Introducing *Diri*:
Is It an Argument or Something Else?

Bambang Kartono, Eric Reuland & Martin Everaert
Utrecht institute of Linguistics OTS, E-mail: b.kartono@uu.nl
Contents

- Introduction
- Research questions
- Introducing *Diri*
  - Indonesian
  - Palembangnese
  - Jambi
  - Lampungnese
- Conclusion
Introduction

- There is substantial variation in the way languages express reflexivity (Reuland 2011, 2017), which cannot be captured by the binding theory of Chomsky (1981).

- One of the goals of the current project is to investigate the unity underlying this diversity, by teasing apart the different factors involved in expressing interpretive dependencies.

- 1. Def: A (transitive) predicate is reflexive iff one argument bears two of its theta-roles

- Russian: Ivan mojetsja – English John washes

- How derived? as in (2)?

  2. \( \lambda x (\lambda y (V_{\theta_1,\theta_2} (x, y))) \rightarrow (\lambda x (V_{\theta_1,\theta_2} (x, x))) \)

    Not an innocuous operation:

- Russian: *Ivan nenavidetsja – English *John hates
- Natural language avoids identical expressions in a local domain – Local identity avoidance (see Reuland 2017 for a detailed discussion) \( \rightarrow \) reflexivity must be licensed

- Captures certain standard instances of condition B of Canonical Binding Theory (CBT, Chomsky 1981): Pronominals are free in a local domain

  3. a. \( \text{Juliet}_{i} \) \( \text{men-cinta-i} \) \( \text{dia}_{i_{k}}. \) \([\text{Indonesian}]\)

  \( \text{Juliet} \) \( \text{AV-love-CAU} \) \( \text{her} \)

  ‘Juliet loves her.’

  b. \( \text{Juliet}_{i} \) \( (\lambda x (\text{mencintai}_{\theta_{1},\theta_{2}} (x, x))) \)

- Licensing reflexivity:

  4. a. Detransitivization: Reducing one argument and bundling the roles into a composite theta-role (Reinhart & Siloni 2005)

  b. Keeping the arguments distinct (protection) \( \rightarrow \) near reflexivity (Reuland 2001, Lidz 2001, Reuland 2011)
Some Austronesian languages, including Indonesian, two dialects of Jambi, Palembangnese, Javanese, and others have elements that are in some sense in-between anaphors and pronominals (Kartono 2013), and are puzzling for the CBT (see Cole et al. 2008, 2015).

I refer to these as 'half reflexives', since they can be both locally and non-locally bound.

Kartono (2013), Reuland (2016, 2017): Their existence is expected: dirinya is sufficiently complex to keep the arguments distinct, but does not enforce local binding.

5. a. \textit{Andi}_i \text{mem-}(p)ukul \textit{diri-nya}_i/j.  \\
Andi AV-hit body-3SG.GEN  \\
‘Andi hit himself.’

b. \textit{Andi}_i \text{meng-(k)ata-kan} \text{mereka} \text{mem-}(p)ukul \textit{diri-nya}_i.  \\
Andi AV-say-kan 3PL AV-hit body-3SG.GEN  \\
‘Andi said that they hit him.’

c. \textit{Andi}_i (\lambda x (\text{memukul}_{\theta_1,\theta_2} (x, [\text{diri} \ x])))
Introducing *Diri*: Verb + *diri*

- Indonesian has another strategy with the element *diri*
- *Diri* traditionally means ‘body’ or ‘self’
- Combining a verb + *diri* results in a reflexive interpretation

   [Indonesian]
   3sg AV-wash body in river
   ‘He washed himself in the river.’

   - Subject agreement (Voskuil 1990, Cole et al. 1999, Sato 2010)
Introducing *Diri*: Verb + *diri*

- Elements similar to *diri* can be also be found in other Austronesian languages, such as in *two dialects of Jambi, two dialects of Palembangnese, and two dialects of Lampungnese.*

7. Anton *m-basuh diri* di sungai. [City Palembangnese]
   Anton AV-wash body in river
   ‘Anton washed himself in the river.’

8. Dio *nge-basuh diri* balik kerjo. [City Jambi]
   3sg AV-wash body return work
   ‘He washed himself after work.’

9. Rita *mbasuh dikhi* pas mulang kerja. [Lampungnese dialect O]
   Rita AV-wash body when return work
   ‘Rita washed herself after she returned from work.’
Introducing *Diri: Verb + diri*

- Similarly to simplex anaphors like Dutch *zich*, or affixes like Russian –*sja*, Indonesian *diri* is restricted to a subset of agent-theme verbs such as *to defend, to injure, to wash* and *to primp*.

