## An Agent Advantage in Tagalog Relative Clause Comprehension

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A signature feature of Tagalog grammar is its voice system, in which a verbal affix signals the thematic role of the nominal marked by the case prefix (focus marker)  $a\eta$ . In (1), the -um- infix in the verb indicates that the NP bearing the marker  $a\eta$  is the agent. In (2), on the other hand, the infix -in- indicates that the  $a\eta$ -marked nominal is the patient/theme.

(1) AGENT VOICE

H<um>a~habol an lalake sa babae <AV>IPFV~chase NOM man OBL woman 'The man is chasing the woman.'

(2) PATIENT VOICE

H<in>a~habol nan lalake an babae <PV>IPFV~chase GEN man NOM woman 'The man is chasing the woman.'

These contrasts are also relevant to the syntax of relative clauses. As illustrated in (3) and (4), an NP that is selected for focus is relativizable.

(3) AGENT RELATIVE

lalake=ŋ [h<um>a~habol \_\_\_\_ sa babae] man=L <AV>IPFV~chase OBL girl 'the man who is chasing the woman'

(4) PATIENT RELATIVE

babae=ŋ [h<in>a~habol naŋ lalake \_\_\_\_] woman=L <PV>IPFV~chase GEN boy

'the woman who the man is chasing'

In contrast, other arguments cannot be relativized, as shown in (5) and (6).

(5) Ungrammatical agent relative

\*lalake=ŋ [h<in>a~habol \_\_\_\_ aŋ babae] man=L <PV>IPFV~chase NOM woman

'the man who is chasing the woman'

(6) UNGRAMMATICAL PATIENT RELATIVE

\*babae=ŋ [h<um>a~habol \_\_\_\_ aŋ lalake] woman=L <AV>IPFV~chase NOM man

'the woman who the man is chasing'

Cross-linguistic research has shown that subject (agent) relative clauses are easier to produce, comprehend, and acquire than direct object (patient) relatives. This asymmetry has been found in many languages of the world, although (to our knowledge) the only experimental studies done on Austronesian languages are a comprehension study on Chamorro (Borja et al. 2015) and a production study on Tagalog (Tanaka et al. 2015). Tanaka and colleagues conducted a picture-based elicited production task and found that, although children (and adults) prefer to produce theme focus patterns in basic clauses, they perform better on agent focus patterns when tested on relative clauses.

In the current study, we ask whether a similar asymmetry arises in the comprehension of relative clauses by adult and child speakers of Tagalog. In each trial, participants were shown a panel of two pictures like those in Figure 1 and were asked to select a referent that matched the auditory description, which was given in the form of either an agent RC or a theme RC. Consider, for example, Figure 1, which contains a picture of a girl chasing a boy and another picture of a boy chasing a girl. If the participants heard the agent RC babae=ng h<um>a-habol ng lalake</m> 'the girl who is chasing the boy', the correct response was to select the girl in the picture on the left. In contrast, if they heard the theme RC babae=ng h<in>a-habol ng lalake</n> 'the girl who the boy is chasing', they should select the girl in the picture on the right.





Figure 1. Sample item with pictures of a girl chasing a boy and a boy chasing a girl.

The same five verbs were used for both relative clause types (buhat 'carry', habol 'chase', yakap 'hug', tulak 'push', basa? 'wet'), giving us ten items in total. The experiment with adults was carried out with the help of MouseTracker (Freeman and Ambady 2010), which recorded the movements of the computer mouse as participants used it to click on the character of their choice; the experiment with children involved a paper-and-pencil task, in which they were asked to point at the character of their choice and then circle it. We measured accuracy (i.e., the selection of the correct picture) for adults and children, as well as reaction times (e.g, how long it takes to click on a character) for adults.

The results from 15 adults showed no significant difference in either accuracy (96.47% in agent relative clauses; 97.65% in theme relative clauses) or reaction time (3801 ms in agent relative clauses; 3898 ms in theme relative clauses). However, the results from 15 children (7 female; 8 male) from 3;0-5;4 (mean 4;3) revealed a major difference. Although three-year-olds and four-year-olds were generally poor at understanding either type of relative clauses, the data from five-year-olds showed a large advantage for agent relative clauses (70.00% correct) over theme relative clauses (23.33% correct). These results confirm the agent advantage shown in the production study by Tanaka and colleagues (2015), and raise intriguing questions about the differences between the focus system of Tagalog-speaking children and adults.

## **References:**

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