Classification of Reflexives

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1. Introduction

Several languages have more than one type of reflexive anaphors and those reflexives induce different kinds of reflexivity when locally bound: Lidz (2001a, b) distinguishes ‘Pure reflexivity’ and ‘Near reflexivity.’ This paper proposes that the classification of ‘Pure reflexive anaphors’ and ‘Near reflexive anaphors’ is parametric among languages: in some languages (e.g. Japanese, Chinese, Russian, Korean etc.), bound-morpheme (affixal) reflexives are Pure reflexive anaphors and free-morpheme reflexives are Near reflexives, while in others (Dutch, Kannada, Norwegian), morphologically simplex anaphors among free-morpheme reflexives are Pure reflexives and complex ones are Near reflexives. Our claim is that though the classification of anaphor is parametric, it is language universal that inherently (lexically) reflexive verbs induce Pure reflexivity and syntactically reflexive verbs yield Near reflexivity. Our proposal sheds a new light on the typological research of reflexivity and coreference in generative grammar.

2. Two types of Reflexivity

2.1. Pure Reflexivity and Near Reflexivity

Lidz (2001a, b) demonstrates that, when they are locally bound, reflexives in a language like Dutch can induce different reflexivity using two diagnostics (i) availability of statue readings in the Madame Tussaud context (Jackendoff, 1992) and (ii) availability of non-sloppy identity readings in comparative deletion constructions.

First, let us see the Madame Tussaud context diagnostic. Imagine a situation in which Ringo Starr is standing in front of a statue that depicts

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him in a wax museum. When he shaves the statue, in Dutch, it is felicitous to say (1b) but not (1a). If he shaves his face, it is fine to say either (1a) or (1b). According to Reinhart and Reuland (1993), the predicate scheert ‘shaves’ in (1) is specified doubly as reflexive and non-reflexive in the lexicon. That is, the verb has two usages. In (1a), the predicate is used as reflexive (=lexically reflexive predicate), while the verb in (1b) is used as non-reflexive. In (1b) as well as in (1a), a reflexive interpretation is available. For, the predicate itself lacks reflexivity but it gets reflexivity by taking the anaphor zichzelf in syntax (= syntactically reflexive predicate). The syntactically reflexive predicate in (1b) induces an additional ‘statue’ reading, compared with the lexically reflexive predicate in (1a).

(1) a. Ringo scheert zich. (zieh = Ringo,*statue)  
Ringo shaves self
b. Ringo scheert zichzelf (zichzelf = Ringo, statue)  
Ringo shaves selfself
‘Ringo shaves himself.’ (Lidz, 2001a, (29))

The second diagnostic is the availability of non-sloppy identity interpretations in comparative deletion constructions. Both in (2a) and (2b), the sloppy identity reading is allowed: the deleted structure contains a local reflexive reading. On the other hand, the non-sloppy identity reading: the object of the deleted structure is the same one of the matrix clause, is available in (2b) but not in (2a). Here again, the syntactically reflexive predicate in (2b) has an additional reading.

(2) a. Zij verdedigde zich beter dan Peter.  
She defended self better than Peter.
‘She defended herself better than Peter defended {himself / *her}.

b. Zij verdedigde zichzelf beter dan Peter.  
She defended selfself better than Peter.
‘She defended herself better than Peter defended {himself / her}. (Lidz, 2001a, (30))

Giving these results of the diagnostics, Lidz claims that lexically reflexive predicates and syntactically reflexive predicates have different semantics. He proposes that lexical reflexive predicates are ‘Pure reflexive predicates’ that have the semantics given in (3a). He calls what Pure reflexive predicate induce ‘Pure reflexivity.’ On the other hand, syntactically reflexive predicates are ‘Near reflexive predicates’ that have the semantics in (3b). ‘Near reflexivity’ is induced.
In addition, Lidz categorizes anaphors into types. Anaphors that occur with lexically reflexive predicates, such as \textit{zich} ‘self’ in (1a), are ‘Pure reflexive anaphors’ that require complete identity with their antecedents. This type of anaphor functions as a variable (the second argument of the formula in (3a)). On the other hand, anaphors that occur with syntactically reflexive predicates, such as \textit{zichzelf} ‘selfself’ in (1b), are ‘Near reflexive anaphors’ that are referentially dependent on their antecedents but are not necessarily identical with them. This type of anaphor introduces the ‘Near reflexive function’ (the second argument \(f(x)\) in (3b)) that takes the antecedent (the first argument) as input and returns an entity that is representationally related to that argument. When the Near reflexive function returns the input itself, namely, the antecedent itself, Pure reflexive reading is induced. That is, Pure reflexivity is a subcase of Near reflexivity.

