

Introduction

We analyzed three types of basic copula clauses in Indonesian: copula clauses with noun phrase (NP) expressing the notions of ‘proper inclusion’ and ‘equation’, adjective phrase (AP) expressing ‘attribution’, and prepositional phrase (PP) predicates expressing ‘location’. Our analysis is implemented in the Indonesian Resource Grammar (INDRA), a computational grammar for Indonesian (Moeljadi et al., 2015):

<http://moin.delph-in.net/IndraTop>.

Copula clauses with NP pred.

Three copula verbs which may appear are (1) *adalah*, (2) *ialah*, and (3) *merupakan*.

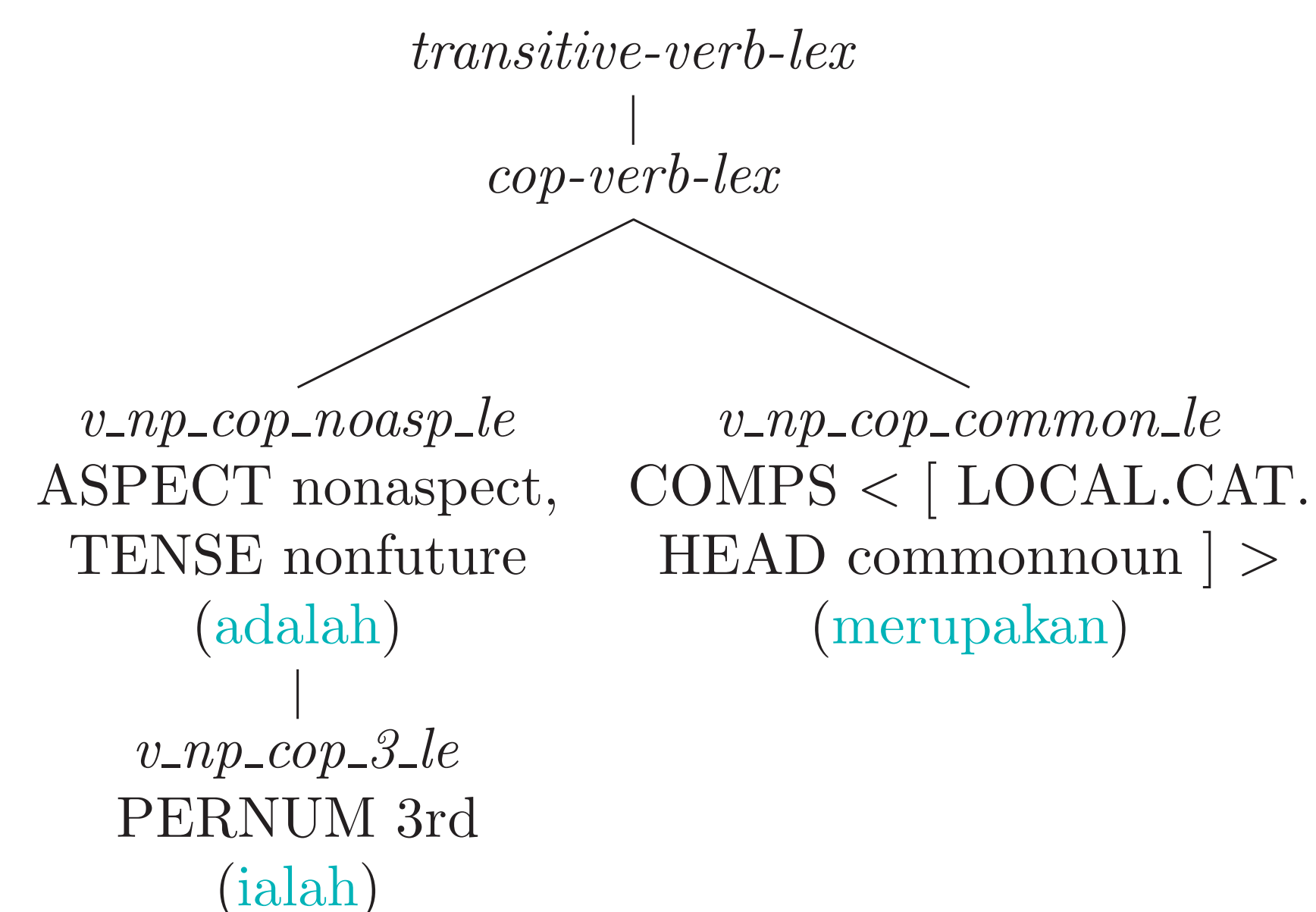


Figure 1: Type hierarchy of copula verbs

Some examples:

