# Verbal Reflexive as a SELF Anaphor in Ho

Taejin Koh & Dohun Kim

(Busan University of Foreign Studies)

**Koh, Taejin & Kim, Dohun. (2017). Verbal Reflexive as a SELF Anaphor in Ho.** *The Linguistic Association of Korea Journal, 25*(1), 55-73. Ho is one of the very few languages on the Indian Subcontinent that rely exclusively on the verbal reflective. Its non-overt object is the empty category; and its reflexive morpheme is an argument-absorbing operator that detransitivizes the verb. Moreover, the intransitive marker functions as the verbal and passive markers. Such observations compel this study to assume that the nature of Ho's verbal reflexive is fundamentally associated with its non-overt object. In order to gain a deeper understanding of the verbal reflexive, this study sets out to provide an overall description of the properties of Ho's verbal reflexive, followed by a thorough examination of its nature within the framework of predicate-centered binding theory put forward by Reinhart (1983) and Reinhart and Reuland (1993).

**Key Words:** detransitivitizer, SELF anaphor, predicate-centered reflexivity, verbal reflexive, condition R

## 1. Introduction

The study of reflexivization has offered a deeper insight into the nature of language; the binding theory captures the distribution of pronouns and anaphors despite the empirical constraints of the c-command approach. A vast majority of languages on the Indian Subcontinent possess nominal devices for anaphor (e.g. *Indo-Aryan:* Hindi-Urdu, Kashmiri, Punjabi, Gujarati, Nepali, Bengali, Assamese, Oriya; *Dravidian:* Malayalam; *Austro-Asiatic:* Khasi, Juang; *Tibeto-Burman:* Tangkul); some have both nominal and verbal devices (e.g. *Indo-Aryan:* Marathi; *Dravidian:* Telugu, Kannada, Tamil; *Tibeto-Burman:* Hmar, Mizo, Manipuri, Rabha, Aimol, Angami); only a small handful of languages rely exclusively on

the verbal reflexive[1] (e.g. *Austro-Asiatic*: Ho, Mundari, Sora, Santali) (Subbarao, 2001). While significant research has been done on the first and second groups, little attention has been paid to the third, inter alia, languages that mark reflexivity directly on the verb, not its arguments. As an initial effort to gain a deeper understanding of the third category and to fill the research gap, this study investigates Ho, a Munda language of the Austro-Asiatic language family. In examining the precise nature of Ho's verbal reflexive, which will be followed by a general illustration of the properties thereof, this study capitalizes on Reinhart and Reuland's (1983, 1993) predicate-centered binding theory. According to Reinhart (1983) and Reinhart and Reuland (1993), the appropriate partitioning of anaphors is determined by syntactic properties. In line with the binding theory, their typology of reflexives builds upon the theories of the syntactic properties of referential dependence. Nominal anaphors are categorized into SE anaphors (simplex expression: anti-local) and SELF anaphors (complex expression: local); even though SE anaphors and pronouns belong to the same group in terms of their internal structures, SE anaphors differ from pronouns in that they lack a full specification of Φ-features. While their analysis is confined to nominal anaphors, the framework may well be adapted and refined to have application to the verbal reflexive. Employing the aforementioned analysis as the main theoretical framework, this study sets out to analyze and examine Ho's verbal reflexive; the relations between the empty category and the verbal reflexive will often be discussed, as it is a critical factor in understanding the nature of the verbal reflexive.

## 2. Properties of Ho's verbal reflexive

Ho is typologically verb final, and is nominative-accusative. The pronominal subject and object of a [+transitive] verb are heavily dropped due to the presence of subject and object agreement markers.

---

[1] Despite the controversies over the existence of nominal reflexive, Ho's nominal reflexivization is a form calqued from neighboring Indo-Aryan languages (Mayuri et al., 2014, p. 72)

(1)  siima<sub>i</sub>       manDi<sub>j</sub>-i<sub>i</sub>      jom-e<sub>j</sub>-ke-D-a.
     *Sema*          *meal-3sg*        *eat-3sg-pst-[+TR]-dec*
     'Sema ate meal'                 (Koh, 2009)


(2)  pro<sub>i</sub>        pro<sub>j</sub>          cereb-ke-**D**-mi<sub>j</sub>-<sup>y</sup>a-ñ<sub>i</sub>[2]
     *I*             *you*            *kiss-pst-[+TR]-2sg-dec-1sg*
     'I kissed you.'


(3)  pro<sub>i</sub>        giti-ke-**n**-a-ko<sub>i</sub>.
     *They*          *sleep-pst-[-TR]-dec-3pl*
     'They slept.'

