Classification of Reflexives
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1 Introduction

• Several languages have more than one type of reflexive anaphor:

(1) Dutch  zich ‘self,’ zichzelf ‘selfself’ and ’m zelf ‘himself’

• How do these anaphors differ? How are they classified?

(2) Lidz (1996, 2001a,b)
    Anaphors are semantically different: ‘Pure reflexive anaphors’ and ‘Near reflexive anaphors’
    (→ Section 2)

(3) Liu (2003)
    Another type of anaphor with a special function.
    (→ Section 3)

• Proposal:

(4) Only the two types of anaphor: Pure reflexive anaphors and Near reflexive anaphors.

(5) Parametric variation with respect to the two-way classification of reflexive anaphor
    a. Morphologically simplex anaphors and complex anaphors (e.g. Dutch, Kannada etc.)
    b. Bound-morpheme anaphors and free-morpheme anaphors (Japanese, Korean, Chinese etc.)

(6) What looks like the third type of anaphor is a subcase of Near reflexive anaphor.
    (→ Section 4)

2 Lidz (1996, 2001a,b)

• When locally bound, anaphors in a language have different semantics.

(7) Diagnostic #1: Availability of “statue reading” in the Madame Tussaud context
    a. Ringo scheert zich
       Ringo shaves self

       ‘Ringo shaves himself.’ (zich = Ringo, *statue)

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2 The Madame Tussaud context is first discussed in Jackendoff (1992). The examples and definitions in this section are from Lidz (1996, 2001a,b) unless noted otherwise.

3 Reinhart and Reuland (1993) propose that the predicates scheert ‘behaves’ in (7) and verdedigde ‘defended’ in (8) are doubly marked as reflexive and non-reflexive in the lexicon. In other words, these predicates have two usages: the predicates in the (a) examples are used as reflexive, while the ones in the (b) examples are non-reflexive.
b. Ringo scheert zichzelf  
Ringo shaves himself  
‘Ringo shaves himself’ (zelf = Ringo, statue)  
c. Only in the *zelf* case in (b), an additional statue reading is available.

(8) Diagnostic #2: Availability of non-sloppy identity reading in comparative deletion constructions  
a. Zij verdedigde zich beter dan Peter  
she defended herself better than Peter  
‘She defended herself better than Peter defended himself’ (sloppy identity reading)  
*‘She defended herself better than Peter defended her’ (*non-sloppy)  
b. Zij verdedigde zichzelf beter dan Peter  
she defended self better than Peter  
‘She defended herself better than Peter defended himself’ (sloppy)  
‘She defended herself better than Peter defended her’ (non-sloppy)  
c. Only in the *zelf* case in (b), an additional non-sloppy identity reading is available.

(9) Two types of anaphor  
a. Pure reflexive anaphors (e.g. *zich* in (7a)): require complete identity with their antecedents.  
b. Near reflexive anaphors (*zelf* in (7b)): referentially dependent on their antecedents, but not necessarily identical with them.

(10) 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)

• Near reflexivity

(11) Individual anaphors are lexically specified as introducing the Near reflexive function ($f(x)$ in (10b)) or not.

• Pure reflexivity

(12) Condition $R$  
$\lambda x[P(x,x)] \leftrightarrow (\theta 1 = \theta 2)$  
semantics $\theta$-grid

(13) a. Left side: the semantics of reflexivity (semantic reflexivity)  
b. Right side: the theta-grid of lexically reflexive predicate (lexical reflexivity)

(14) a. Semantic reflexivity marking = by taking a Pure reflexive anaphor  
b. Lexical reflexivity marking = lexically marked on verbs, taking a verbal reflexive marker etc.  
(Cf. Lidz, 1995)

(15) a. Hari tann-annu hoDe-du-koND-a  
Hari self-Acc hit-PP-Refl.Past-3sm  
‘Hari hit himself.’ (= Hari, *statue)  
Hari self-Acc hit-Past-3sm  
‘Hari hit himself.’ (= Hari)
c. Hari tann-annu-taane hoDe-d-a
   Hari self-Acc-self hit-Past-3sm
   ‘Hari hit himself.’ (= Hari, statue)

- Prediction that Condition R makes:

  (16) Predicates that have reflexivity in the lexicon are Pure reflexive predicates.

3 Liu (2003)

- Pure reflexivity and Near reflexivity are not the only interpretations that are induced in the Madame Tussaud context.

(17) a. Jiang Jie-Shi henhen-de da-le ziji yi-xia. [Chinese]
   Jiang Jie-Shi furiously hit-Asp self one-Cl
   ‘Jiang Jie-Shi, hit himself, furiously.’ (ziji = Jiang Jie-Shi, statue)
   b. Jiang Jie-Shi henhen-de da-le ta-ziji yi-xia.
      Jiang Jie-Shi furiously hit-Asp him-self one-Cl
      ‘Jiang Jie-Shi, hit himself, furiously.’ (ta-ziji = Jiang Jie-Shi, statue)
   c. Jiang Jie-Shi henhen-de da-le ziji-benshen yi-xia.
      Jiang Jie-Shi furiously hit-Asp self-self one-Cl

(18) a. What looks like Pure reflexivity in (17c) is ‘Pure identity’ between ziji-benshen ‘self-self’ and its antecedent.
   b. Ziji-benshen is not a Pure reflexive anaphor but a ‘focus operator anaphor.’