Lidz proposes ‘Condition R’ shown in (4) that regulates Pure reflexivity.

\begin{equation}
(4) \quad \lambda x \ [P(x,x)] \leftrightarrow (\Theta_1 = \Theta_2) \tag{Lidz, 2001a, (17)}
\end{equation}

The left side of the condition shows the semantics of reflexivity, and the right side indicates the theta-grid of lexically reflexive predicate. The two thematic roles of a lexically reflexive predicate must be coindexed. Condition R says that if a predicate is semantically reflexive (e.g. in Dutch, a predicate takes a Pure reflexive anaphor \textit{zich} as its object argument as in (1a)), it has to be lexically reflexive (to be marked as reflexive in the lexicon as \textit{scheert} in (1a)). If a predicate is lexically reflexive, it has to be semantically reflexive.¹

¹ Burzio (1994) also notices that different types of anaphor induce different reflexivity. Under his analysis, morphologically complex anaphors are called as ‘strong anaphors’ and simplex anaphors are called as ‘weak anaphors.’ He proposes ‘Weak Anaphor Principle’ given in (i). This principle says that inherent coreference (similar notion to ‘Pure reflexivity’ in Lidz (2001a,b)) requires weak(er) anaphors, and weak anaphors induce inherent coreference. He proposes that morphologically simpler anaphors such as Italian reflexive clitic \textit{si} ‘self’ or morphologically simplex anaphor \textit{se} are ‘weaker’ than morphologically complex anaphor \textit{se stesso} ‘selfsame.’ Only weaker anaphors can induce coreference (or identity between anaphor and its antecedent).
Under the Condition R analysis, the (un)availability of each statue interpretations in the Madame Tussaud context and non-sloppy identity interpretations in comparative deletion constructions in the Dutch examples (1) and (2) is explained as follows. The anaphor *zich* in (1a) marks semantic reflexivity, and the predicate is lexically reflexive (=marks lexical reflexivity). Condition R is satisfied. Only a Pure reflexive reading is induced and a Near reflexive (statue) reading is not yielded. By contrast, *zichzelf* in (1b) does not mark semantic reflexivity. The predicate does not mark lexical reflexivity in (1b). Condition R does not operate here, so a Near reflexive interpretation is allowed. In (2a), the anaphor *zich* functions as a variable, so in a comparative deletion construction, only a sloppy identity reading is available. On the other hand, in (2b), the anaphor *zichzelf* is not a variable and it can bear its own index. A non-sloppy identity reading is available in the construction.

2.2. Reflexivity Marking

How is a predicate marked lexical and semantic reflexivity? In Lidz’s (2001a,b) discussion, there seem to be at least three ways that a predicate is marked lexical reflexivity among languages. Dutch uses the first way: lexical reflexivity is specified in the lexicon on verbs. The predicate in (1a) is marked as reflexive in the lexicon. In this language, semantic reflexivity is marked by taking a Pure reflexive anaphor *zich*.

A second way is to attach a verbal reflexive marker on verbs (Cf. Lidz, 1995). Kannada takes this way: -koND is attached on verbs as in (5b). In this language as well as in Dutch, semantic reflexivity is marked by taking a Pure reflexive anaphor *tann* ‘self.’

(5) a.*Hari tann-annu hoDe-d-a                          [Kannada]
     Hari self-Acc  hit-Past-3sm

(i) Weak Anaphor Principle
   Inherent coreference $\leftrightarrow$ weak anaphora
   (semantics)                                         (morphology) (Burzio, 1994, (3))

2 The predicate in (1b) is the same with the one used in (1a). As we have seen above, the predicate is assumed to have two usages: reflexive and non-reflexive usages, as proposed in Reinhart and Reuland (1993). We assume that the predicate is used as reflexive in (1a) and as non-reflexive in (1b).
b. Hari tann-annu hoDe-du-koND-a \((tann = \text{Hari}, *\text{statue})\)
   Hari self-Acc hit-PR-Refl.Past-3sm

c. Hari tann-annu-taane hoDe-d-a \((tannu-tanne = \text{Hari}, \text{statue})\)
   Hari self-Acc-self hit-Past-3sm

‘Hari, hit himself.’