Unlike sentence (1), both the subject and the direct object are dropped in sentence (2). The subject agreement marker *-ñ* occurs to the right of the verb as a suffix and the direct object agreement marker *-mi* occurs to the right of the verb as an infix. In sentence (3), the intransitive marker *-n* occurs to the right of the tense marker. Its verbal reflexive has the following five functional properties.

## 2.1. Detransitivizing function

As can be seen in sentence (3), the intransitive marker *-n* occurs as an infix; whereas, in sentence (2), the transitive marker *-D* occurs.

As (5) below indicates, Ho is deficient in nominal anaphors (in reflexive, as well as reciprocal contexts); it only has the verbal reflexive. Hence, we find a null argument  in the direct object position of both reflexive and reciprocal sentences. While an emphatic device can occur in the direct object position as shown in (4), this has a sloppy reading. It should be noted that this emphatic device is found only in urban areas where the speakers of Ho encounter those of Hindi. Standard Ho from villages does not have the emphatic nominal device *añ-te-ge*.


(4)  pro<sub>i</sub>        (añ-te-ge-ñ<sub>i</sub>)          goe<sup>?</sup>-ke-**n**-a
     *I*             *me-by-emph-1sg*          *kill-pst-[-TR]/VR-dec*
     'I killed myself.'

---

2) The examples without citations are from the fieldwork conducted in 2002 and 2003 in Chaibasa, India.

(5) pro$_i$        goe$^?$-ke-**n**-a-ñ$_i$
    *I             kill-pst-[-TR]/VR-dec-1sg*
    'I killed myself.'
    *'I killed (someone).'

(6) pro$_i$        goe$^?$-ke-**D**-a-ñ$_i$
    *I             kill-pst-[+TR]/VR-dec-1sg*
    *'I killed myself.'
    'I killed (someone).'

In sentence (4), *añ-te-ge* 'by me' is not a nominal reflexive; it functions as an emphatic. It should be noted that *-te* 'with' or 'by', and *-ge* 'also' are not case markers but fall into the category of 'emphatic clitics'. While a nominal device is optional in most of Dravidian languages due to the existence of the verbal reflexive, it is not the case in Ho. In sentence (5), the direct object position is empty and the intransitive marker *-n* occurs though the verb is [+transitive]. The transitive marker *-D* occurs in sentence (6) unlike (5). The difference between (5) and (6) is the occurrence of the [±transitive] marker. In (5), the verbal reflexive marker, which also serves an intransitive marker, functions as a detransitivizer.

(7) pro$_i$           ø           aRsi-re-m$_i$           nel-ke-**n**-a
    *You                          mirror-in-2sg           see-pst-[-TR/VR]-dec*
    'You saw yourself in the mirror.'
    *'You saw something/someone in the mirror.'

(8) pro$_i$           ø           aRsi-re-m$_i$           nel-ke-**D**-iñ$_j$-a
    *You                          mirror-in-2sg           see-pst-[+TR]-1sg-dec*
    'You saw me in the mirror.'

The examples above show that pronominal subjects are dropped due to the occurrence of the subject agreement marker, and that the form of the marker of [+transitive] and [-transitive] are *-D* and *-n*, respectively. Although the verb in sentence (7) is a transitive verb *-nel* 'see', the intransitive marker *-n* occurs since it is a sentence with a reflexive. However, the transitive marker *-D* occurs in sentence (8). This phenomenon may well be labeled as 'detransitivizing function'.

## 2.2. Absence of long distance binding

Sentence (9) below is grammatically correct in Ho.

(9)   pro$_i$           Ø$_i$              toke-kie-**n**-a-ñ $_i$
      *I*                               *hit- pst-[VR]-dec-1sg*
      'I hit myself.'

In sentence (10) below, a third singular pronoun *-aye* occurs instead of the nominal anaphor, while no verbal reflexive occurs in this context. In general, the reflexive marker corresponds only to the direct object.

(10)  soma$_i$  [ ram$_j$ aye$_{i/*j/k}$-lagiD cai bai-ti$^y$a ]-e$_i$    kaji-ke-**D**-a
      *Soma    Ram him-for        tea make-to-3sg     tell-pst[+TR]-dec*
      'Soma told Ram to make tea for himself.'

(11)  pro$_i$   aRsi-re     nel-e-**n**-ti$^y$a-m          sanaŋ-a**D**-a
      *you    mirror-in   see-epen-VR-to-2sg       want-pst.pef-dec*
      'You wanted to see yourself in the mirror.'

