonants like [f] 2 or 3 months later (about the 8th or 9th month), and dento- apical voiceless consonants like [v]. Tone 5 (grave accent) at first may be up to the air compression in their stomach and lungs, then go out representing infants' discomfort. Dang makes such sounds as "ư, hự, hự" [ʔ5, hʔ5, hʔ5] when tired or feeling uncomfortable by nappy or is left too long in bed.

b. The labial sounds of [b], [f], [p], [m] are first pronounced with an explosion which disappears later and becomes nearer to adult sounds. The postdorso- mediopalatal consonants of [h] and [ɣ] are pronounced primarily like an affricate sound, then like a glottocclusive sound [ʔ] and glottofricative sound [hʔ].

c. Infant articulation- adjusting mechanism is best shown at the age of about 9- 12 months at which, according to Nakazima (1975), infants begin to reorganize their articulatory acts. We state that infants' articulation at this time turns from arbitrary to purpose- oriented. Infants begin to reorganize their articulation after neighbours' sound stereotypes with the first representation of imitating the babbles which adults make to teach infants.

Vietnam's normal infants at 9- 12 months old all can make such babbles as [măm], [măm] or [ma], [ba], [ca], etc. Despite phonetically different babbles among infants due to specific educational situations, they all are the result of the natural operation of speech organs caused by direct stimuli. This is the reason why infants of different peoples may pronounce similar sounds when crying for food, e.g. [am- am] by Russian infants (Kol'sova 1979) and [ma- ma] by Japanese ones. The infants of such ethnic minorities as Tay, Muong in Vietnam have the same babbles as Viet infants', e.g. [ma- ma] to call mother, [pa- pa] to call father; or [mʔ- mʔ] (in Tay infants) to cry for food.

It is necessary to note that babbling is primarily a mixed action combined with others- i.e. pointing with fingers, facial expressions etc. Infants soon realize that their requirements are still met without any gestures but sounds, which intensifies their use of babbling for communication. We disagree with R. Jakobson (1971) about the role of infants' pre- linguistic articulation which is said to be arbitrary and natural with no reference to learning native languages. It is also realized that articulatory acts gradually turn purpose- oriented during the developmental process and that infants try in more and more ways to establish signs for outward communication.

The babbling of 9 month- old infants is phonetically structured as follows: First there are the syllables made of consonant + vowel. Labial and apico- alveolar consonants like [m, b, p', ɸ, ɸ̥] are most often seen.

The vowels, which are most often seen, are medial vowels with the low or average rise of the tongue like [a, ɤ] and short vowels like [ă, ɐ]- e.g. [ma- ma], [mʔ1- mʔ1], [ɕa1- ɕa1], [a2- a2], [p'a2- p'a2], etc.

Conclusion

Based on the analysis of the development in the "infant- object- adult" communicative relation which is the stimulus of the formation of the infant's media to express intentions, we would come to some conclusions as follows:

1- The development of pre- linguistic communication is the functional development of sense- motion (in the terms of Vien Nguyen Khac and Luyen Bui Van). At first, these motions depend directly on direct stimuli. They then become independent and aim at expressing some purpose to turn into infant's communicative media. Such forms of primary intention expressions are changeable. On the one hand, they are defined by communications experienced by infants. On the other, it is because of the new development of communicative needs. These expressions are developing and renovated in the usual interactions between infants and contexts.

2- Infants' development of articulation proceeds from an arbitrary action to a purpose- oriented articulation. The articulation by infants of 2- 6 months parallels with the natural