(Lidz, 2001a, (12))

The predicate in (5a) is semantically reflexive as it takes a Pure reflexive anaphor \(tann\), but it lacks lexical reflexivity on the verb. The sentence is excluded due to the violation of Condition R. On the other hand, the condition is satisfied in (5b) because the predicate is now marked lexical reflexivity by taking the verbal reflexive marker \(\text{-koND}\). In (5c), the condition vacuously applies: the predicate is neither semantically nor lexically reflexive marked.

A third way is observed in Russian. \(\text{Sebja ‘self’}\) in (6b) induces a Near reflexive reading. So, the verb in the example \text{zastrelil ‘shot’}\ marks neither semantic nor lexical reflexivity. The same predicate is used in (6a), but Condition R is operative in this example. Then, it follows that the affixal reflexive anaphor \(-\text{sja ‘self’}\) marks both lexical reflexivity and semantic reflexivity.

(6) a. Yeltsin zastrelil-sja. \((-\text{sja} = \text{Yeltsin}, *\text{statue})\) [Russian]
   Yeltsin shot-self

b. Yeltsin zastrelil sebja. \((\text{sebja} = \text{Yeltsin}, \text{statue})\)
   Yeltsin shot self

‘Yeltsin, shot himself.’

(Lidz, 2001a, (26))

3. Ways to Classify Anaphors

3.1. Types of Anaphor

In Dutch (recall (1) and (2)) and Kannada ((5)), the morphological composition of anaphor distinguishes Pure and Near reflexive anaphors: morphologically simplex anaphors are Pure reflexive anaphors \((\text{zich in Dutch and tannu in Kannada})\), while complex ones are Near reflexives \((\text{zichzelf and tannu-tanne})\). This classification, however, is not true in every language, as the Russian example in (6) shows. \(\text{Sebja that is morphologically simple functions like a Near reflexive anaphor in (6b). Also, in Chinese, as (7) indicates, the morphologically simplex anaphor } \text{ziji ‘self’ and the complex anaphor } \text{ta-ziji ‘him-self’ both can induce Near reflexive interpretations.}
Through the observations above, Lidz (2001a,b) claims that individual anaphor is lexically specified as introducing the Near reflexive function \( f(x) \) in (3b) or not. He notes that Condition R makes an interesting prediction given in (8).

(8) If an anaphor can be bound by a coargument (in the absence of lexical reflexivity), then that anaphor is a Near-reflexive.  

Under his analysis, the morphological composition of anaphor does nothing with respect to the classification of anaphor into Pure reflexives and Near reflexives, and individual anaphor is specified as being a Near reflexive anaphor or not in the lexicon.\(^3\)

3.2. Pure Identity

Liu (2003) argues that Pure reflexivity and Near reflexivity are not the only options that are induced in the Madame Tussaud context. (9) illustrates that two types of anaphors in Chinese \( \textit{ziji} \) ‘self’ and \( \textit{ta-ziji} \) ‘him-self’ function as Near reflexive anaphors, but another type \( \textit{ziji-benshen} \) does not allow a Near reflexive interpretation.

(9) a. Jiang Jie-Shi henh en-de da-le \( \textit{ziji yi-xia} \). \( \textit{ziji} = \text{JJS, statue} \)
   Jiang Jie-Shi furiously hit-As self one-Cl

\(^3\) Reinhart and Reuland (1993) categorize anaphors into types based on the morphological composition of anaphor, but the data in Russian (6) and Chinese (7) shows that their way of categorization is not correct.
b. Jiang Jie-Shi henhen-de da-le ta-ziji yi-xia. (ta-ziji = JJS, statue)  
   Jiang Jie-Shi furiously hit-As him-self one-Cl

c. Jiang Jie-Shi henhen-de da-le ziji-benshen yi-xia.  
   Jiang Jie-Shi furiously hit-As self-self one-Cl
   ‘Jiang Jie-Shi, hit himselfi furiously’ (ziji-benshen = JJS, *statue)  
   (Liu, 2003, (11))