(12)  soma$_i$  [ ram$_j$ Ø$_j$  goe-**n**-ti$^y$a ]-e$_i$    sanaŋ-a**D**-a
      *Soma    Ram     kill-VR-to-3sg     want-pst.pef[+TR]-dec*
      'Soma$_i$ wanted Ram$_j$ to kill himself$_{*i/j}$.'

As the examples above testify, the verbal reflexive marker is monomorphemic; long distance binding is impossible. The subject of the matrix clause is *Soma* in sentence (10) and (12), where *Soma* cannot be coindexed with the direct object of the embedded clause; a null-argument is coindexed with the nearest subject — *Ram*.

The verbal reflexive necessarily must not be long-distance reflexive.[3] Let us

---

3) Cole and Sung (1994) provide the typological properties of long distance relfexives as follows:
   i) Long distance relfexives are monomorphemic;
   ii) A local reflexive can refer to a subject or an indirect object, but a long distance refexive can refer only to a subject; and
   iii) When an immediately higher subject differs in person from a lower subject, long distance binding is blocked.

examine the case of the verbal reflexive in Ho. It has the following properties:

i) It is monomorphemic: the marker is -*n*, no nominal reflexive marker other than the verbal reflexive;

ii) It is subject-orientated; and

iii) Long distance binding is not allowed.

(13)  soma$_i$    uRuu-keD-a    ci     rahul$_k$    suku-ke-n-a
    *Soma*    *think-pst-dec*    *that*    *Rahul*    *like-pst-VR-dec*
    'Soma$_i$ thought that Rahul$_k$ liked himself$_{*i/k}$.'

Even though the subordinate subject appears as the third singular form, as the matrix subject 'Soma', it does not allow the coindexation as found in (13).

## 2.3. Emphatic function

Let us now examine (14) and (15). The verb is [+transitive]; however, the intransitive marker -*n* occurs although it is not a reflexive context since the object and the subject are not identical. Again, the verbal reflexive marker is always coindexed with the direct object, which is an empty category, and the direct object in turn is coindexed with the subject.

(14)  ram$_i$    soma-ta$^?$are    laD-e$_i$    ema-ki-**n**-$^y$a
    *Ram*    *Soma-to*    *bread-3sg*    *give-pst-[-TR/VR]-dec*
    'Ram **GAVE HIS** bread to Soma.'    (Deeney, 1966)

(15)  ram$_i$    soma-ta$^?$are    laD-e$_i$    ema-ke-**D**-a
    *Ram*    *Soma-to*    *bread-3sg*    *give-pst-[TR]-dec*
    'Ram gave the bread to Soma.'    (Deeney, 1966)

In (14), we see an interesting relationship between the verbal reflexive marker and the direct object, which is not the same as the subject. According to Deeney (1966), the occurrence of the intransitive marker -*n* means action stressing (with less emphasis on any object, although at times, it may be expressed) and the possessive relationship. The subject Ram and the direct object *laD* 'bread' are not identical in (14), although the verbal reflexive marker (the intransitive marker) -*n* occurs. However, the relationship between two NPs is

possessive as shown in (14). And the focus of the context is to emphasize the action and the possessive relationship. However, there is no possessive relationship and no action stressing in (15) since the transitive marker *-D* occurs. As sentence (15) cannot be interpreted as 'Ram gave his bread to Soma', the speaker of Ho intentionally uses the verbal reflexive marker (intransitive marker) *-n* to stress the action as well as the possessive relationship.

## 2.4. Absence of passive marker

The internal argument of reflexives in Ho is a null argument which is an empty category. It may indicate that the verbal reflexive morpheme absorbs its internal argument. Thus, the reflexive morpheme absorbs both the case feature and the thematic relation. Reflexives and passives in Ho have common features: both possess the same morphological marker *-n* which is a detransitivizing marker occurring to the right of the verb. Nevertheless, they are not homonymous. According to Burrows (1915), the passive is used very sparingly, the active form being the preferred choice. The morpheme *-o*[4) is a marker of the passives except in the past tense, where the active intransitive marker *-n* is used. The occurrence of the passive is permitted only with transitive verbs. Let us examine the following sentences.

(16) pro$_i$ em-**o**-tan-a-ñ$_i$
　　　 I 　　　　 *give-passive-pres-dec-1sg*
　　　 'I am given.' (Burrows, 1915)

(17) pro$_i$ em-ake-**n**-a-ñ$_i$
　　　 I 　　　　 *give-pst-VR/passive-dec-1sg*
　　　 'I was given.' (Burrows, 1915)

The passive marker *-o* occurs in (16) whereas the passive marker or verbal reflexive marker *-n* occurs in (17); sentences (16) and (17) are the present tense and the past tense markers respectively.

