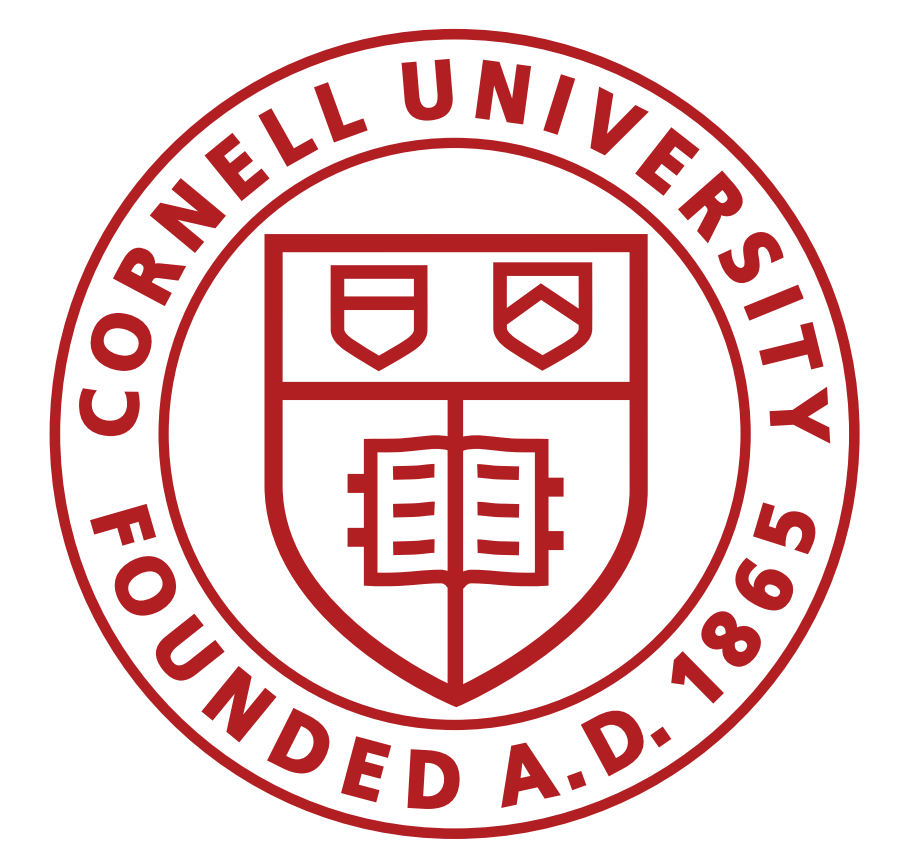


# Processing Ambiguity in Bengali Correlatives

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## Objectives

- Certain verb classes lead to ambiguity in correlatives
- An eye tracking experiment could show us how to pick out the correct referent

## Simple Correlatives in Bengali

### Non-eventive:

- (1) Raj<sub>k</sub> khoob raagi. [jey kukur-ta Meena-key<sub>j</sub>  
Raj very angry. REL dog-DET Meena-ACC  
bhalobashey]<sub>i</sub> [o<sub>k</sub>/<sub>\*j</sub> o-ke<sub>i</sub> chene]  
love.PRES DEM DEM-ACC know  
'Raj has a temper. **He/she knows the dog who loves Meena.**'
- (2) Meena<sub>j</sub> khoob raagi. [jey kukur-ta Meena-key<sub>j</sub>  
Meena very angry. REL dog-DET Meena-ACC  
bhalobashey]<sub>i</sub> [o<sub>k</sub>/<sub>\*j</sub> o-ke<sub>i</sub> chene]  
love.PRES DEM DEM-ACC know  
'Meena has a temper. **He/she knows the dog who loves Meena.**'

## Non-eventive vs. eventive verbs

According to Rosch's prototype theory (1973):

- A *non-eventive* verbs denote a situation without a clearly delineated beginning or end point and are exemplified by state verbs such as *know* and *love*.
- A *eventive* verb denotes a dynamic change which takes place within a circumscribed period of time, and which involves several actors and are exemplified by transitive action verbs like *hit*, *kiss*, *eat*, *reject*.

## Simple correlatives in Bengali

### Eventive verbs:

- (3) Raj<sub>k</sub> khoob raagi. [jey kukur-ta Meena-key<sub>j</sub>  
Raj very angry. REL dog-DET Meena-ACC  
bhalobashey]<sub>i</sub> [o<sub>k</sub> o-ke<sub>i</sub> marlo]  
love.PRES DEM DEM-ACC hit  
'Raj has a temper. **He hit the dog who loves Meena.**'
- (4) Meena<sub>j</sub> khoob raagi. [jey kukur-ta Meena-key<sub>j</sub>  
Meena very angry. REL dog-DET Meena-ACC  
bhalobashey]<sub>i</sub> [o<sub>j</sub> o-ke<sub>i</sub> marlo]  
love.PRES DEM DEM-ACC hit  
'Meena has a temper. **She(Meena) hit the dog who loves Meena.**'

## Proposal

With the context as a variable, the fixation time on the coreferent of the demonstrative positively correlates to the correct coindex and thus, resolves the ambiguity.