10. Anton mem-basuh diri. [Indonesian]
   Anton AV-wash body
   ‘Anton washed (himself).’

- By contrast, verbs such as *to love, to hate, to like* and *to see* cannot be combined with *diri*.

11. *Anton mem-benci diri.* [Indonesian]
   Anton AV-hate body
   ‘Anton hates himself.’
The element *diri* is allowed in constructions such as in (10) but not in (11). This triggers questions:

- What is actually the role of *diri*?
- Is it an anaphor in argument position or is it something else?
Reinhart and Siloni (2005) provide a detailed study of reflexivization. They argue that cross-linguistically, one of the operations involved in reflexivization is a lexical process of bundling and detransitivization, where an agent role and a theme are bundled into a complex [agent-theme] role which is assigned to the remaining subject argument.

This accounts for the close connection between reflexivization and detransitivization observed in many languages.

In this approach elements like Dutch *zich* or the Russian suffix *sja* are not arguments, but elements licensing the lexical bundling operation by eliminating a residual marker of transitivity (such as Case in Dutch or Russian).
Reinhart and Siloni (2005) argue that the operation underlying reflexivization involves a bundling operation reducing the internal argument and assigning the bundled role to the remaining argument:

\[ \text{Reflexivization - Bundling} \]

\[ \theta_i \theta_j \rightarrow [\theta_i - \theta_j] \]

where \( \theta_i \) is an external \( \theta \)-role

(12) a. Verb entry: \( \text{wash}_{\text{acc}} (\theta_1, \theta_2) \) (NB: transitive \( \text{wash} \) assigns Case)

b. Bundling output: \( \text{wash} [\theta_1 - \theta_2] \) (NB: acc Case eliminated)

c. Logical syntax representation: \( (\lambda x (\text{wash}_{\theta_1-\theta_2} (x))) \).

d. \( \ldots V_{[\theta_1], [\theta_2]} (x, y) \rightarrow \ldots V'_{[\theta_1-\theta_2]} (x) \)

(\( \text{where} \ [\theta_1-\theta_2] \text{ stands for the Bundling of } \theta_1 \text{ and } \theta_2 \))
Proxy reading (Jackendoff 1992)

13. {Upon a visit to a wax museum:} All of a sudden
   Ringo started undressing *himself.*
   
   \((\text{OKRingo, OKRingo's statue})\)

14. {Upon a visit to a wax museum:} All of a sudden
   Ringo started undressing.
   
   \((\text{OKRingo, *Ringo's statue})\)
Testing for argumenthood 2

Proxy reading

15. {Upon a visit to a wax museum,}
Ringo memasuki museum yang dipenuhi banyak orang yang menunggu kedatangannya.

(‘Ringo entered a museum that was full of people who were waiting for his arrival.’)

Kemudian, Ringo men-ampil-kan diri-nya sendiri.
Then, Ringo AV-display-CAU body-3gen self
‘Then, Ringo displayed himself.’

(\textit{OK}Ringo, \textit{OK}Ringo’s statue)
Testing for argumenthood 3

Proxy reading

16. {Upon a visit to a wax museum,}

Ringo memasuki museum yang dipenuhi banyak orang yang menunggu kedatangannya.

(‘Ringo entered a museum that was full of people who were waiting for his arrival.’)

Kemudian, Ringo men-(t)ampil-kan diri-nya.

Then, Ringo AV-display-CAU body-3gen

‘Then, Ringo displayed himself.’

(OKRingo, OKRingo’s statue)
Proxy reading

The element diri – Indonesian

17. {Upon a visit to a wax museum,}
Ringo memasuki museum yang dipenuhi banyak orang yang menunggu kedatangannya.
(‘Ringo entered a museum that was full of people who were waiting for his arrival.’)

Kemudian, Ringo men-(t)ampil-kan diri.
Then, Ringo AV-display-CAU body
‘Then, Ringo displayed himself.’

(OK Ringo, *Ringo’s statue)
Further tests for argumenthood 1

Object comparison

18. John *washes himself* more often than George.

**Object comparison**

John washes himself more often than *John washes George*.

allows object comparison: *himself* is argument

19. John *washes* more often than George.

**Object comparison**

*John washes himself more often than John washes George*.

Doesn’t allow object comparison: no argument

(Dimitriadis and Everaert 2014)
Further tests for argumenthood 2

Object Comparison

[Indonesian]

20. Budi mencubit dirinya/dirinya sendiri lebih sering daripada Anton.

a. Object comparison
   
   Budi pinched himself more than Budi pinched Anton.