Liu claims that what looks like Pure reflexivity in (9c) is ‘Pure identity’ between ziji-benshen and its antecedent. His claim is that this anaphor is not a Pure reflexive anaphor but a ‘focus operator anaphor.’ While Pure reflexivity in Lidz’s (2001a,b) sense is as a consequence of Condition R, Pure identity arises as a consequence of the three properties of the anaphor: (a) the semantic composition of the Near reflexive function of ziji, (b) a focus function of -benshen, and (c) the operator status of the anaphor. His explanation how Pure identity reading in the Madame Tussaud context is induced as follows: the best representation of the antecedent of ziji is selected from the set of what the Near reflexive function of ziji denotes, and, as a consequence, the antecedent itself is selected. Pure reflexivity is a subcase of Pure identity.

In a comparative deletion construction (10), while ziji in (10a) allows both sloppy and non-sloppy identity readings, ziji-benshen in (10b) allows only sloppy identity reading. Liu explains this by claiming that ziji-benshen functions as an operator because this anaphor has a ‘semantic range,’ namely the range of the Near reflexive function of ziji (Cf. Katada, 1991). The possession of ‘semantic range’ is a property shared by other operators such as quantifiers, wh-words, and null operators.

(10) a. Zhangsan xianzai bi Lisi guoqu geng guanxin ziji-de liyi.  
   Zhangsan now compare Lisi past more care-about self-DE benefit  
   ‘Zi cares about hisi benefit more than Li cared about hisi benefit.’

b. Zhangsan xianzai bi Lisi guoqu geng guanxin  
   Zhangsan now compare Lisi past more care-about  
   ziji-benshen-de liyi.  
   self-self-DE benefit  
   ‘Zi cares about hisi benefit more than Li cared about hisi benefit.’  
   (Liu, 2003, (32))

He assumes that an operator ziji-benshen undergoes an LF movement, namely, adjunction to VP (Cf. Huang and Tang, 1991). Under his analysis,
(11) is the LF representation of the deleted structure of (10b). Ziji-benshen adjoins to VP, and the trace of it can be bound only by the local subject Lisi.

(11) \[ [\text{IP Lisi} \ [\text{VP ziji-benshen} \ [\text{VP \ldots V t \ldots }] \] ] \]

(Liu, 2003, Footnote 26)

Further, he claims that ziji-benshen is not a Pure reflexive anaphor from the viewpoint of the semantic contents of anaphor. Pure reflexive anaphors (e.g. zich ‘self’ in Dutch) are variables without any content, while the focus operator anaphor ziji-benshen has richer semantic/pragmatic contents as a focus marker.

Thus, Liu (2003) proposes that there are two ways to induce Pure identity reading in languages: as a consequence of Condition R (Pure reflexivity: like the Dutch, Kannada and Russian cases) and as a consequence of the properties of anaphor (Pure identity: like the Chinese case) and that a language disjunctively selects one of the two ways. For example, Dutch utilizes the first way: Pure reflexive anaphor zich and Near reflexive anaphor zichzelf, while Chinese selects the second way: Near reflexives ziji and ta-ziji and intensifier operator anaphor ziji-benshen.

3.3. Questions

As we have just observed in the last subsection, Liu (2003) claims that, as a way to induce Pure identity readings, a language disjunctively selects Pure reflexivity as a sequence of Condition R (Lidz, 2001a,b) or Pure identity as a consequence of the properties of anaphor. It means that a language has a Pure reflexive anaphor cannot have an anaphor with a special function, and vice versa. Our question is if the two ways need to be disjunctive. Isn’t it possible for a language has the two ways? If it is possible, then, we have another question. It follows that a language can have three types of anaphor: Pure reflexive anaphor, Near reflexive anaphor and anaphor with a special function such as the focus operator anaphor ziji-benshen in Chinese. Lidz (2001a,b) says that individual anaphor is lexically specified as introducing the Near reflexive function or not. Then, how the second and third types of anaphor that lack the Near reflexive function are distinguished should be explained.
4. Proposal

We propose that there are only two types of anaphor: Pure and Near reflexives and that what looks like a third type: an anaphor with a special function, is a subcase of Near reflexive anaphor. Our assumption is that when a Near reflexive anaphor has a special function such as focus, its Near reflexive anaphor status is counteracted by the special function and Near reflexive readings are not induced.