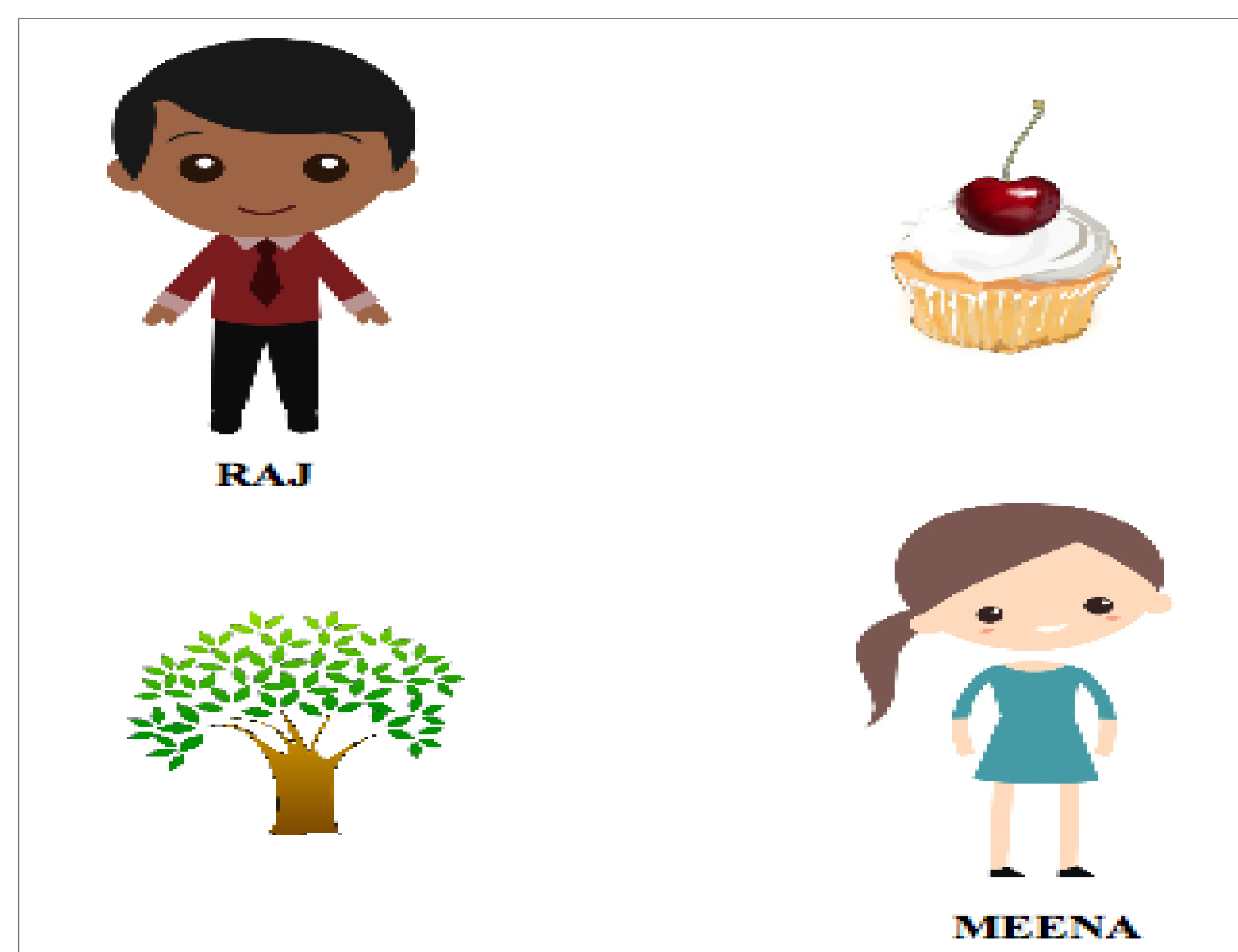


Figure 1: Visual stimuli

## Experimental design

- Eye-tracking study based on the visual world paradigm proposed by Cooper (1974) & Tanenhaus et al. (1995)
- Participants would be given examples (1) - (4) as pre-recorded audio stimuli
- Visual stimuli (Fig. 1) is based on four object display of Allopenna et al. (1998) & the positions will change with each sentence
- The visual fillers will have random images for each sentence

## Conclusion

- Eventive verbs in Bengali correlatives lead to ambiguity
- There is a testable experimental prediction which would help resolve the ambiguity in Bengali correlatives.

## Selected References

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