

The background features several large, overlapping, curved shapes in shades of purple, green, and blue. Interspersed among these are numerous small, yellow, triangular shapes that resemble sun rays or confetti. The overall aesthetic is bright and dynamic.

# **A Study of Stress in Jakarta Indonesian**

**By**

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# Introduction

- Prosody is a very important element in all spoken languages (Himmelman and Ladd. 2008) yet there are still few studies conducted in this field (especially insofar as the relationship between prosody and syntax is concerned).
- Jakarta Indonesian is a language whose prosodic features are little known (this is a first step towards a description of prosody in Jakarta Indonesian)



# Crux of the problem

- *Naek motor*                      *guwe*  
go.up motorbike                  1SG  
1. 'I took my motorbike'  
2. 'I took a motorbike '



# Minimal pair sample data

3. [<sub>VP</sub>*naek* [<sub>NP</sub>*motor* ***gúwe***]]

'I rode my motorcycle'.



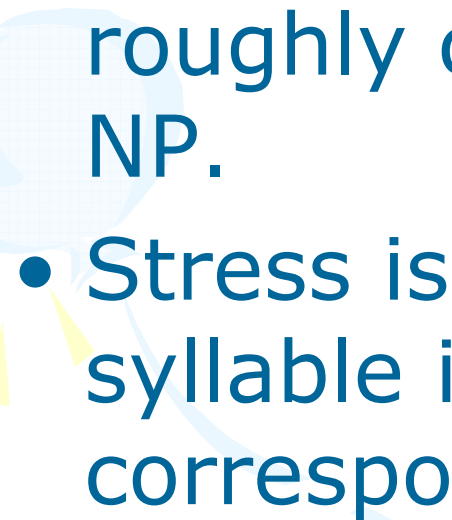
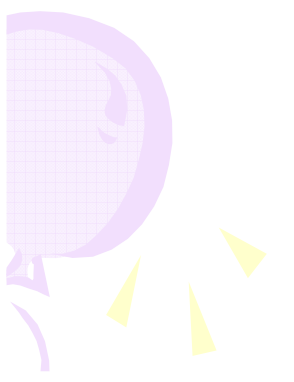
4. [<sub>VP</sub>*naek* [<sub>NP</sub> ***mótor***] [<sub>NP</sub>*guwe*]]

'I rode a motorcycle'.





# Hypotheses

- stress is assigned to the penultimate syllable in a phonological phrase that roughly corresponds to the object NP.
  - Stress is assigned to the penultimate syllable in a phrase that roughly corresponds to the clause.
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- 




# Aim

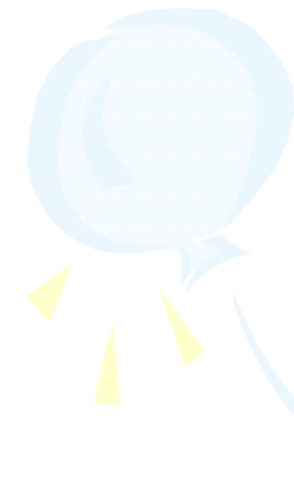
- To test the hypothesis that **stress placement in different parts of the same sequence of words in Jakarta Indonesian is used to signal different syntactic structures.**



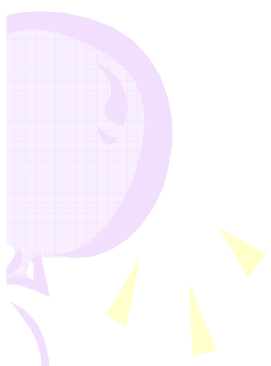
# Experiment Procedures

- make up some sample paragraphs in Jakarta Indonesian containing a context that would force the interpretation of the relevant clauses as containing either of the structures in (3) or (4).


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5. *Di rumah guwe ada tiga VW: punya guwe, kakak guwe dan adik guwe. Karena kakak guwe lagi di luar negeri, guwe suka bawa mobilnya karena guwe seneng aja ama warnanya. Tetapi sekarang karena kakak guwe udah balik, guwe ga bisa bawa mobil dia lagi. Kayak tadi pagi, ke kantor **naek VeWe guwe.***