We assume that there is parametric variation among languages with respect to the classification of anaphor into the two types. Languages like Dutch and Kannada use the way in (12a): the morphological composition separates Pure and Near reflexive anaphors. Other languages use the way in (12b): a bound-morpheme anaphor is a Pure reflexive anaphor and a free-morpheme anaphor is a Near reflexive anaphor. Languages that use the second way are Japanese, Chinese, Russian and Korean etc.4

(12) a. morphologically simplex anaphor = Pure reflexive anaphor

    morphologically complex anaphor = Near reflexive anaphor

b. bound-morpheme anaphor = Pure reflexive anaphor

    free-morpheme anaphor = Near reflexive anaphor

We claim that though the classification of anaphor is parametric among languages, it is language universal that lexically (inherently) reflexive predicates are Pure reflexive verbs and syntactically reflexive predicates are Near reflexive predicates.

Further, we believe that the two ways to induce Pure identity: Pure reflexivity and Pure identity, are not disjunctive in a language. Compare the Chinese example (13) with (9a,b) and (9c).

(13) Xiang-Yu zuihou zi-jin-le. [Chinese]
    Xiang-Yu finally self-killing-Asp
    ‘Xiang-Yu finally killed himself.’ (zi- = Xiang-Yu, *statue)
    (Liu, 2003, Footnote 30 (ii))

The affixal reflexive zi- ‘self’ would not have a special function as it is morphologically simple and cannot be decomposed, unlike ziji-benshen in

4 The classification in (12) is in some ways like Burzio’s (1994) weak(er)/strong(er) distinction of anaphor reviewed in Footnote 1: we regard morphologically simpler anaphors Pure reflexives and more complex ones Near reflexives.
(9c) that can be decomposed as the ziji ‘self’ part and the focus part - benshen ‘self.’ So, we claim that zi- in (13) is a Pure reflexive anaphor that functions as a variable and that what is induced in (13) is Pure reflexivity.\footnote{Liu (2003, Footnote 30) notes that Chinese has two ways to induce Pure identity, but he does not mention that one is Pure identity and the other is Pure reflexivity.}
The comparison between (13) and (9) shows that Pure reflexivity as well as Pure identity interpretations can be induced in Chinese. Three types of interpretation: Near reflexive reading, Pure identity reading and Pure reflexivity reading, are induced in the Madame Tussaud context in one language.

5. Analysis

5.1. Japanese

Let us see how our proposal works observing Japanese that selects the second way of (12). We examine three types of anaphor that lack phi-feature specification: zibun ‘self,’ zibun-zisin ‘self-self’ and affixal anaphor zi-/ziko- used in Sino-Japanese complex verbs known as zi-verbs /ziko-verbs.\footnote{Japanese 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.}

We propose that free-morpheme anaphors are all Near reflexive anaphors in this language based on the fact that they are bound by their coarguments in the absence of lexical reflexivity following the prediction made by Condition R in (8): If an anaphor can be bound by a coargument in the absence of lexical reflexivity, then that anaphor is a Near-reflexive. In (14), the diagnostic that distinguishes Pure and Near reflexivity discussed in Lidz (2001a,b), namely, the availability of statue readings in the Madame Tussaud context, is applied to zibun and zibun-zisin.\footnote{Shimada (2006, 74/76) and Miura (2008) also apply the diagnostics, including this one, discussed in Lidz (2001a,b) to Japanese. Though their analyses are different from ours, their judgments are the same with ours.}

\begin{enumerate}
\item a. John-ga zibun-o hihan-si-ta. (zibun = John, statue)  
\textit{John-Nom self-Acc criticism-do-Past}
\item b. John-ga zibun-zisin-o hihan-si-ta. (zibun-zisin = John,*statue)  
\textit{John-Nom self-self-Acc criticism-do-Past\textquoteleft John, criticized himself.’}
\end{enumerate}

