

The Acquisition of Voice in Malagasy

In this paper we examine children's acquisition of the Malagasy voicing system. We show that the acquisition data support proposals that treat this system as an instance of A'-movement. The analysis is based on the longitudinal data of 3 children ages 19 to 32 months.

The Malagasy voicing system involves distinctive verbal morphology that corresponds to the promotion of a verbal argument: the promotion of the agent corresponds to the Actor-Trigger form (AT), traditionally termed active voice, the promotion of the theme to the Theme-Trigger form (TT), traditionally passive voice, and the promotion of an oblique to the Circumstantial-Trigger (CT) form, traditionally circumstantial or relative voice (see template in Table 1). The argument is promoted to a referentially and syntactically prominent position, linearly the rightmost surface position in a clause. We look at two competing accounts of the Malagasy voicing system, one in which the promoted argument is analyzed as a subject and the promotion operation an instance of A movement (Guilfoyle, Hung & Travis 1992) and a more recent account in which Malagasy is analyzed as a V2-type language in which the promoted argument is a topic and the promotion an instance of A' movement (Pearson, 2003).

A-chain formation of the sort associated with passives is a relatively late development (Borer & Wexler 1987). English-speaking children do not have full comprehension of verbal passives until quite late in development (roughly age 5) and the frequency of spontaneous verbal passives and especially the use of the *by*-phrase is quite low. Similar patterns have been shown to obtain in German (Mills, 1985) Dutch (Verrips, 1996) and Japanese, (Sugisaki, 1997). Even in languages that exhibit early acquisition of passives (e.g. Sesotho, Demuth, 1989) the frequency of passives seems to be significantly below that of actives. Borer & Wexler (1987) argue that young children do not produce or understand full passives because the early grammar does not represent A-chains and that the capacity to represent A-chains matures at around 4 to 5 years old. More precisely, they propose that children cannot associate a θ -role with a position to which it is not canonically assigned. If Guilfoyle, et al 1992 are on the right track we predict a significant delay in the acquisition of TT relative to AT forms in Malagasy. If on the other hand Pearson (2003) is the right analysis no such delay is predicted.

Our results show that Malagasy children use TT forms frequently (Table 2). In fact there is no observable maturation effect in their production of TT forms. As Table 3 shows the frequency of children's production of TT and AT forms does not vary at different stages of acquisition. Furthermore the frequency of TT forms in child Malagasy is very close to the frequency of TT forms in both adult to adult (AL), and child directed adult speech (CDL) (Table 4). Thus the acquisition data seem to support the view that promotion of the theme argument to a prominent position is not the result of A-movement. The data are not problematic for an A'-movement analysis as in Pearson (2003).

We also address the issue of the low frequency of CT forms in child Malagasy. As Table 4 shows the children produced only 7 CT forms during the entire period of investigation and most of these are in the last files. In adult language the frequency of CTs is almost as high as TTs (17% vs. 21%). However, in child directed language CT clauses are very infrequent, around 1.4%. The low frequency of the CT voice in the child data might thus be explained as simple matching of the frequency in the adult input. However, such a statistical account completely ignores the question of why the adult input looks the way it does. Alternatively, the delayed appearance of the CT may be due to the greater grammatical complexity of this structure. The CT form targets for promotion an oblique argument, a non-subcategorized constituent, and typically requires the suppression of a preposition; it has an additional level of functional structure, an ApplP (Pearson, 2003) not present in the other voices; and it is morphologically more complex (cf. Table 1). We propose that the avoidance of the CT in CDL is a linguistic accommodation that adults make due to the intuited linguistic complexity of the CT clauses. An account in terms of linguistic complexity predicts both the children's infrequent use of the CT form as well as the difference in frequency between the two registers of adult language, while the statistical account has nothing to say about the latter.

Table 1: Morphological Template for Malagasy Verbal Forms

Form	Morphological Template	Examples	
		Underl. form	Surf. form
Actor Trigger (AT)	TNS/m- + PFX- + ROOT	m-an-táov	manáo
Theme Trigger (TT)	TNS + ROOT + -in	vidi-in	vidína
Circumstantial Trigger (CT)	TNS + PFX- + ROOT + -an	an-táov-an	anáovana

Table 2: Frequency of different voice types

	AT	TT	CT
Tsiorisoa	361 (75%)	115 (24%)	3 (.06%)
Sonnia	274 (69%)	122 (31%)	3 (.07%)
Ninnie	309 (59%)	212 (41%)	1 (.02%)
Total	944 (67.5%)	449 (32%)	7 (.05%)

Table 3: Proportion of voice type by age

Child	Period 1 (1;7 – 2;1)		Period 2 (2;2 – 2;8)	
	AT	TT	AT	TT
Tsiorisoa	121 (76%)	39 (24%)	240 (76%)	76 (24%)
Sonnia	199 (72%)	76 (28%)	75 (62%)	46 (38%)
Ninie	177 (59%)	121 (41%)	132 (59%)	91 (41%)
Total	497 (68%)	236 (32%)	447 (68%)	213 (32%)

Table 4: Frequency of voice types in AL, child, and CDL

Voice type	AL*	Child	CDL
AT	5601 (62.3%)	944 (68%)	294 (61.9%)
TT	1846 (20.5%)	449 (32%)	174 (36.6%)
CT	1532 (17%)	7 (.05%)	7 (1.4%)

*From Keenan & Mahorohanta (2001)

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