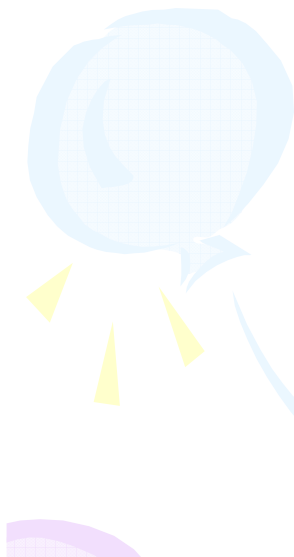
'At my home there are three VW cars: mine, my older brother's and my younger brother's. Because my older brother had gone abroad I used to drive his car just because I loved its color. But now since he's back I can't drive his car anymore. Like this morning, to the office, **I drove my (own) car.**'



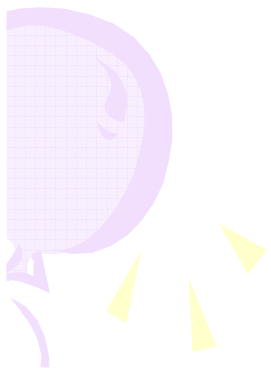


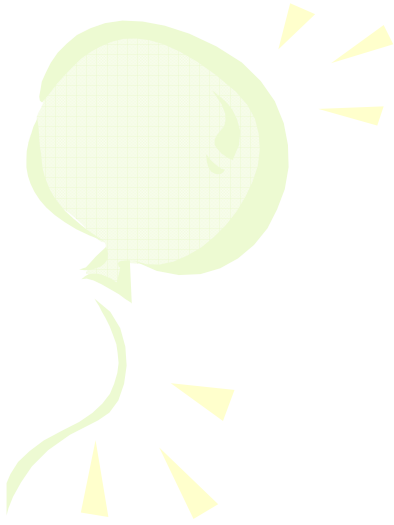


6. *Di rumah guwe ada tiga motor: punya guwe, kakak guwe dan adik guwe. Karena kakak guwe lagi di luar negri, guwe suka bawa motornya karena guwe seneng aja ama warnanya. Tetapi sekarang karena kakak guwe udah balik, guwe ga bisa bawa motor dia lagi. Kayak tadi pagi, ke kantor **naek motor guwe.***

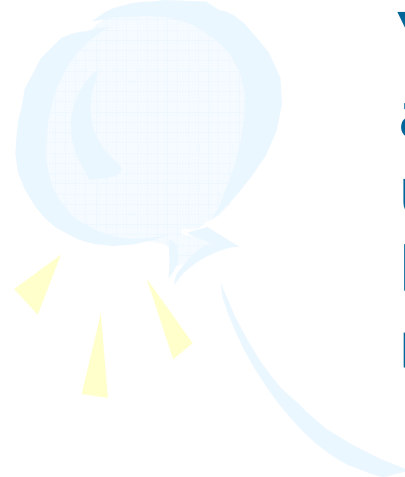


'At my home there are three motorcycles: mine, my older brother's and my younger brother's. Because my older brother had gone abroad I used to drive his motorcycle just because I loved its color. But now since he's back I can't drive his motorcycle anymore. Like this morning, to the office, **I drove my (own) motorcycle.**'

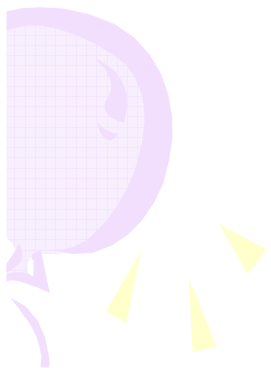





7. *Bokap guwe punya tiga kendaraan di rumah: sedan, pick-up ama motor. Biasanya sih guwe bawa motor ke kampus, tetapi karna tadi pagi ujan deres, akhirnya **bawa sedan guwe.***



'At home my father has three vehicles: a sedan, pick-up and a motorcycle. I usually take the motorcycle to school. However since it was raining this morning **I drove the sedan.**'

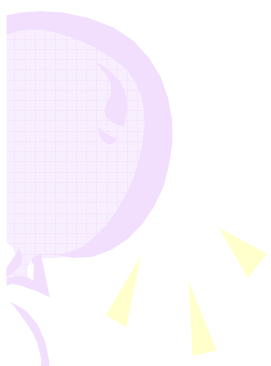




8. *Biasanya guwe ke kampus naek motor. Tapi tadi pagi motor guwe rusak, jadi **naek taksi guwe.***



'Usually I drive a motorcycle to school. But this morning it was broken, so **I took a taxi.**'

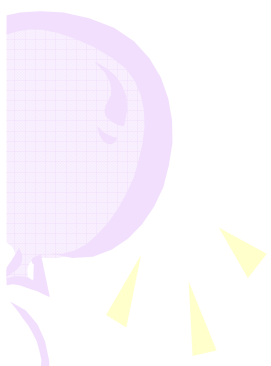


- 
- ask native speakers of Jakarta Indonesian to read each of the paragraphs in a natural manner.