---

4) Both the passive marker and the reflexive marker in the present tense have a separate form from the intransitive maker -n. However, this is related with the position of the occurrence of direct object agreement marker in Ho.

Meanwhile, sentence (18) below can be interpreted as i) when morpheme *-n* is treated as a verbal reflexive, and as ii) when *-n* is treated as a passive morpheme.

(18) (añ)$_i$    añ-te-ge-ñ̃$_i$      goe?-ke-**n**-a
  *I*  *me-by-emph-1sg* *kill-pst-[-TR]-dec*
  (i) 'I killed myself.'
  (ii) 'I was killed by myself.'

In normal reflexive contexts in Ho, no direct objects occur except for sentences such as (19) below.

(19) ram$_i$  kule-te-ge-?e$_i$  goe?-ke-n-a
  *Ram*  *tiger-by-emph-3sg kill-pst-[-TR]-dec*
  (i) '? Ram KILLED HIS tiger.'
  (ii) 'Ram is killed by a tiger.'

When the direct object occurs with the postposition *-te* 'by' in reflexive sentences, it inevitably leads to a sloppy reading. This type of sentence can also be interpreted as a passive. But there lies a difference between the two sentences: the postposition, which occurs in the direct object position, *kule* 'tiger' is not identical with the subject *añ* 'I' in (19) while the other postposition, which also occurs in the same position, *añ* 'me' can be identical with the omitted subject *añ* 'I' in (18). Therefore, (19) is i) to stress the action as well as the possessive relationship, which is an indirect reflexivizing way of the subject's possession, since the intransitive marker (reflexive marker) is used, and the direct object occur as the postposition, and ii) to show the passive since the intransitive marker (passive marker) and the postposition occurs. Both sentences (19) and (18) are the passive sentences whose interpretations differ.

The reason as to why we need to compare the passive and the reflexive sentence in Ho is that both sentences are detransitivized; passivized verb loses the ability to assign structural accusative case to its complement.

According to Ramamurthy (1931, p. 26), Sora also uses reflexive verbal forms which express the meaning of the middle voice. Like Ho, Sora exclusively lacks the nominal anaphor; moreover, the verbal reflexive marker can also function as a passive marker.

## 2.5. Ambiguous readings

Lidz (2001) proposes Condition R to explain why lexically/morphologically reflexive-marked predicates can only allow sloppy reading.[5] Nevertheless, Condition R is unable to fully account for Ho, which allows for both strict and sloppy readings.

(20) $\text{pro}_i$   $\emptyset_i$     nel-ke-n-a-ñ$_i$
     *I*   *self*   *see-pst-VR-dec-1sg*
     'I saw myself. (= I or statue)'

Sentence (20), which contains only the verbal reflexive morpheme, allows for both interpretations.

(21) $\text{pro}_i$   añ$_i$-te-ge-ñ$_i$      nel-ke-n-a
     *I*   *me-by-emph-1sg*   *see-pst-VR-dec*
     'I saw myself. (= I, *statue)'

Sentence (21) has only a sloppy interpretation. The difference between (20) and (21) is the occurrence of the visible and concrete direct object. Both sentences also have the reflexive-marked predicates, since they are lexically reflexive-marked by the verbal reflexive morpheme. However, the statue interpretation is blocked in (21).

When the predicate is lexically reflexive-marked, it has two readings as in (22) and (23). Note that the verbal reflexive morpheme occurs.

(22) rami   $\emptyset$     aRsi-re?-ei     nel-ke-n-a
     *Ram*         *mirror-in-3sg*   *see-pst-VR-dec*
     (i) 'Ram saw himself in the mirror.'

---

5) Lidz (2001, p. 131) explains that the left side of the formula is the semantic representation of refexivity, and the right side is the Θ-grid requirement of a lexically/morphologically reflexive predicate. Condition R states that if a predicate is semantically reflexive, it must be lexically/morphologically reflexive, and similarly if a predicate is lexically/morphologically reflexive, then it must be semantically reflexive.

$\lambda x[P(x, x)] \leftrightarrow (\Theta 1 = \Theta 2)$
semantics          Θ-grid

(ii) 'Ram saw his reflection in the mirror.'
(23)  tam-ke-n-a-ñ
       *hit-pst-VR-dec-1sg*
       (i) 'I hit myself.'
       (ii) 'I hit the statue.'

# 3. Verbal reflexive as a SELF anaphor

Predicate-centered binding theory, put forward by Renhart (1983) and Reinhart and Reuland (1993), is refined hereunder to account for Ho's verbal reflexive.