(15) John-ga Mary-o hihan-si-ta.  
\textit{John-Nom Mary-Acc criticism-do-Past\textquoteleft John criticized Mary.’}
In (14a), a Near reflexive reading is yielded: *zibun* can refer to a statue that depicts the antecedent. This means that Condition R does not apply in this example so the predicate *hihan-suru* ‘criticize’ does not mark lexical reflexivity. Actually, the same predicate is used in (15) in which a non-reflexive reading is induced. The predicate does not mark any reflexivity. Now, in (14b), the same predicate with (14a) and (15) is used, and *zibun-zisin* is bound by its coargument. Both *zibun* and *zibun-zisin* are bound by their coarguments in the lack of lexical reflexivity, so both are categorized as Near reflexive anaphors. Predicates that take *zibun* or *zibun-zisin* as their object arguments are Near reflexive predicates.

However, the classification that *zibun-zisin* is a Near reflexive anaphor apparently contradicts with the result that the anaphor does not induce a Near reflexive reading in (14b). We dispense with this contradiction by claiming that this anaphor functions as an intensifier operator anaphor, following Liu’s focus operator anaphor analysis of *ziji-benshen* ‘self-self’ in Chinese. As (16) illustrates, the affix -zisin functions as an intensifier: it intensifies what the suffix attaches to, namely *John*.

Mary-Nom John-self-Acc criticism-do-Past
‘Mary criticized John himself, not anybody related to him.’
(Nakamura, 1989, 1)

We regard *zibun-zisin* as an intensified form of *zibun*. We assume that *zibun-zisin* as an operator because it has the semantic range, namely the range of the Near reflexive function of *zibun*, as other operators do. What induced in (14b) is Pure identity as a consequence of the three properties of *zibun-zisin*: (a) the semantic composition of the Near reflexive function of *zibun* ‘self,’ (b) an intensifier function of -zisin ‘-self,’ and (c) the operator status of *zibun-zisin*. The intensifier operator anaphor *zibun-zisin* selects the best representation of the antecedent of *zibun* from the set of what the Near reflexive function *zibun* denotes. Our assumption is that though *zibun-zisin* is a Near reflexive anaphor as it is a free-morpheme anaphor, the Near reflexive anaphor status of the anaphor is counteracted by the special function as an intensifier, so a Near reflexive reading is not induced in (14b).

Now, we apply the same diagnostic to the third type of anaphor: the affixal reflexives *zi*- and *ziko*- ‘self’ in (17). Following Kishida and Sato (2009), we assume that *zi*- and *ziko*- are incorporated in verbal nouns such as *satu* ‘killing’ and *hihan* ‘criticism’ in syntax and supported by the light verb *suru* ‘do’ as *zi-satu-suru* ‘do self-killing, kill oneself’ and *ziko-hihan-
suru ‘do self-criticism, criticize oneself.’

8 We claim that zi- and ziko- are Pure reflexive anaphors in Lidz’s (2001a,b) sense that function as variables and that what is induced in (17) is Pure reflexivity. Zi-verbs and ziko-verbs are Pure reflexive predicates. Further, we assume that these anaphors mark both semantic and lexical reflexivity, as the Russian affixal reflexive -sja does. For, in (17a), the verbal noun and the light verb combination satu-suru ‘killing-do’ means nothing, and only when the reflexive zi- is incorporated, the complex makes sense. Also, in (17b), the predicate hihan-suru ‘criticize’ is identical with the ones in (14) and (15). As we have seen, the predicate does not mark any reflexivity. Therefore, we assume that both zi- and ziko- are semantic and lexical reflexive markers.

  John-Nom self-killing-do-Past
  ‘John, killed himself.’
  
  John-Nom self-criticism-do-Past
  ‘John, criticized himself.’

What are induced by zi- and ziko- in (17) and zibun-zisin in (14b) are different from the viewpoint of semantics and pragmatics, as Liu (2003) notes that Pure reflexivity and Pure identity are semantically and pragmatically different. Pure reflexive anaphors are variable without any content, while anaphors with a special function have richer semantic/pragmatic contents. In (17), zi-/ziko- just functions as a variable, while the free-morpheme anaphor with the special intensifier function zibun-zisin in (14b) carries richer semantic/pragmatic contents as an intensifier.