(19) a. The suffix -benshen ‘-self’ functions as a focus marker.
   b. Wei-le jiaqiang liang-guo jian de bangyi, zongtong benshen yao dao jichang
      For-Asp reinforce two-state between DE friendship president self want arrive airport
      lai yingjie meigu guowuqing.
      come welcome United States Secretary of State
      ‘In order to reinforce the diplomatic relationship between the United States and us, the president himself will come to the airport to welcome the U.S. Secretary of State.’

(20) a. ‘Pure identity’ is induced as a consequence of the three properties of the anaphor:
   (i) the semantic composition of the Near reflexive function of ziji ‘self’
   (ii) a focus function of -benshen ‘-self’
   (iii) the operator status of the anaphor ziji-benshen ‘self-self’
   b. Focus anaphor selects the best representation of the antecedent of ziji from the set of what
      the Near reflexive function of ziji denotes. Consequently, the antecedent itself is selected.

(21) Pure reflexivity is a subcase of Pure identity.

³The examples in this section are from Liu (2003).
• Focus operator anaphor does not induce a non-sloppy identity reading in comparative deletion constructions.

(22) a. Zhangsan zianzai bi Lisi guoqu geng quanxin ziji-de liyi
Zhangsan now compare Lisi past more care-about self-DE benefit
‘Zhangsan, cares about his\textsubscript{i} benefit more than Lisi\textsubscript{j} cared about his\textsubscript{j} benefit.’ (sloppy identity)

b. Zhangsan zianzai bi Lisi guoqu geng quanxin ziji-benshen-de liyi
Zhangsan now compare Lisi past more care-about self-self-DE benefit
*‘Zhangsan, cares about his\textsubscript{i} benefit more than Lisi\textsubscript{j} cared about his\textsubscript{j} benefit.’ (non-sloppy)

(23) a. Ziji-benshen is an operator because it has the semantic range (the range of the Near reflexive function of ziji) like other operators such as quantifiers and wh-words.

c. [ [ Lisi\textsubscript{i} ] [vp ziji-benshen\textsubscript{i} [vp \ldots t\textsubscript{i} \ldots ] ] ] (the elided part of (22b))

• There are two ways to induce Pure identity reading in languages:

(24) a. as a consequence of Condition R (Pure reflexivity: like the Dutch case)
   b. as a consequence of the properties of anaphor (Pure identity: like the Chinese case)

(25) A language disjunctively selects one of the two ways.

4 Proposal

(26) Pure reflexivity and Pure identity are not disjunctive in a language.

(27) a. Only the two types of anaphor: Pure reflexive anaphors and Near reflexive anaphors
   b. What looks like the third type (e.g. ziji-benshen in Chinese) is a subcase of Near reflexive:
      if a Near reflexive anaphor has a special function, that function counteracts its Near reflexive anaphor status.

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

a. morphologically simplex anaphor = Pure reflexive anaphor (e.g. Dutch zich ‘self’ in (7))
morphologically complex anaphor = Near reflexive anaphor (zichzelf ‘selfself’)
(Languages that select (28a) are Dutch, Kannada, Norwegian etc.)

b. bound-morpheme anaphor = Pure reflexive anaphor
   free-morpheme anaphor = Near reflexive anaphor
(Languages that select (28b) are Japanese, Chinese, Korean, Spanish, Italian etc.)

(29) Language universality: Predicates that have reflexivity in the lexicon induce Pure reflexivity.
4.1 Japanese

- Japanese selects the second way of the two-way classification of anaphor ((28b)).

(30) Three kinds of anaphor

a. bound-morpheme zi-/ziko- ‘self’ = Pure reflexive anaphor
b. zibun ‘self’ = Near reflexive anaphor
c. zibun-zisin ‘self-self’ = Near reflexive anaphor

- The Pure / Near reflexivity distinguishing diagnostics

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

   John-Top self-criticism-do-Past
   ‘John criticized self.’ (ziko- = John, *statue)
   John-Top self-Acc criticism-do-Past
   ‘John criticized self.’ (zibun = John, statue)
   John-Top self-self-Acc criticism-do-Past
   ‘John criticized self-self.’ (zibun-zisin = John, *statue)

(32) 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)
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)
   ‘Mary criticized herself more severely than John criticized her.’ (non-sloppy)
c. Mary-wa John yorimo hagesiku zibun-zisin-o hihan-si-ta.
   Mary-Top John than severely self-self-Acc criticism-do-Past
   ‘Mary criticized herself more severely than John criticized himself.’ (sloppy)
   *‘Mary criticized herself more severely than John criticized her.’ (*non-sloppy)

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4Japanese has one type of anaphor that is phi-feature specified: pronoun+zisin ‘-self’ type such as kare-zisin ‘him-self’ and kanojo-zisin ‘her-self,’ but this type of anaphor is rarely used. So, we exclude this type from our examination.