## 3.1. Syntactic anaphoric expressions

Both binding theory and Reinhart and Reuland's (1993) typology focus on the syntactic properties of referential dependence. One of the major contributions of generative grammar is the conception of a theory of anaphoric relations taken as syntactic dependencies (Chomsky, 1981). A key assumption is that all interpretative dependencies can be understood in terms of structural conditions on indexing. Lexical elements are classified into [±anaphor] and [±pronominal]; and their distribution is regulated by the following binding principles:

**(i)  Principle  A**
Anaphor must be bound in its governing category.

**(ii)  Principle  B**
Pronoun must be free in its governing category.

**(iii)  Principle  C**
R-expression must be free everywhere.

As seen above, binding theory is the module of the grammar that regulates the interpretation of the NPs. The theory posits that the relation between an anaphor and its antecedent is configurationally sensitive, and that the

restrictions to the distribution of anaphors and pronominal are determined by the position of their antecedent.

Reinhart and Reuland (1993) classify nominal anaphors into two: SE anaphors (simplex expression: antilocal) and SELF anaphors (complex expression: local).[6] According to their analysis, SE anaphors differ from pronouns in that they lack a full specification of Ø-features although they belong to one group in terms of internal structure. Therefore, Reinhart and Reuland (1993) define anaphors along the lines of binding theory: anaphors of both the SE and SELF types are referentially defective NPs. Nevertheless, the two differ substantially in their grammatical functions. Meanwhile, Langacker (1966 cited in Reinhart, 1983, p. 28) points out that the problem of definite NP coreference is the one, which originally motivated the relation 'precede and command'. It was introduced to account for a problem that is independent of the specific theory adopted concerning the status of anaphoric relations: a pronoun cannot be related arbitrarily to any full NP in a sentence. The standard division of lexical anaphoric expression is into pronouns and anaphors.

SE anaphors not only form a group with SELF anaphors with respect to the R property – as both are referentially deficient (-R) expressions – but also form a group with pronouns with respect to the 'reflexivizing' function, since none of them can reflexivize a predicate.

|  | | SELF | SE | Pronoun |
| --- | --- | --- | --- | --- |
| **Reflexivizing** | **function** | + | - | - |
| **Referential** | **independence** | - | - | + |

Under the view that reflexivity is a property of predicates, SELF anaphors function as reflexivizers, whereas SE anaphors lack this function. Reinhart and Reuland (1993) define a predicate as reflexive if two of its arguments are coindexed.

**Condition A**
A reflexive-marked predicate is reflexive.

---

6) Cole and Sung (1994) observe that complex reflexives are universally locally bound, whereas simplex reflexives are universally long-distance bound.

## Condition B
A reflexive predicate is reflexive-marked.

The conditions follow the definitions below:
 a. A predicate is reflexive if two of its arguments are coindexed.
 b. A predicate is reflexive-marked if
  i) it is lexically reflexive, or
  ii) one of its arguments is a SELF anaphor.
 c. A SELF anaphor is a morphologically complex anaphor.

One of the universal properties of natural language is the licensing of reflexivity. A predicate can be reflexive only if it is linguistically marked as reflexive and corresponds to intrinsic and extrinsic reflexivization: in intrinsically reflexive predicates, the verb is marked as such in the lexicon, with or without an overt morphological marking of the verb; and a transitive predicate which is not intrinsically reflexive may turn into a reflexive predicate if reflexivity is marked on one of its arguments with a SELF anaphor (Reinhart and Reuland, 1993, p. 662). Thus, reflexivization is viewed as an operation on the verb's $\Theta$-grid, absorbing one of its $\Theta$-roles. This can be labeled as 'absorption approach', which is also supported by our analysis of Ho's anaphors. Let us look at how Conditions A and B work.

(24) *$Max_i$ haat $zich_i$.
  *Max* *hates* *self*  (SE)
  'Max hates himself.'

(25) Max haat zichzelf.
  *Max* *hates* *selfself*  (SELF)
  'Max hates himself.'

(26) Max scheert zich.
  *Max* *shaves* *self*  (SE)
  'Max shaves himself.'   (Reinhart and Reuland, 1993)

In the Dutch example in (24), Condition B rules out *zich*, which is SE anaphor as it is not assumed to be reflexive-marked. Hence the reflexive predicate is not licensed (the predicate is only reflexive but not

reflexive-marked). However, *zichzelf* in (25) is bound by a coargument since it is reflexive-marked, which is SELF (complex). Sentence (26) is grammatical, as it is SE (simplex); nevertheless, in principle, it should be ruled out by Condition B, since its predicate is not reflexive-marked as found in (24). Nevertheless, Reinhart and Reuland (1993) did not exclude this sentence on the ground that the verb *scheert* 'shave' is intrinsically a reflexive predicate, which is lexically reflexive-marked. Thus, this lexical verb enables the reflexivization of the predicate.

