Parametric Variation in Reflexive Classification: Evidence from Japanese

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1 Introduction

- Some languages have only one form of reflexive anaphor:

(1) English pronoun+self such as himself, herself and themselves

Several languages have more than one form of reflexive anaphor:

Korean caki ‘self,’ casin ‘self,’ caki-casin ‘self-self,’ ku-casin ‘him-self,’ ca-/caki- ‘self-
Dutch zich ‘self,’ zichzelf ‘selfself,’ and ’m zelf ‘himself’ etc.

- The questions we have now:

(3) How do these anaphors differ? How are they classified in a language?

- The analysis that we follow:

(4) Lidz (1996, 2001a,b)

Anaphors are semantically different: Pure reflexive anaphors and Near reflexive anaphors

- What I would like to propose:

(5) Parametric variation in the two-way classification of reflexive anaphor among languages

a. Morphologically simplex anaphors and complex anaphors
   (e.g. Dutch, Kannada, Malayalam etc.)

b. Affixal anaphors and non-affixal anaphors
   (Japanese, Russian, Korean, Turkish etc.)
2 Reflexivity

- Reinhart and Reuland (1993) classify anaphors into two types based on their morphological complexity.

(6) a. Morphologically complex anaphors (e.g. *zichzelf ‘selfself’ in Dutch) function as reflexivizers that add reflexivity to predicates that lexically lack reflexivity.

b. Morphologically simplex anaphors (like Dutch *zich ‘self’) do not have the reflexivizing function.

(7) a. Max haat [-Ref] {zichzelf / *zich}. [Dutch]

   Max hates {selfself / *self}

   ‘Max hates himself.’

b. Max wast [+Ref] *zich

   Max washes self

   ‘Max washes himself.’ (Reinhart and Reuland, 1993, 665-666)

(8) Their approach makes us an interesting prediction: the predicates in (7a) with *zichzelf and (7b) with *zich form a natural class semantically.

3 Two types of Reflexivity

- Lidz (1996, 2001a,b) demonstrates that anaphors in a language show semantic difference when locally bound and that the reflexive predicates in (7a) and (7b) do not semantically form a natural class.

(9) Diagnostic #1: (Un)availability of “statue reading” in the Madame Tussaud context\(^1\)

   a. Ringo scheert *zich.

      Ringo shaves self

      ‘Ringo shaves himself.’ (*zich = Ringo, *statue of Ringo)\(^2\)

   b. Ringo scheert *zichzelf.

      Ringo shaves selfself

      ‘Ringo shaves himself’ (*zichzelf = Ringo, statue) (Lidz, 2001a, (29))

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\(^1\)The Madame Tussaud context is first discussed in Jackendoeff (1992).

\(^2\)Reinhart and Reuland (1993) assume that the predicates *scheert ‘shaves’ in (9) and *verdedigde ‘defended’ in (10) have two usages: the predicates in the (a) examples are used as reflexive, while the ones in the (b) examples are non-reflexive.
Diagnostic #2: (U)navailability of non-sloppy identity reading in comparative deletion constructions

a. Zij verdedigde **zich** beter dan Peter
   she defended self better than
   ‘She defended herself better than Peter defended himself’ (sloppy identity reading)
   *‘She defended herself better than Peter defended her’ (*non-sloppy identity)

b. Zij verdedigde **zichzelf** beter dan Peter
   she defended self itself better than
   ‘She defended herself better than Peter defended himself’ (sloppy identity)
   ‘She defended herself better than Peter defended her’ (non-sloppy identity) (Lidz, 2001a, (30))

The two reflexive predicates in (7) semantically do not form a natural class.

- Two Types of Reflexivity

Two Types of Anaphors

a. **Pure reflexive anaphors** (e.g. **zich** in (9a)): require complete identity with their antecedents. They are variables.

b. **Near reflexive anaphors** (**zichzelf** in (9b)): referentially dependent on their antecedents, but not necessarily identical with them. They have the Near reflexive function.

Semantics of Pure reflexivity / Near reflexivity

a. \( \lambda x [P (x,x)] \) (Pure reflexive predicates)

b. \( \lambda x [P (x,f(x))] \) (Near reflexive predicates) (Lidz, 2001a, (15))

The morphological complexity of anaphor corresponds to the Pure/Near reflexive anaphor distinction in Dutch as in (9) and (10).