5The affixal zi/ziko- are used in Sino-Japanese complex verbs known as ziverbs/ziko-verbs. Zi/ziko-verbs consist of three parts: the affixal zi/ziko- morpheme ‘self’, Sino-Japanese verbal noun (e.g. hihan ‘criticism’ in (31a) and satu ‘killing’ in (i)), and the light verb suru ‘do.’ Zi-/ziko-morphemes do not productively attach to verb roots. These affixal reflexives are incorporated to verb roots as their object arguments: another object argument is not allowed. (Sato and Kishida, 2007, Kishida and Sato, 2009: cf. Aikawa, 1993, Tsujimura and Aikawa, 1996, 1999, Shimada, 2006)

(i)*John-ga zibun-o zi-satu-si-ta.
   John-Nom self-o self-killing-do-Past
   ‘John killed self.’

6Shimada (2006, 74/76) and Miura (2008) also apply the diagnostics to Japanese. Their judgements are the same with ours but their analyses are different from our analysis.
• Apparent contradiction:

(33) Near reflexive anaphor *zibun-zisin* does not behave like a Near reflexive anaphor in (31c) and (32c).

• *Zibun-zisin* is an ‘intensifier operator anaphor’ (following Liu’s (2003) *ziji-benshen* analysis)

(34) a. The suffix -zisin ‘self’ functions as an intensifier.
   
   b. Mary-ga John-zisin-o hihan-si-ta
      Mary-Nom John-self-Acc criticism-do-Past
      ‘Mary criticized John himself.’ (Nakamura, 1989, 1)

(35) What is induced in (31c) is Pure identity as a consequence of the properties of *zibun-zisin*.

(36) a. *Zibun-zisin* undergoes LF movement because it is an operator anaphor that has the semantic range.
   
   b. [ [ John ] [VP zibun-zisin] [VP ... t ... ] ]
      (the elided part of (32c))

(37) As this anaphor has a special function as an intensifier, that function counteracts its Near reflexive anaphor status.

• Classification of anaphor in Japanese

(38) a. bound-morpheme zi- / ziko- ‘self-’ = Pure reflexive anaphor
   
   b. zibun ‘self’ = Near reflexive anaphor
   
   c. *zibun-zisin* ‘self-self’ = Near reflexive anaphor → Intensifier operator anaphor

4.2 Other languages

• Bound-morpheme anaphors (or clitics) are Pure reflexive anaphors, while free-morpheme anaphors are Near reflexive anaphors. A Near reflexive anaphor with a special function does not behave like a Near reflexive anaphor.

(39) a. Xiang-Yu zuihou zi-jin-le. [Chinese]
   
   Xiang-Yu finally self-killing-Asp
   ‘Xiang-Yu finally killed himself’ (*zi- = Xiang-Yu, *statue)

   b. Jiang Jie-Shi henhen-de da-le { ziji / ta-ziji } yi-xia. (= (17a,b))
   
   Jiang Jie-Shi furiously hit-Asp { self / him-self } one-Cl
   ‘Jiang Jie-Shi hit himself furiously.’ (*ziji / ta-ziji = Jiang Jie-Shi, statue).’

   c. Jiang Jie-Shi henhen-de da-le ziji-benshen yi-xia. (= (17c))
   
   Jiang Jie-Shi furiously hit-Asp self-self one-Cl

(40) a. bound-morpheme zi- ‘self-’ = Pure reflexive anaphor
   
   b. ziji ‘self’, ta-ziji ‘him-self’ = Near reflexive anaphors
   
   c. *ziji-benshen* ‘self-self’ = Near reflexive → Focus operator anaphor
(41) a. Chelswu-ka ca-phokhayssta.  
Chelswu-Nom self-blew-up
b. Chelswu-ka caki-lul phokhayssta.  
Chelswu-Nom self-Acc blew-up
‘Chelswu blew himself up.’ (ca- = Chelswu, *statue) (caki = Chelswu, statue)  
(Kang, 2001, (18))

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

(43) a. Gianni si lava.  
Gianni self-washes
b. Gianni lava se stesso.  
Gianni washes self-same
‘Gianni washes himself.’ (si- = Gianni, *statue) (se stesso = Gianni, statue)  
(Giorgi, 2007, (15)(18))

(44) El zorro se lavó.  
The zorro self washed
‘Zorro washed himself.’ (se- = Zorro, *statue)  
(Shimada, 2006, 60)

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

5 Concluding remarks

(46) Anaphors are classified based on their semantics: Pure reflexive anaphors and Near reflexive anaphors.

(47) What looks like the third type is a subcase of Near reflexive: if a Near reflexive anaphor has a special function, that function counteracts its Near reflexive anaphor status.

(48) Parametric variation with respect to the two-way classification of anaphor:
   a. Morphologically simplex anaphors and complex anaphors (e.g. Dutch, Kannada etc.)
   b. Bound-morpheme anaphors and free-morpheme anaphors (Japanese, Korean, Chinese etc.)

(49) Language universality: Predicates that have reflexivity in the lexicon induce Pure reflexivity.
References