- (1) a. *Budi (adalah/ialah/merupakan) guru.*
Budi COP teacher
“Budi is a teacher.”
- b. *Budi (adalah/ialah/merupakan) guruku.*
Budi COP teacher=1SG
“Budi is my teacher.”
- c. **Saya ialah guru.*
1SG COP teacher
Intended meaning: I am a teacher.
- d. **Orang itu merupakan Budi.*
person that COP Budi
Intended meaning: That person is Budi.

- Copula *adalah*, *ialah*, and *merupakan* take two arguments, similar to transitive verbs
- Our analysis follows the Montagovian treatment as presented in Van Eynde (2009)

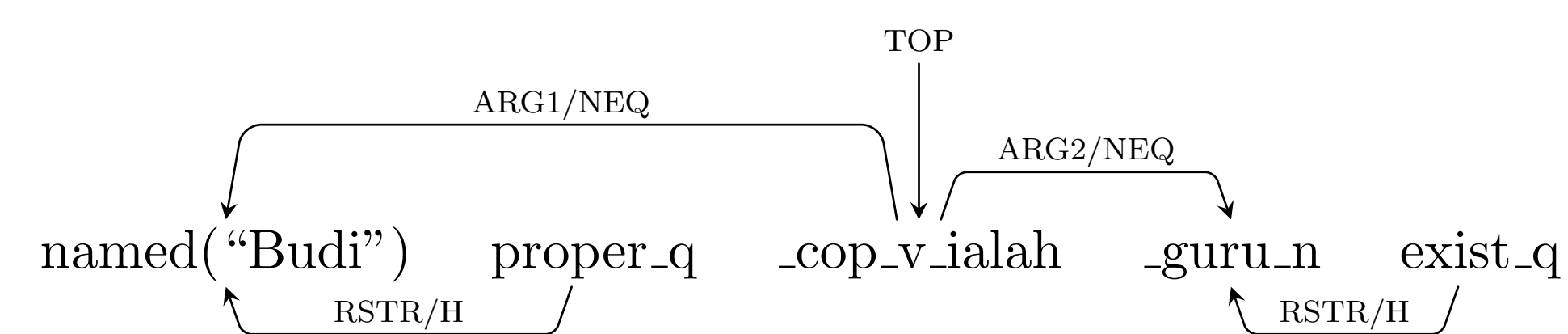


Figure 2: DMRS of *Budi ialah guru*

- A pumping rule which pumps an NP to a VP was made for zero copula clauses
- A predicate *cop_v_zero_rel* with the subject as ARG1 and the NP predicate as ARG2 is introduced, covering both identificational and predicational relations, which Indonesian does not distinguish syntactically

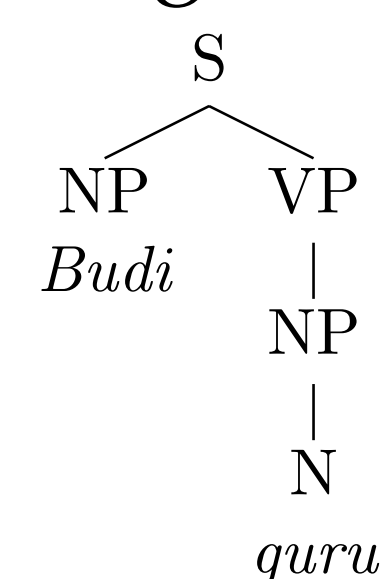


Figure 3: Parse tree of *Budi guru*

- The syntactic structure is similar to the one in Arka (2013) → any lexical category can be a predicate
- Our zero copula analysis corresponds to ‘Constructional analysis II’ in Bender (2001) → does not work for African American Vernacular English (AAVE) but can be implemented for Indonesian because of differences in syntactic structure

Copula clauses with AP pred.

A copula *adalah* may appear, as in (2).