This is true in Kannada.

a. Hari **tann**-annu hoDe-du-koND-a
   Hari self-Acc hit-PP-Refl.Past-3sm
   ‘Hari hit himself.’ (= Hari, *statue) [Kannada]

b. Hari **tann**-annu-**taane** hoDe-d-a
   Hari self-Acc-self hit-Past-3sm
   ‘Hari hit himself.’ (= Hari, statue) (Lidz, 2001a, (12b,c))

- However, there are languages with affixal reflexives:
  - Japanese has the affixal anaphors **zi**- and **ziko**- ‘self.’

How are affixal anaphors classified?
4 Proposal: Parametric Variation of the Two types

- Parametric variation among languages with respect to the two-way classification of anaphor:

(16) a. **Morphologically simplex** anaphor = **Pure reflexive** anaphor
    (e.g. Dutch *zich* ‘self’ in (9a), Kannada *tann* in (14a))

    b. **Morphologically complex** anaphor = **Near reflexive** anaphor
    (Dutch *zichzelf* ‘selfself’ in (9b), Kannada *tann-tanne* in (14b))

    [Languages that select the way in (16) are Dutch, Kannada, Malayalam etc.]

(17) a. **Affixal** anaphor = **Pure reflexive** anaphor
    (e.g. Japanese *zi/-ziko-* ‘self’ in (18a), Russian *-sja* in (27a))

    b. **Non-affixal** anaphor = **Near reflexive** anaphor
    (Japanese *zibun* ‘self’ in (18b), Russian *sebja* in (27b))

    [Languages that select the way in (17) are Japanese, Russian, Korean, Turkish, English etc.]

4.1 Japanese

- We compare the affixal anaphor *ziko-* ‘self’ and the non-affixal anaphor *zibun* ‘self.’

- Application of the two diagnostics

(18) Diagnostic #1: Availability of statue reading in the Madame Tussaud context

- John-wa *ziko*-hihan-si-ta.
  John-Top self-criticism-do-Past
  ‘John criticized self.’ (*ziko-* = John, *statue)

- John-wa *zibun*-o hihan-si-ta.
  John-Top self-Acc criticism-do-Past
  ‘John criticized self.’ (*zibun* = John, statue)

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3This work does not focus on other types of non-affixal anaphors in Japanese, namely *zibun-zisin* ‘self-self’ and the pronoun+-*self* type such as *kare-zisin* ‘him-self.’ Kishida (to appear) compares these anaphors with *zi/-ziko-* and *zibun.*

4We share the judgements in (18) and (19) with Shimada (2006) and Miura (2008) who also apply these diagnostics to Japanese and propose different analyses.
(19) Diagnostic #2: Availability of non-sloppy identity reading in comparative deletion constructions

a. Mary-wa John yorimo hagesiku ziko-hihan-si-ta.
   Mary-Top John than severely self-criticism-do-Past
   ‘Mary criticized herself more severely than John criticized himself.’ (sloppy identity)
   *‘Mary criticized herself more severely than John criticized her.’ (*non-sloppy identity)

b. Mary-wa John yorimo hagesiku zibun-o hihan-si-ta.
   Mary-Top John than severely self-Acc criticism-do-Past
   ‘Mary criticized herself more severely than John criticized himself.’ (sloppy identity)
   ‘Mary criticized herself more severely than John criticized her.’ (non-sloppy identity)

- The results follow if the affixal anaphor ziko- is a Pure reflexive anaphor and the non-affixal anaphor zibun is a Near reflexive anaphor, as we propose.

(20) a. The Pure reflexive anaphor ziko- requires complete identity with its antecedent, so it refers to only the antecedent John in (18a).

b. The Pure reflexive anaphor is a variable, so the semantic structure of (19a) is (20c). The sloppy identity reading is obligatorily induced.

c. [criticize (Mary,Mary)] better than [criticize (John,John)]

(21) a. The Near reflexive anaphor zibun has the Near reflexive function (f(x)) and it takes its antecedent John as input and returns a referential extension of it, namely ‘the statue of John’ in (18b).

b. The Near reflexive anaphor is not a variable and can have its own index. There are two possible semantic representations for (19b) as in (21c) and (21d). Either sloppy and non-sloppy identity reading is allowed.

c. \(\lambda x[\text{criticize}(x,f(x))](\text{Mary})\) better than \(\lambda x[\text{criticize}(x,f(x))](\text{John})\)

d. \(\lambda x[\text{criticize}(x,f_i(x))](\text{Mary})\) better than \(\lambda x[\text{criticize}(x,f_i(x))](\text{John})\)

- Another different pattern: (Un)availability of Non-local Binding

(22) a. Mary-wa John-ga ziko-hihan-si-ta to omot-ta.
   Mary-Top John-Nom self-criticism-do-Past that think-Past
   ‘Mary thought that John criticized self.’

b. Mary-wa John-ga zibun-o hihan-si-ta to omot-ta.
   Mary-Top John-Nom self-Acc criticism-do-Past that think-Past
   ‘Mary thought that John criticized self.’