Here is the summary of the classification of Japanese anaphor under our proposal. Both zibun ‘self’ and zibun-zisin ‘self-self’ are Near reflexive anaphors, but the latter one has a special function as an intensifier and its Near reflexive anaphor status is counteracted by the function. The affixal zi- and ziko- are Pure reflexive anaphors.

In (18), we apply the second diagnostic for Pure reflexivity and Near reflexivity distinction: the comparative deletion construction test, to the three types of anaphor.

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8 Contrary to our proposal, Tsujimura and Aikawa (1996, 1999) assume that zi- is lexically combined with verbal nouns. Aikawa (1993) claims that ziko- functions like a ‘reflexivizer’ in Reinhart and Reuland’s (1993) sense, like the Dutch anaphor zichzelf ‘self-self’ in (1b). It changes a non-reflexive predicate that it co-occurs with into a reflexive predicate.
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(18) a. Mary-ga John yorimo motto zibun-o hihan-si-ta.
   Mary-Nom John than more self-Acc criticism-do-Past
   ‘M criticized herself more than J criticized {himself / her}.’

   b. Mary-ga John yorimo motto zibun-zisin-o hihan-si-ta.
   Mary-Nom John than more self-self-Acc criticism-do-Past
   ‘M criticized herself more than J criticized {himself / *her}.’

   c. Mary-ga John yorimo motto ziko-hihan-si-ta.
   Mary-Nom John than more self-criticism-do-Past
   ‘M criticized herself more than J criticized {himself / *her}.

Zibun in (18a), a Near reflexive anaphor under our proposal, induces both the sloppy and non-sloppy identity readings, zibun-zisin in (18b), an intensifier operator anaphor, induces only the sloppy identity reading, and the affixal ziko- in (18c), a Pure reflexive anaphor, induces only the sloppy identity reading. The results are explained as follows under our analysis: the Near reflexive zibun can have its own index, so it can induce a non-sloppy identity reading. The intensifier operator anaphor zibun-zisin undergoes an operator movement at LF as in (19). Only the local subject John can be the reference of zibun-zisin in (18b). The Pure reflexive anaphor ziko- is a variable and bound by the local subject John in (18c).

(19) [IP Johni [VP zibun-zisin, [VP … t V … ]] ]

The Japanese date above shows that lexically reflexive predicate that take the affixal reflexives zi- and ziko- are Pure reflexives and syntactically reflexive predicates that take zibun and zibun-zisin are Near reflexive predicates. Zibun-zisin has a special function as an intensifier, so Near reflexive interpretations are suppressed and Pure identity interpretations are induced. We have proposed that, in languages like Japanese, bound-morpheme anaphors are Pure reflexive anaphors and free-morpheme anaphors are Near reflexive anaphors (recall (12b)), and that languages such as Dutch classify anaphors based on their morphological composition (recall (12a)). Note that in the latter type of languages as well, lexically reflexive predicates are Pure reflexive predicates (e.g. (1a) and (2a)) and syntactically reflexive predicates are Near reflexive predicates ((1b) and (2b)). So, we claim that though the way to classify anaphor into Pure and Near reflexives is parametric, it is language universal that lexically reflexive predicates are Pure reflexive predicates and syntactically reflexive predicates are Near reflexive predicates.
5.2. Other Languages

In this subsection, we see that not only in Japanese but also in other languages, bound-morpheme reflexives are Pure reflexive anaphors and free-morpheme reflexives are Near reflexive anaphors. As we have seen in (9) and (13), in Chinese, free-morpheme anaphors ziji ‘self’ and ta-ziji ‘himself’ are Near reflexives, while the affixal zi- ‘self’ is a Pure reflexive. Zi-jiben’hen ‘self-self’ is a Near reflexive anaphor as it is a free-morpheme, but it has a special function as focus and does not function like a Near reflexive anaphor.

In Korean, as (20) shows, the bound-morpheme anaphor ca- ‘self’ is a Pure reflexive anaphor that excludes a Near reflexive interpretation, while the free-morpheme anaphor caki ‘self’ is a Near reflexive anaphor that can induce a Near reflexive interpretation.