- (2) *Budi (adalah) pandai.*
Budi COP clever
“Budi is clever.”

- Predicative APs take one argument (NP as the subject), similar to intransitive pred.
- *adalah* is treated as an auxiliary which does not introduce a predicate

- The MRS of the clauses with and without *adalah* are the same

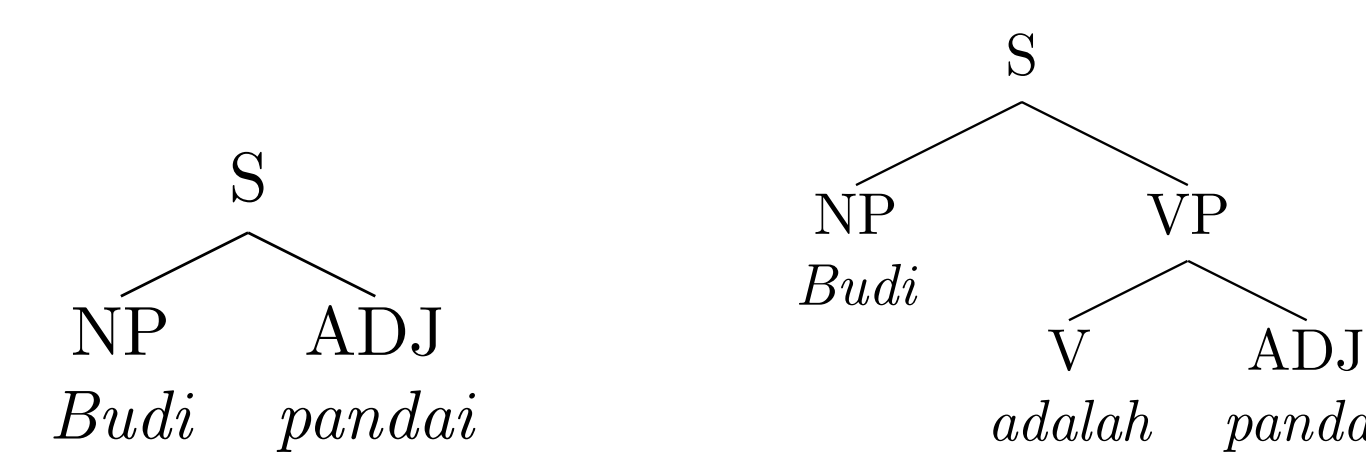


Figure 4: Parse trees of *Budi pandai* and *Budi adalah pandai*

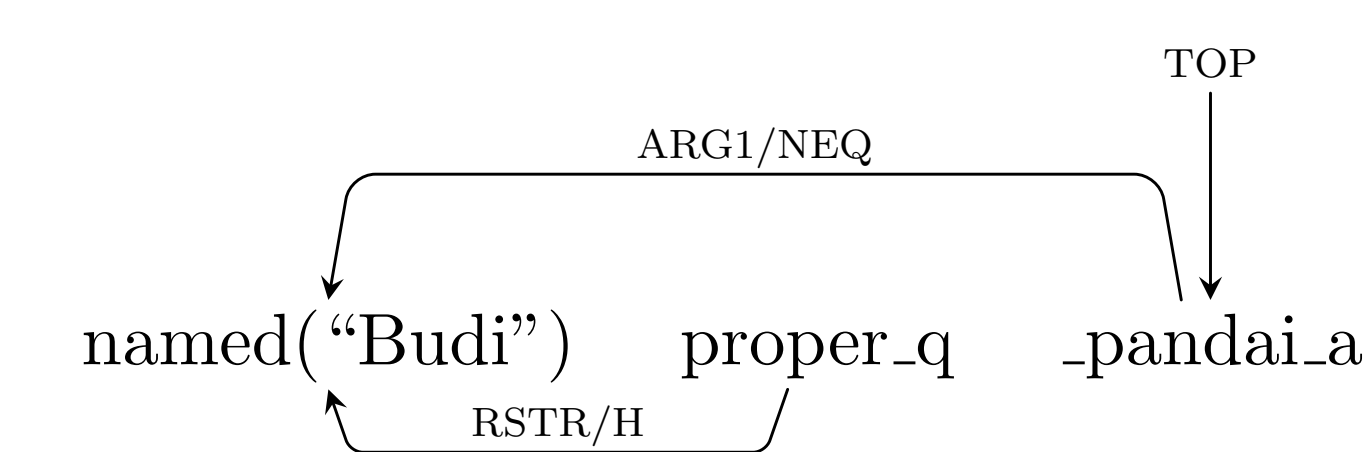


Figure 5: DMRS of *Budi (adalah) pandai*

Copula clauses with PP pred.