## 3.2. Verbal reflexive as a type of SELF anaphor

As the verbal reflexive has a great many features of SELF anaphors, this study refined Reinhart and Reuland's (1993) model − which only deals with nominal anaphors − to put the verbal reflexive into the category of SELF anaphor. Let us look at (27) and (28) from Ho.

(27)  $pro_i$       $pro_j$       cereb-ke-D-mi$_j$-$^y$a-ñ$_i$
      *I*           *you*         *kiss-pst-[+TR]-2sg-dec-1sg*
      'I kissed you.'

(28)  $pro_i$       ø           aRsi-re-m$_i$       nel-ke-n-a
      *You*                     *mirror-in-2sg*     *see-pst-[-TR/VR]-dec*
      'You saw yourself in the mirror.'

The verbal reflexive can occur only when a null argument is coindexed with an antecedent, and a non-overt object occurs in an argument position. Thus, there is a clash between two contra distinctive features. On one hand, the verbal reflexive is monomorphemic; on the other hand, it is coindexed with a null argument in an argument position. In order to account for Ho, we add the following statement to Reinhart and Reuland's (1993) definition: 'one of its arguments is coindexed with the verbal reflexive'.

Indeed, we may 'safely' define the verbal reflexive as a SELF anaphor. Sentence (29) below perfectly conforms to Ho's grammar; therefore, reflexive marking can be realized either syntactically (through a SELF anaphor) or lexically in Ho. Namely, it is realized by a verbal reflexive marker (Lidz, 2001)[7].

This indicates that *-n* should not be treated as an SE but as a SELF, since it is coindexed with the argument. Thus, it reflexivizes a predicate.

(29)    pro        ø            toke-kie-n-a
        *I*                         *hit-pst-[VR]-dec*
        'I hit mysef.'

Hence, the verbal reflexive is also locally bound in consonance with the property of SELF anaphors; in reflexive contexts in Ho, long distance binding is not allowed as the following sentences (30) and (31) illustrate:

(30)    soma$_i$   [ram$_j$    aye$_{i/*j/k}$-lagiD   cai    bai-ti$^y$a]-e$_i$    kaji-ke-**D**-a
        *Soma*   *Ram*    *him-for*        *tea*    *make-to-3sg*   *tell-pst-[+TR]-dec*
        'Soma told Ram to make a tea for himself.'

(31)    soma$_i$   [ram$_j$    ø$_j$        goe-**n**-ti$^y$a]-e$_i$   sanaŋ-a**D**-a
        *Soma*   *Ram*            *kill-[VR]-to-3sg*  *want-pst[+TR]-dec*
        'Soma$_i$ wanted Ram$_j$ to kill himself$_{*i/j}$.'

As Lidz (2001, p. 124) points out, the classification into reflexivizing and nonreflexivizing anaphors is intended to capture the apparent antilocality of the nonreflexivizing ones. Thus, reflexive-marked SELF anaphors must be locally-bound. This is because the property of the verbal reflexive is subject-oriented[8]; and reflexive-marked predicates (i.e. complex anaphors), verbal reflexives, and inherent lexical verbs do not allow long distance binding.

## 3.3. Chain condition

While the chain condition of Reinhart and Reuland (1993) may not be readily applicable to Ho, we need to pay keen attention to its assumption that [R] property holds for the R-expression of the GB framework, as well as for

---

7) Lidz (2001) has extended the definition of reflexive-marked predicate to include morphological reflexivity. In the [-past] tense, the distinctive forms of the reflexive and the passive occur with the intransitive marker.

8) Subbarao (2001) argues that a verbal reflexive has the property of subject-orientation.

pronouns, including PRO, *wh*-trace, and *pro*. Precisely, the approach facilitates the understanding of the nature of *pro* in verbal reflexive contexts. It is also important to compare SE anaphors and pronominals since they are not reflexive-marked. While Condition B rules out all reflexive predicates that are not reflexive-marked, pronouns and SE anaphors are indistinguishable with respect to this condition. Let us see the following sentences.

(32)  Willem$_i$      schaamt      zich$_i$/*hem$_i$
       Willem$_i$      shames       SE$_i$/*him$_i$
       'Willem shames himself/*him.'        (Reinhart and Reuland, 1993)

When the predicate is lexically reflexive (the reflexive predicate is intrinsically reflexive-marked by the inherent lexical property of the verb), Condition B cannot rule out the coindexation between *Willem* and the pronoun *hem* as shown in (32). Hence, Reinhart and Reuland's (1993) theory faces a challenge; however, they insert A-chain[9], which can regulate the distribution of SE anaphors and pronouns. Under this condition, SE anaphor *zich* is [Case-marked] and [−R] link. Since all pronominals are [+R], the chain appropriately contains only one link; Willem is both [+R] and [Case-marked], and *zich* is [-R] and [Case-marked].