Korean has another type of free-morpheme anaphor: casin ‘self.’ Though both caki and casin are free-morpheme anaphors, they show different acceptability with respect to the availability of Near reflexive interpretation. The Near reflexive reading ‘Chelswu blew up the statue that depicts him’ is allowed only in (20b) in which caki is used. By contrast, the expression in (i) with casin is low in acceptability with the reading.

(i) John-nun casin-lul phokhayssta. (casin = John, ?statue)
John-Nom self-Acc blew-up
‘John, protected himself’

The contrast between (20a) and (20b) is consistent with our claim. However, the contrastive acceptability of Near reflexive reading in (20b) and (i) has to be explained. For, under our analysis, both caki and casin are classified as Near reflexive anaphors.

We will not dwell further into the discussion on caki and casin for the purposes of this paper, and we tentatively say that casin has a special function and its Near reflexive anaphor status is counteracted. We regard casin is a special case of Near reflexive anaphor because caki and casin have many different properties in addition to the (un)availability of Near reflexive reading such as (a) caki has a person restriction on its antecedent and only third-person can be its antecedent, while casin does not have such a restriction, (b) both caki and casin allow long-distance binding, but ‘blocking effects’ are observed only with casin, not with caki (Cole et al., 1990), (c) preferred readings for caki are long-distance binding, while for casin, local binding (Park, 1988, Kim, 1993, Kang, 2001), (d) caki does not felicitously occur with ‘physical activity verbs’ (in Yoon’s (1989) term) such as hit, while casin does as in (ii), etc.
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    John-Nom self-blew-up
    b. John-nun caki-lul phokhayssta. (caki = John, statue)
    John-Nom self-Acc blew-up
    ‘John protected himself.’ (Kang, 2001, (18))

Spanish has only the bound-morpheme (clitic) type anaphor se-‘self’ as in (21), and it does not induce a Near reflexive reading.

(21) El zorro se-lavó. [Spanish]
    The zorro self-washed
    ‘Zorro washed himself.’ (se- = Zorro, *statue)

Italian in (22) has two types of anaphor: bound-morpheme (clitic) si- ‘self’ and free-morpheme se stesso ‘self-same.’ Si- functions as a Pure reflexive anaphor, while se stesso functions as a Near reflexive anaphor.

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

English has just the free-morpheme type anaphor that is feature-specified such as himself and herself as in (23b). Himself can refer to a statue. As (23a) shows, if a predicate is lexically specified as reflexive (that is, the predicate can mean a reflexive action without taking a reflexive anaphor overtly as their object arguments), only a Pure reflexive reading is induced.

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

In all the data above, bound-morpheme reflexives are Pure reflexive anaphors and free-morpheme reflexives are Near reflexives and that lexically reflexive predicates that take bound-morpheme anaphors induce
Pure reflexivity, while syntactically reflexive predicate that take free-morpheme anaphors induce Near reflexivity. We believe that the data in this subsection shows the validity of our proposal.

6. Conclusion

We have discussed that several languages have more than one form of reflexive anaphors and they are classified into ‘Pure reflexive anaphors’ that require complete identity with their antecedents and ‘Near reflexive anaphors’ that are referentially relevant to their antecedents but not necessarily identical with them, in Lidz (2001a, b)’s sense. We have proposed that the Pure and Near reflexive anaphor classification is parametric among languages: in some languages (e.g. Japanese, Chinese, Russian, Korean etc.), bound-morpheme reflexives are Pure reflexive anaphors and free-morpheme reflexives are Near reflexives, while in others (Dutch, Kannada, Norwegian etc.), morphologically simplex anaphors among free-morpheme reflexives are Pure reflexive anaphors and complex ones are Near reflexives. The Near reflexive anaphor status of free-morpheme anaphor is counteracted if the anaphor has a special function such as Chinese zi ji-benshen that functions as a focus anaphor and Japanese zibun-zisin that functions as an intensifier anaphor. We have claimed that though the classification of anaphor is parametric, it is language universal that lexically reflexive verbs induce Pure reflexivity and syntactically reflexive verbs induce Near reflexivity.

References