- Record the paragraph readings with an audio recorder
- Four speakers were recorded

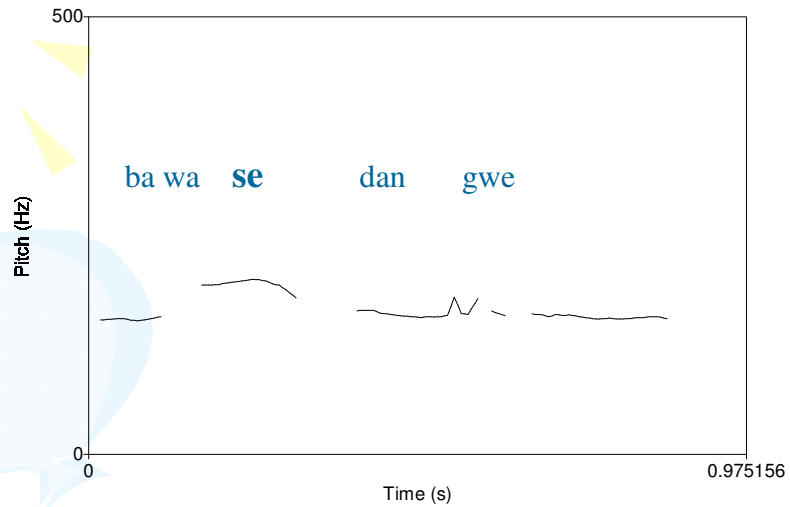
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- capture the stress in the recording in the form of pitch contours

- Use Praat software (developed by scholars from the university of Amsterdam for speech analysis)
- It makes it possible to see a visual representation of the pitch contours of the stresses



# Results

Figure 1. [*bawa sedan*]<sub>VP</sub> *guwe* 



***se*** and ***tak*** on the pitch peak

Figure 2. [*naek taksi*]<sub>VP</sub> *guwe* 

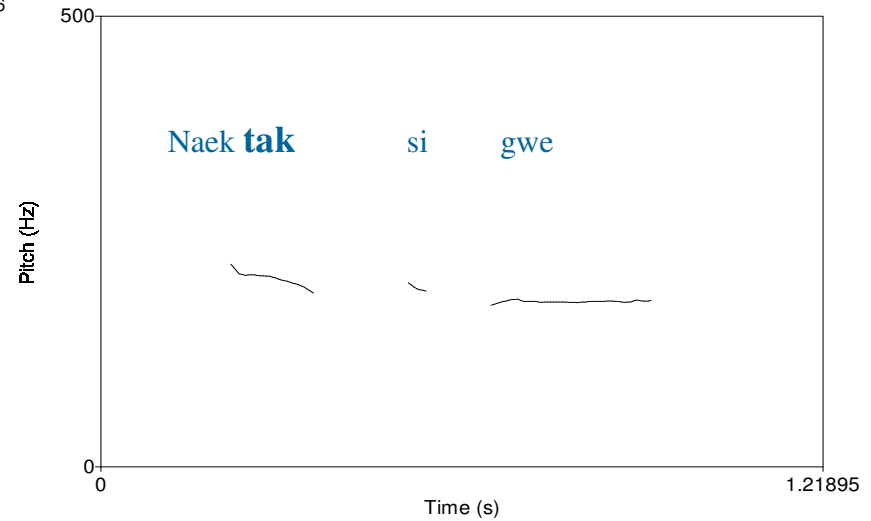
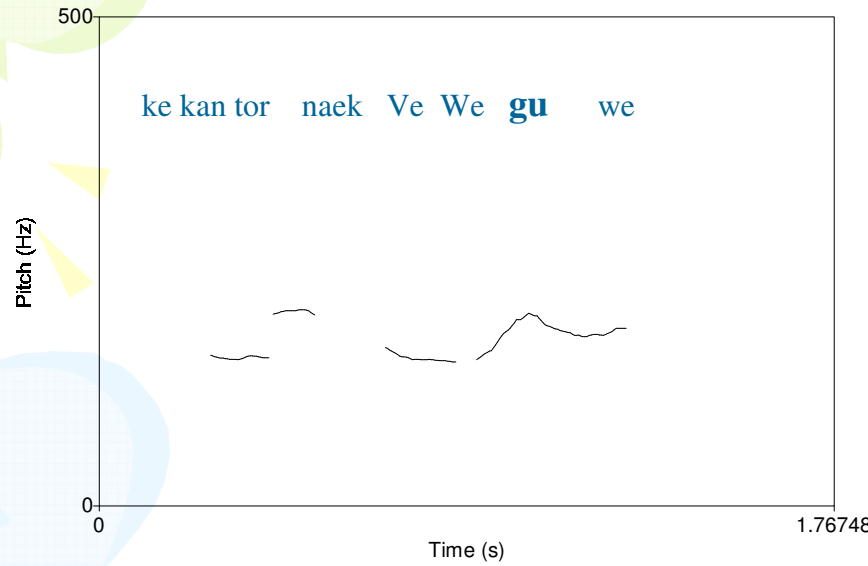
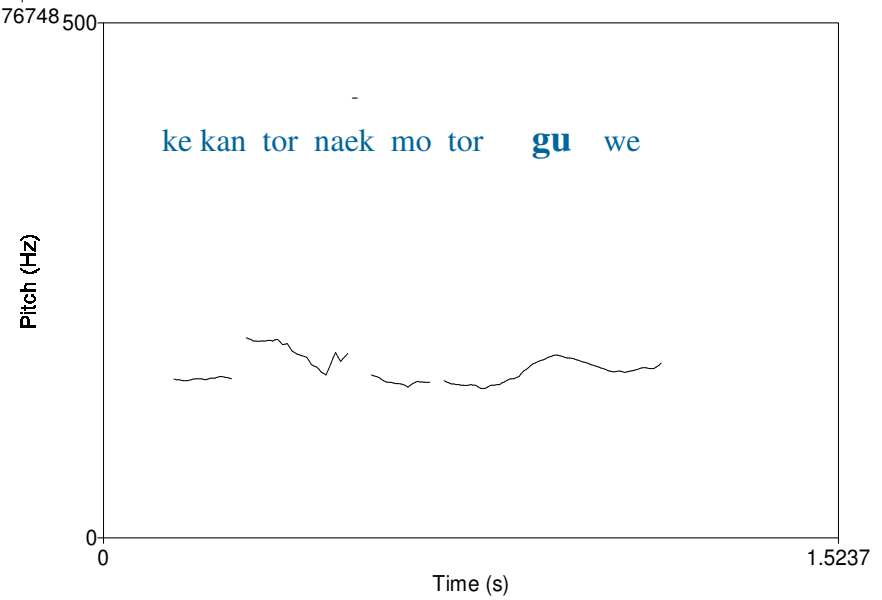