Copula *adalah* or *ialah*, as well as an existential verb *ada* or *berada* may appear as in (3).

- (3) *Budi (adalah/ialah/ada/berada) di rumah.*
Budi COP/EXIST at home
“Budi is at home.”

- Predicative PPs take two arguments, similar to transitive predicates
- *adalah*, *ialah*, *ada*, and *berada* are treated as aux. which do not introduce a predicate
- The MRS of the clauses with and without *adalah*, *ialah*, *ada*, or *berada* are the same

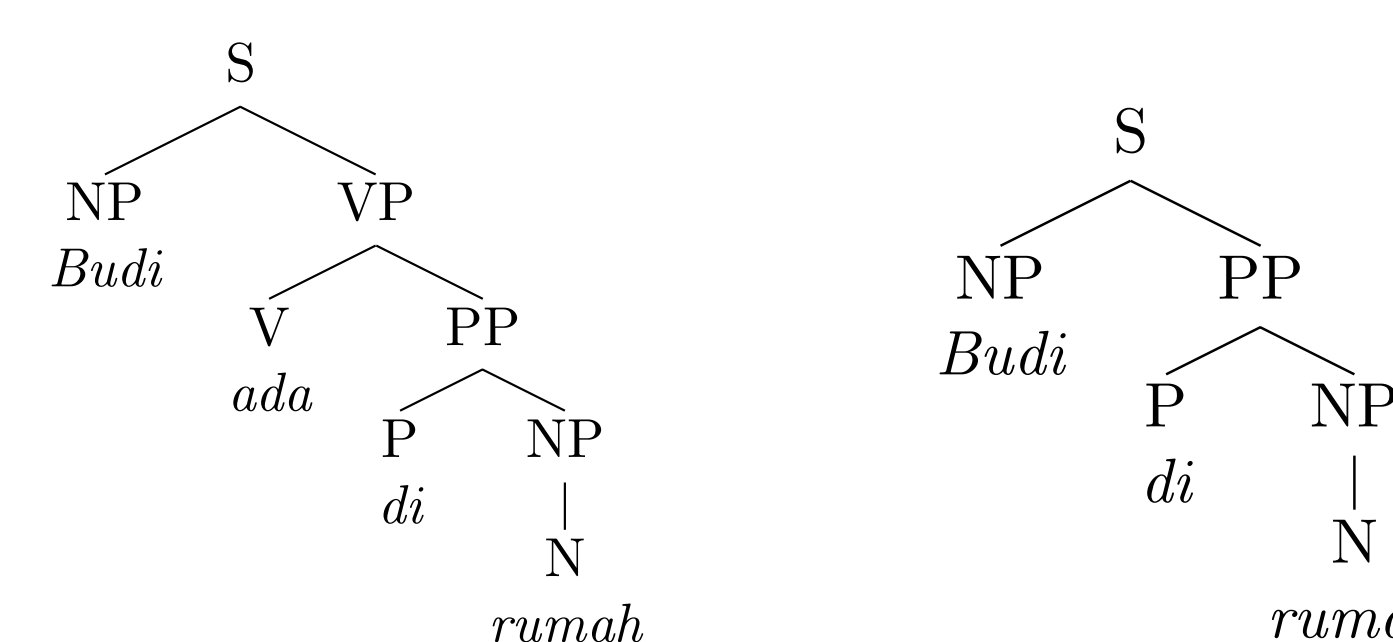


Figure 6: Parse trees of *Budi ada di rumah* and *Budi di rumah*

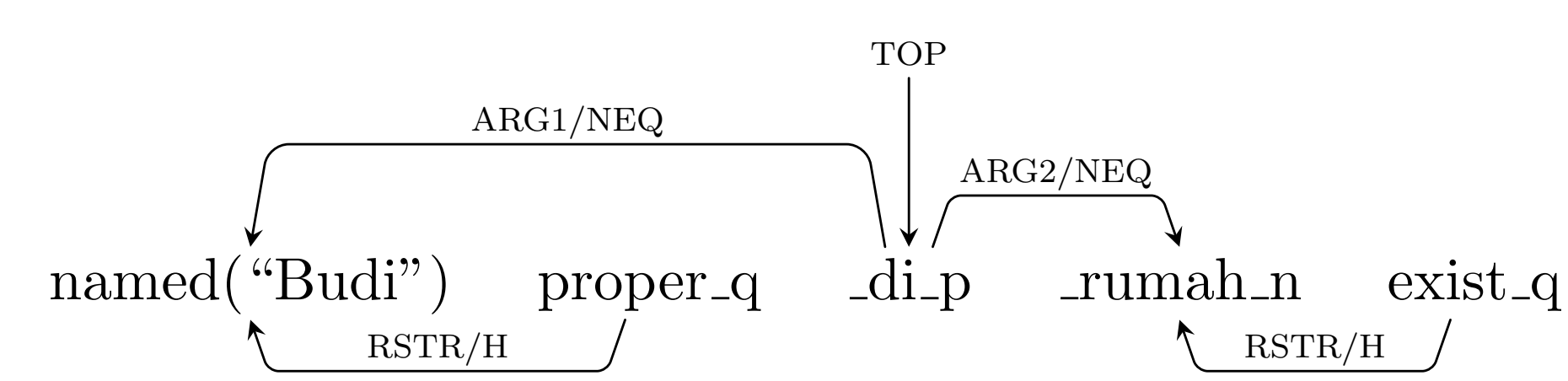


Figure 7: DMRS of *Budi (ada) di rumah*

Generation

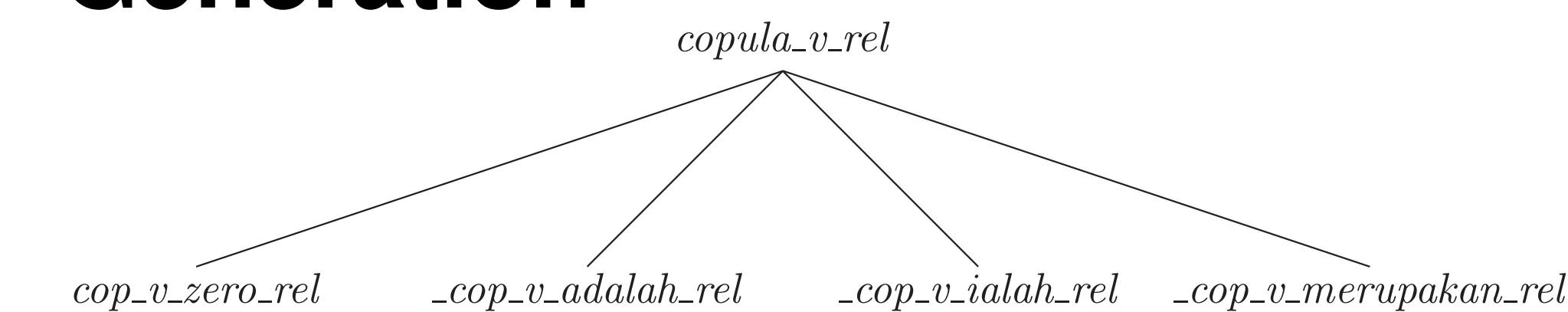


Figure 8: Semantic hierarchy of copulas

Having been implemented in INDRA, we can generate other possible copula clauses with different copulas from one input clause:

Input:	Input:
Budi merupakan	Budi ada di
guru	rumah
Output:	Output:
Budi guru	Budi di rumah
Budi ialah guru	Budi berada di
Budi adalah guru	rumah
Budi merupakan	Budi sudah berada
guru ...	di rumah ...

Conclusion

Our analyses of Indonesian copula clauses are similar to Arka (2013)’s LFG analysis but covers more copula verbs with a refined type hierarchy. Because of differences in syntactic structure between AAVE and Indonesian, the analysis that builds a VP out of a predicative NP, which does not work for AAVE, can be successfully implemented for Indonesian.

References

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