Malayalam, a South Dravidian language spoken primarily in Kerala, India, uses a variety of plural markers to mark the difference between one, and two or more of a noun. Two features determine the plural morpheme selection, under what we call the animacy constraint: (a) the animate feature [+ANIMATE] (animate vs. inanimate) and the human-ness feature [+HUMAN] (human vs not human). The singular noun is always unmarked for number. If a noun is animate and human, that is, it bears the lexical features [+HUM, +ANIM]¹, then the plural marker –maal is used, as for example in amma-maal ([mother-PL] “mothers”). The epicene plural marker, with two lexically-conditioned, allomorphic variants, is employed to create plurals of nouns with a [+ANIMATE] feature which references a mixed gender set. For example, -kaar (e.g. paṭi-kaar [job-PL] “servants” but -ar (n_ art_t_ ak-ar [dance-PL] “dancers”). Nouns that bear the features [−HUM, +ANIMATE], are marked with the plural marker –kal, as for example in kili-kal ([bird-PL] “birds”). The plural marker is optionally omitted in the context of [−ANIMATE, −HUM] plural nouns, as for example in, riṇṭ ṭi kas_eer’ā [two chair-null] instead of riṇṭ ṭi kas_eer’ā-kal [two chair- PL].

In this paper, we focus on the acquisition of Malayalam plural markers by a monolingual Malayalam speaking child by looking at longitudinal acquisition data between the ages of 1.10 and 2.10. The acquisition patterns of plurals differ cross-linguistically. While in Turkish (Ketrez and Aksu-Koc, 2009) and Croatian (Kovac’evic’, Palmovic’, and Hrz’ica, 2009) the number inflections emerge late, in Yucatec Maya (Pfeiffer, 2009) and Greek (Stephany and Christofidou, 2009)², they are present from 2 years onwards. Most of these studies attribute the late or early development of number inflections to the language specific number marking properties, such as dependence on categories like gender or animacy hierarchy. We observe, in the current Malayalam data, that plural markers not only emerge relatively late but they are infrequent and non-productive compared to the other nominal and verbal inflections of the language. In the data, only 0.04% of the child’s nominal inflections comprise plurals, that is, 0.02% of the total inflectional forms produced. Of all the inflectional morphemes, plural markers are produced the least and they never occur with more than two unique stems in any of the recordings. Typically, no omission errors are found among the number inflections (except once at 2.1.1 where the morpheme –maal was omitted). Since all the other nominal and verbal inflectional markers are in place very early, it is interesting that plurals alone show this delay.

We propose that the late acquisition of plural markers can be attributed to the late acquisition of the animacy constraint that drives the selection of the particular plural morpheme. Delayed acquisition of this lexical feature has consequences for the development of this particular piece of the inflection machinery. Although the child’s plural productions are very few and there is not enough data to directly (and statistically) test the significance of this proposal, we do have indirect means to examine the acquisition of the animacy constraint by looking at the child’s accusative case marker production and usage.

Direct objects are marked by the accusative case. In Malayalam, the animacy constraint determines the obligatoriness/optionality of the accusative case marker. More specifically, a [+ANIMATE] noun, whether [+HUMAN] or [−HUMAN], requires obligatory marking of the accusative case, while on a [−ANIMATE] object noun, the case marker is obligatorily omitted. We expect that if our proposal of the delayed acquisition of the animacy

¹The feature combination [+HUM, -ANIM] cannot exist.
²All the references mentioned here are from Stephany and Voeikova (eds.), 2009.
constraint has consequences for the production of plurals, it must also have an effect on the overt/covert accusative case marking of nouns.

From the table below, we can see that for [+ANIMATE] nouns that require obligatory accusative marking, the child has produced 22 incorrect forms and 127 correct ones. The same is not true of the [−ANIMATE] nouns, where the accusative marking is obligatorily covert (unmarked). These nouns do not require the animacy features to instantiate case marking, and there is only 1 incorrect instance and 197 correct ones.

<table>
<thead>
<tr>
<th></th>
<th>+ANIM</th>
<th>−ANIM</th>
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<tbody>
<tr>
<td>Incorrect</td>
<td>22</td>
<td>1</td>
</tr>
<tr>
<td>Correct</td>
<td>127</td>
<td>197</td>
</tr>
</tbody>
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The Fisher Exact test for this data gives a p-value of 4.6 x 10⁻⁸. Here we can say with 95% confidence that the odds of the child making an error in accusative case marking on an obligatory [+ANIMATE] noun is 5.34 to 1405 times more than that of an error of accusative marking in a non-obligatory, [−ANIMATE] instance. This tells us that the child has not yet completely acquired the animacy constraint at the age of 2.10.3 and offers indirect but tangible support for our proposal for the late acquisition of plural markers in Malayalam - markers that centre on the animacy constraint.

More specifically, the selection of the plural marker requires a three-way distinction of the animacy constraint but the accusative requires only a two-way distinction of one of the features (that is, a distinction between animate and inanimate nouns). This allows the child to use case, albeit with a high error-rate, while the three-way feature distinction with the plural marking, severely restricts plural productions to just 5 types and 58 tokens. This leads us to the larger question of how a particular inflectional assignment rule is acquired.

The three main factors that influence the acquisition of any marker are i) formal complexity, ii) relative salience, and iii) productivity (Dressler, 2012). These factors play a crucial role in the child’s acquisition of Malayalam inflections. Malayalam case and number forms are syllabic and easily segmentable and the one-to-one correspondence between meaning and form (biuniqueness) is also observed (relative salience). The forms are mostly productive - case marking being completely and plural marking being largely exceptionless (productivity). However, the formal complexity of plural and case marking on the nominal as determined by one (case) or two (number) inherent lexical-semantic features appears to cause the delay - most for plurals and somewhat less so for case. This raises interesting questions about the lexical property of animacy and its expression in the developing grammar.

References