Let us examine the following sentences of Ho.

(33)  Ram        ø          giyu-**n**-tan-a
      *Ram*                 *shame-[VR]-pres-dec*
      'Ram shames himself.'

(34)  Ram        ø          tam-ki-**n**-a
      *Ram*                 *hit-pst-[VR]-sec*
      'Ram hit himself.'

---

9) According to Reinhart and Reuland (1993, pp. 692-697), A-chain is any sequence of coindexation that is headed by an A-position and satisfies antecedent government and there is no barrier between any two of the links. General condition on A-chain is that a maximal A-chain (α1, . . . αn) contains exactly one link: α1 that is both [+R] and [Case-marked].

(35)  Ram$_i$      añ$_i$-$^y$e$_i$      tam-ki-**D**-iñ$_i$-a
      *Ram       me-3sg       hit-pst-[TR]-1sg-dec*
      'Ram hit me.'

In sentences (33) and (34), the verbal reflexive *-n* occurs and there is no nominal device. However, in (35), the direct object occurs and the transitive marker *-D* also occurs to the right of the verb as an infix. As previously discussed, an empty category which occurs in the direct object position is regarded as pro. This leads us to claim that a null argument is [+R] and [-Case marked].[10] Note that the verbal reflexive is marked in bold in (37) and (38).

(36)  *pro$_i$*      am$_j$   mandi-m$_j$   jom-ti$^y$a-ñ$_i$      sanaŋ-ke-**D**-a
      *I       you   rice-2sg   eat-to-1sg      like-pst-[+TR]-dec*
      I wanted you [PRO to eat rice]
      'I wanted you to eat rice.'

(37)  *Ram [*pro*   mandi      jom-ti$^y$a]-e   sanaŋ-ke-**n**-a
      *Ram         rice      eat-to-3sg   like-pst-[VR]-dec*
      Ram   wanted   *pro* [PRO to eat rice]
      'Ram wanted himself to eat rice.'

(38)  Ram [*pro*   mandi      jom-e**n**-ti$^y$a]-e   sanaŋ-ke-**D**-a
      *Ram         rice      eat-[VR]]-to-3sg like-pst-[VR]-dec*
      'Ram wanted himself to EAT HIS rice.'

---

10) Condition B rules out the SE anaphor in (b) below, since the SE anaphor *zich* occupies the direct object position in a to-infinitival ECM structure. Reinhart and Reuland (1993, p. 711) claim that there are contexts where objects of control verbs and ECM subjects are predicted to display different anaphora properties so that one such contrast arises in the case of SE anaphors.

(a) Henk$_i$ horde  [zich$_i$ zingen]
    Henk  heard  [SE    sing]
(b) *Henk$_i$       overreedde   zich$_i$       [PRO$_i$   te    zingen]
    Henk          persuaded    SE          [PRO   to    sing]
(c) Henk$_i$ overreedde   zichzelf$_i$   [PRO$_i$   te    zingen]
    Henk  persuaded    SELF        [PRO   to    sing]    (Reinhart and Reuland, 1993)

As observed earlier, only SELF anaphors can make the coindexation between the matrix subject and the object in to-infinitival ECM construction, since the predicate is reflexive-marked. Then, the verbal reflexive may allow the coindexation in the structure since the verbal reflexive is lexically reflexive-marked. However, sentence (37) is ungrammatical due to the absence of the verbal reflexive marker in the embedded clause and the structural problem that the verbal reflexive marker -*n* is coindexed with the embedded clause. The entire embedded clause cannot be coindexed with the verbal reflexive − the matrix subject and the embedded clause (the object of the matrix verb) cannot be identical. Nevertheless, sentence (38) is grammatical, as the verbal reflexive marker -*n* occur inside the embedded clause.