Figure 3. [<sub>VP</sub>naek [<sub>NP</sub>VeWe guwe]] 



**gu** on the pitch peak

Figure 4. [<sub>VP</sub>naek [<sub>NP</sub>motor guwe]] 



# Discussion

- Two competing hypotheses

- stress is assigned to the penultimate syllable in a phonological phrase that roughly corresponds to the object NP.

(1) naek [<sub>NP</sub> motor **gú**we]

(2) naek [<sub>NP</sub> **mó**tor] [<sub>NP</sub> guwe]

each NP receives stress on its penultimate syllable however *motor* receives sentential stress as the object of the sentence.

- stress is assigned to the penultimate syllable in a phrase that roughly corresponds to the clause.

(1) [<sub>VP</sub> naek motor **gú**we ]

(2) [[naek **mó**tor]<sub>i</sub> [<sub>VP</sub> guwe [t<sub>j</sub>]]]

- No word-level stress in Jakarta Indonesian

- (stress is not always assigned to every word, but just occurs once or twice in a particular phrase)



# Conclusion

- in Jakarta Indonesian stress placement signals different syntactic structures (especially between possessive and clausal constructions) – as has been demonstrated through an analysis of relative pitch contours in competing utterances, based on the use of Praat software





# References

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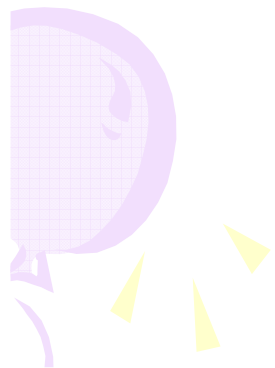
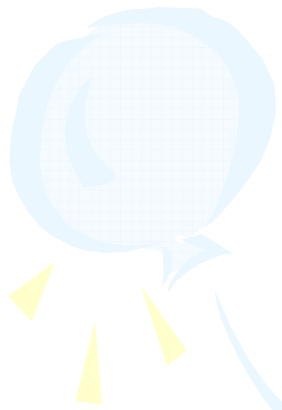
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Thank You