

## Exploring anaphora binding and its acquisition: The view from Bangla and Malayalam

### Abstract

This work explores the computation of reflexive and pronominal anaphora from a recent generative perspective by investigating the division of labour between the syntax, the interpretive and conceptual system, the morphological component of the grammar, and general cognition. To do so are used secondary linguistic data, fresh native speaker judgements, and novel adult processing data and child language acquisition data from two genealogically unrelated but geographically related languages, Bangla (Indo-Aryan) and Malayalam (Dravidian). The anaphora systems of Bangla and Malayalam, although well described using the three principles of the canonical binding theory (CBT), have not been subjected to empirical scrutiny. I study what entails Bangla speaking adults' knowledge of anaphora and how children fair against this threshold.

Two picture-sentence matching tasks, and one fill-in-the blank task were done with Bangla and Malayalam speaking adults (142 and 100 participants respectively). Five child-friendly elicited production tasks were designed as picture description tasks. They were executed with 10 adults, and 19 children. The adult task results reveals that the reflexives (or the pronouns) in Bangla and Malayalam do not behave the way the CBT would expect them to. The Bangla anaphors are more compliant of the CBT than the Malayalam ones. Also discovered is that children attest knowledge of reflexives. However, children as old as 6;11 struggle with the nuances of Bangla politeness.

Children hardly produce polite pronouns, do not produce an entire set of Bangla pronouns – the *je*-set – and replace personal pronouns with demonstratives. All three are evidence of children's yet to fully develop knowledge of politeness, a socio-pragmatic aspect of language embedded in elaborate discourse. Children's trouble with discourse is well-known, and their problem with producing polite pronouns is not an indication of their lack of knowledge of principle B. Afterall, this principle describes *when* a pronoun must appear, and not *which* pronoun must appear. While adults too were not found to majorly produce formal pronouns, they made felicitous replacements. Children, however, did not. They replaced formal pronouns with non-formal counterparts, leading to infelicity. Children also show a lack of knowledge of an entire set of Bangla pronouns, the *je*-set, which is found to allow both referential and non-referential antecedents. This set is unlike the other set, the *o*-set, which only permits antecedents that are referential. *je*-set pronouns are also used to convey politeness. Further, demonstratives when used in place of personal pronouns, lower the level of politeness assigned to the referent. Children attest this error type. Politeness, therefore, eludes children. I argue that politeness is a morpho-pragmatic feature, licensed in the

periphery of the nominal and clausal spines. Children's errors can be attributed either to their lack of the feature values that build polite pronouns or their lack of an elaborate nominal periphery i.e., a nominal speech-act layer.

The discussion of the literature on Malayalam anaphora – where complex reflexives have the structure *taan*-CASEMARKER (POSTPOSITION) REFL – and the experiments with adults reveal that reflexivisation happens in the syntax, specifically in the  $\nu$ P domain. The two key features involved in reference resolution are the [REFL(EXIVE)] feature, which is morphosyntactic, and the [REF(ERENTIAL)] feature, which is morphosemantic. [REFL] is hosted on  $\nu$ , while the [REF] feature is part of the feature matrix of R-expressions or pronouns. When the [REFL] and [NREF] features are present in the numeration, a reflexive or bound pronoun is manifested, while when the [REF] feature is present, an R-expression or free pronoun is born.

One of the many drawbacks of the CBT has been its inability to explain cases where reflexives and pronouns occur in free variation. This is the case in the possessive position in both Bangla and Malayalam. I present a phase-theory based account of binding domains to explain how both possessive reflexives and possessive (bound) pronouns, which are at the edge of the DP phase, are licensed in that position.

A major contention about the syntax of anaphora has been which of the two syntactic operations, Merge or Agree, best capture the fact that anaphors and their antecedents match in (phi- or non-phi-) features. Considering the fact that Merge is a third factor operation rather than an exclusive operation of the faculty of language (FL), and that it is the simplest of operations – something children attest knowledge of – I argue that it is Merge, rather than Agree, that best explains the syntax of reference resolution. Further, phi-features, on which Agree operates, show high level of variation across and within languages. In fact, even a feature like Person, which is traditionally considered to have fixed values, shows variation. Malayalam attests cases of 'shifty person' i.e., instances, for example, where an R-expression (third person) is used as the second person.

In the Merge-based account of reference resolution that I propose, the internal Merge of the nominal that is in the direct object position into the specifier of the  $\nu$ P leads to the creation of reflexives and bound pronouns. The external Merge of nominals leads to the creation of referential expressions like proper names, kinship address terms and deictic pronouns. I lay out the legibility conditions on FL that are imposed by the conceptual-intentional (C-I) interface and the sensorimotor (SM) interface, and the late insertion rule that ensures that the right morphological forms appear, to build a model of reference resolution.