# 4. Conclusion

This study discussed and examined the properties of Ho's verbal reflexive within the framework of predicate-centered reflexivity of Reinhart (1983) and Reinhart and Reuland (1993). Throughout this paper, we have witnessed that the nature of the verbal reflexive is basically related to the empty category. Therefore, the focal point is on the relation between a non-overt object and its realization as a verbal reflexive morpheme. Moreover, this study found that the internal argument is absorbed by the verbal reflexives due to the detransitivizing effect. In Section II, this study overviewed five functional properties of Ho's verbal reflexive. The marker -*n* can be a verbal reflexive as well as an intransitive marker and a passive marker; all these function as a detransitivizer. It is monomorphemic and also lacks Ø-features; and in reflexive contexts of Ho, the possibility of long distance binding is blocked out. The verbal reflexive has certain functions, such as stressing action and the possessive relationship, while absorbing both case feature and the thematic relation. Also, the verbal reflexive in Ho allows both strict and sloppy readings. In Section III, this study refined the syntactic classification proposed by Reinhart and Reuland (1993) to include the verbal reflexives. The framework proposes to replace argument-based binding theory with predicate-centered binding theory that requires 'a reflexive-marked predicate is reflexive' (Condition A) and 'a reflexive

predicate is reflexive-marked' (Condition B). It predicts that the SELF anaphor cannot be long-distance bound, since it can reflexive-mark a predicate, whereas the SE anaphor which does not reflexive-mark a predicate can have long distance antecedent. This paper made a suggestion to add one more condition to Reinhart and Reuland's (1993) model: 'one of its arguments is coindexed with the verbal reflexive'. Such addition enabled this study to categorize the verbal reflexive as SELF anaphor – it functions as reflexivizers unlike SE anaphors. Furthermore, we have employed Reinhart and Reuland's (1993) Chain Condition to examine the nature of verbal reflexive in Ho. This study has found that the verbal reflexive in Ho follows the unergative entries proposed by Reinhart and Siloni (2004) who claim that reflexives are derived from their transitive alternative by an operation reducing the internal argument. While the defenders of unaccusative approach argue that most reflexives have syntactic realization as either a clitic or a nominal anaphor, this study demonstrated that the internal argument of reflexives in Ho is null, which indicates that the verbal reflexive morpheme absorbs its internal argument. Thus, in Ho, the reflexive morpheme absorbs both case feature and the thematic relation; a null argument cannot play both the thematic role and case. In order to refute the unaccusative approach, we have seen the passive in Ho: passivization is incompatible with unaccusative entries, and the reflexives and passives in Ho share the same structure as the subject is an underlying object. The findings prove that reflexives cannot be explained under the unaccusative analysis and lead this study to conclude that reflexives are the products of reduction of the internal argument.

# References

Burrows, L. (1915/1980). *The grammar of the Ho language*. New Delhi: Cosmo.

Chomsky, N. (1981). *Lectures on government and binding*. Dordrecht: Foris.

Cole, P., & Sung, L-M. (1994). Head movement and long distance reflexives. *Linguistic Inquiry, 25*, 355-406.

Deeney, J. (1966). *An introduction to the Ho language*. Bihar: Xavier Ho.

Haegeman, L. (1994). *Introduction to government and binding theory*. Oxford: Blackwell.

Lidz, J. (2001). *Condition R. Linguistic Inquiry, 32*, 123-140.

Mayuri, J., Subbarao, K., Everaert, M., Maheshwar, R., & Uma, G. (2014). Some Syntactic Aspects of Lexical Anaphors in Select Munda Languages. *Mon-Khmer Studies, 43*(1), 72-83.

Ramamurthy, G. (1931). *A manual of the Sora (or Savara) language*. Madras: Government Press.

Reinhart, T. (1983). *Anaphora and semantic interpretation*. London: Croom Helm.

Reinhart, T., & Siloni, T. (2004). Against the unaccusative analysis of reflexives. In A. Alexiadou, E. Anagonstopoulou & M. Everaert (Eds.), *The unaccusativity puzzle: Studies on the syntax-lexicon interface* (pp. 159-180). Oxford: Oxford University Press.

Reinhart, T., & Reuland, E. (1993). Reflexivity. *Linguistic Inquiry, 24*, 657-720.

Rizzi, L. (1986). Null objects in Italian and the theory of pro. *Linguistics Inquiry, 17*, 501-558.

Subbarao, K. V. (2001). Syntactic typological and South Asian languages. In R. Singh (Ed.), *The yearbook of South Asian languages and linguistics.* (pp. 93-108). New Delhi: Sage.

Koh, T. (2009). *A Typological Grammar of Ho*. Seoul: HUFS Press.

**Dohun Kim** (corresponding author)
Graduate School of Interpretation and Translation
Busan University of Foreign Studies
Geumsaem-ro 485byeon-gil, Geumjeong-gu, Busan, Korea
Tel: 051-509-5485
E-mail: kdh8377@bufs.ac.kr

**Taejin Koh** (first author)
Department of Indian Studies
Busan University of Foreign Studies
Geumsaem-ro 485byeon-gil, Geumjeong-gu, Busan, Korea
Tel: 051-509-5485
E-mail: tjindia@bufs.ac.kr