(23) This difference is also accounted for under our classification.
(24) a. Following Liu (2003), we assume that the variable anaphor ziko- constitutes an operator-variable relation as in (24b). In this structure, the anaphor is subject to predication or strong binding by an appropriate local subject (Chomsky, 1986). Only the local antecedent (John) is available. 
   b. [[ John ] [VP ziko- i [VP ... t_i-hihan-suru . . . ] ] ] (LF of the embedded sentence of (22a)) 

(25) Zibun is not a variable and it does not constitute an operator-variable relation. Nothing prevents zibun from taking the non-local antecedent (Mary) as its reference. 

4.2 Other languages

- There are several languages that classify anaphors based on the affix/non-affix difference.

(26) Russian and Korean have both affixal and non-affixal anaphors: in the Madame Tussaud context, affixal anaphors do not allow statue readings, while non-affixal ones do.

(27) a. Yeltsin zastrelil-sja. [Russian] 
   Yeltsin shot-self
   ‘Yeltsin shot himself.’ (-sja = Yeltsin, *statue)

b. Yeltsin zastrelil sebja. 
   Yeltsin shot self
   ‘Yeltsin shot himself.’ (sebja = Yeltsin, statue) (Lidz, 2001a, (26))

(28) a. Chelswu-ka caki-piphan-ha-yss-ta. [Korean] 
   Chelswu-Nom self-criticism-do-Past-Dec
   ‘Chelswu criticized himself.’ (caki- = Chelswu, *statue)

b. Chelswu-ka caki-lul piphan-ha-yss-ta. 
   Chelswu-Nom self-Acc criticism-do-Past-Dec
   ‘Chelswu criticized himself.’ (caki = Chelswu, statue) (Based on Kang (2001, (18)))

- Not all the languages have both affixal and non-affixal forms.

(29) Only non-affixal form of anaphor: Turkish kendi in (30a) and English himself in (30b) allow statue readings.

(30) a. (Ben) kendi-m-i savun-du-m. [Turkish] 
   (I) self-my-Acc defend-Past-1.st.sing.
   ‘I defended myself’ (kendi = I, statue)

b. Reagan dressed himself in the museum. (himself = Reagan, statue) (Lidz, 2001a, (22b))

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5There are a large number of studies on non-locally bound zibun (Kuno, 1978, Kameyama, 1984, Katada, 1988, Aikawa, 1993, Iida, 1996, Abe, 1997, among others). For reason of space, we do not review any of these studies in this paper.
(31) Only affixal form of anaphor: Spanish se- in (32a) and Italian si- in (32b) never allow statue readings.

(32) a. El zorro se-lavó.  
    The zorro self-washed  
    ‘Zorro washed himself.’ (se- = Zorro, *statue)  
    [Spanish]  
    (Shimada, 2006, 60)

b. Gianni si-lava.  
    Gianni self-washes  
    ‘Gianni washes himself.’ (si- = Gianni, *statue)  
    [Italian]  
    (Giorgi, 2007, (15))

5 Concluding remarks

- In this paper, I have proposed that reflexive anaphors in languages are classified based on their reflexivity (semantic) differences, as proposed in Lidz (1996, 2001a,b).

- Also, I have claimed that there is a parametric variation in classification of reflexives: affixal reflexives are Pure reflexive anaphors and non-affixal (free-morpheme) reflexives are Near reflexive anaphors in some languages (e.g. Japanese, Korean, Turkish, Spanish etc.), while in others (Dutch, Kannada, Norwegian etc.) monomorphemic anaphors among free-morpheme reflexives are Pure reflexive anaphors and polymorphemic anaphors are Near reflexive anaphors.

- It is interesting that the present proposal that affixal anaphors are Pure reflexive anaphors and non-affixal ones are Near reflexive anaphors holds not only in some Altaic languages but also in some Romance languages. The parametric variation analysis of reflexive classification sheds a new light on the typological research of reflexivity and coreference in generative grammar.
References


