

Ileana Grama

## Learning Non-Adjacent Dependencies: A Mechanism for Language Acquisition

This dissertation explores the human ability for non-adjacent dependency-learning (NADL), which allows adults and infants to track the relationship between *a* and *b* in an *aXb* string. I use artificial grammar learning with adults and infants to investigate whether NADL could facilitate the detection of morpho-syntactic dependencies in natural languages (*The princess is gently kissing the frog*).

Morpho-syntactic dependencies are typically instantiated between functional morphemes (*is*, *-ing*), straddling lexical morphemes (*gently*, *kiss*). Functional morphemes are often less prosodically prominent than lexical ones. I investigate the role of prosodic cues in NADL: both adults and infants learn *aXb* dependencies when *a/b* are prosodically prominent, but also when they are prosodically weak compared to the intervening *X*. The prosodic properties of natural languages could thus facilitate non-adjacent dependency learning.

Early familiarity with the individual units of a morpho-syntactic dependency seems to precede learning of the dependency itself. I investigate how prior familiarity with *a/b* impacts learning *aXb* dependencies for adults. Previous findings suggest a negative effect of prior familiarity with *a/b*, but I find that these results are based on a confound relating to the sequential presentation of two learning phases (learning *a/b*s, and learning *aXb* dependencies). Eliminating this confound, I find no significant disadvantage of prior familiarity with *a/b*.

Finally, I show that adults can generalize *a b* dependencies to novel *aX'b* strings (with unfamiliar *X*), but 18-month-olds show no such generalization. Young learners may only be able to track dependencies in familiar contexts.

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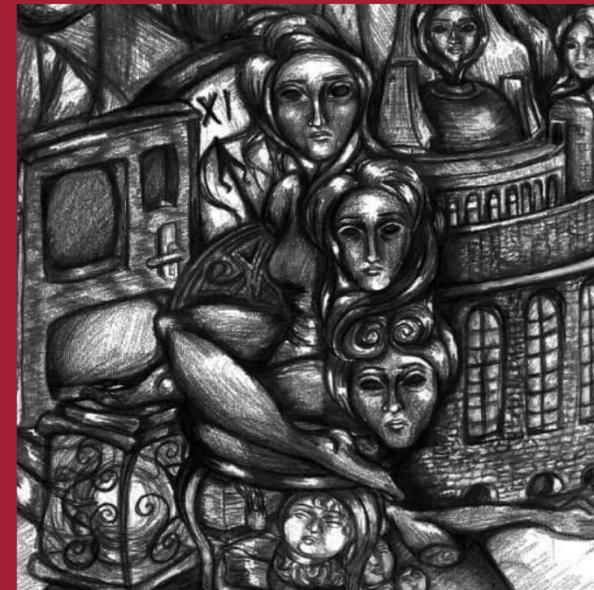
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### Invitation

to attend the public defence of my  
doctoral dissertation entitled

### Learning Non-Adjacent Dependencies: A Mechanism for Language Acquisition

on  
June 16  
at 16:15h  
in  
the Academiegebouw,  
Domplein 29 - 3512 JE Utrecht

The defence will be followed by a  
reception to which you are  
cordially invited

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