21. Susi mem-basuh diri lebih sering daripada Anna.

b. Object comparison
   
   *Susi washes herself more than Susi washes Anna.
Strict and Sloppy Readings

- VP Ellipsis

22. Anton mem-basuh diri di sungai dan Rudy juga.

‘Anton washes himself in the river and so does Rudy.’

- Sloppy = Anton washes himself in the river and Rudy washes himself in the river.

- Strict ≠ Anton washes Anton and Rudy washes Anton.
Conclusions about *Diri*

Bare *diri* is not an independent argument since it lacks the relevant properties as shown by:

- The proxy reading test

- The object comparison test

- In VP Ellipsis it only allows a sloppy reading

- This indicates that *diri* in such constructions is an element that licenses the lexical bundling operation.

- More specifically it eliminates a residual transitivity marker e.g. accusative case as in Reinhart and Siloni (2005).
How we do know that there is bundling?

- Dimitriadis and Everaert (2014) develop a test to identify the presence of syntactically accessible agent and theme/patient roles regardless of their syntactic position.

- I apply the test to see whether these roles are active in the reflexive predicates involving the element diri.
Testing for Agents and Patients

Testing for Agent

- Adverb *carefully* targets agents, not subjects (23a), whereas (23b) completely lacks an agent.

23.  
   a. John *threw* the rock *carefully*.  
   b. *John *feared* the snake *carefully*.

- In Dutch the adverb *opzettelijk* ‘intentionally’ is used as an agent-oriented adverb (24).

24. Jan *gooide* de kei *opzettelijk*.  
    Jan threw the rock *intentionally*.

Dimitriadis and Everaert (2014)
The same test is applied to see whether reflexive verbs with *diri* are also agentive (using the Indonesian counterparts of the adverbs used previously).

   Ringo AV-basuh body with heart-DUPL
   ‘Ringo washes himself *carefully*.’

   b. Anna *dengan sengaja* ber-hias diri.
   Anna with intention INTRA-primp body
   ‘Anna prims herself *intentionally*.’
26. Anna **nyelametke diri** dengan ati-ati.  [City Palembangnese]  
Anna AV-save-CAU self with heart-Dupl  
‘Anna saved herself carefully.’  

27. Anna **sengaja mbasuh dikhi**.  [Lampungnese dialect A (Api)]  
Anna intentionally AV-wash body  
‘Anna washed herself intentionally.’  

28. Anna **sengajao n-(t)unjuk-ken dighei** di depan ulun rame.  [Lampungnese dialect O (Nyo)]  
Anna intentionally AV-show-CAU self in front people many  
‘Anna displayed herself intentionally in front of many people.’
Some adverbs require a syntactically realized theme, such as *completely, painfully.* These can be used to demonstrate the presence of a theme role.

This is illustrated in (29).


(Dimitriadis and Everaert 2014)
If the theme role is accessible in verbs with *diri*, then these verbs should allow modification by adverbs such as *completely, partly or painfully*. The relevant examples are given in (30).

30. a. Anton membasuh diri seutuhnya/seluruhnya.
    Anton AV-basuh body completely.
    ‘Anton washes himself *completely.*’

b. Anna berhias diri selengkapnya.
    Anna INTRA-primp body completely.
    ‘Anna primp herself *completely.*’

The sentences in (30a,b) are both grammatical. This shows that the theme role is indeed present in both examples.
31. Anto *ngebasuh diri* seutuhnyo.  
   Anto AV-wash body completely  
   ‘Anto washed himself completely.’  
   [City Palembangnese]

32. Anto *mbasuh dikhi* seutuhni.  
   Anto AV-wash body completely  
   ‘Anto washed himself completely.’  
   [Lampungnese dialect A (Api)]

33. Anto *nyulukken dighei segalano* di depan ulun rame.  
   Anto AV-display-CAU body completely in front many people  
   ‘Anto displayed himself completely in front of many people.’  
   [Lampungnese dialect O (Nyo)]
Conclusion

- Given the tests for argumenthood, the element diri is not an argument.

- The tests for agent and patient show that these roles are still accessible after bundling.

- Bare diri functions as an element that licenses the lexical bundling operation yielding reflexive verbs.

- More specifically it does so by eliminating a residual marker of transitivity, such as accusative case.
Thank you
References:


- KBBI, Indonesian online dictionary. https://www.kbbi.web.id/
References: