BINDING DOMAINS IN HAITIAN*

Like many Kwa languages of West Africa (Awóyale 1986), Haitian lacks unique, morphologically reflexive expressions equivalent to English herself, himself, themselves. Instead, local binding has three compositional sources. Morphological economy (Burzio 1989) construes an object pronoun reflexively just if no morphologically reflexive expression has the same agreement features. This elsewhere-type principle, generally satisfied in Haitian, applies only exceptionally in French and English, creating surface anaphor/pronoun complementarity as the predominant pattern in those languages (Bouchard 1984). Referential economy (Pica 1987) "anaphorizes" a possessive DP headed by an inalienably possessed noun such as tèt ‘head’ or ko ‘body’. Inherent reflexivity licenses a null internal argument with an inalienably possessed lexical constant BODY. The necessity of all three mechanisms in Haitian argues for the reduction of the LGB binding conditions (Chomsky 1981) to the “On Binding” framework (Chomsky 1980).

1. AMBIGUOUS OBJECT PRONOUNS

With a large number of Haitian verbs, a third person object pronoun is ambiguous between reflexive and pronominal readings. One such verb is wè ‘see’.

(1a) Li wè l (nan glas la).
\[3g \text{ see } 3g \text{ Loc mirror Det}\]
S/he saw her(self)/him(self)/it (in the mirror).

b. Yo wè yo.
\[3p1 \text{ see } 3p1\]
They saw them(selves)/each other.

The same potential ambiguity arises for first and second person object pronouns.

(2)a.  
M wè m.  
\[1sg \text{ see } 1sg\]  
I saw myself.  
\(\text{Jak wè m.}\)  
\(\text{Jak saw me.}\)

b.  
Ou wè w.  
\[2sg \text{ see } 2sg\]  
You saw yourself.  
\(\text{Jak wè w.}\)  
\(\text{Jak saw you.}\)

c.  
Nou wè n.  
\[1/2pl \text{ see } 1/2pl\]  
We/you saw ourselves/each other (pl.).  
\(\text{Jak wè n.}\)  
\(\text{Jak saw you (pl.)/us.}\)

Bernabé (1983: 918–20) cites nearly identical facts in Guadeloupéen, a close relative of Haitian. Similar facts are reported in Seychellois and Mauritian (Corne 1977, 1988), and in Niuean (Seiter 1979: 78f.) and Chamorro (Chung 1989: 149).

Some speakers, while accepting all of (1–2), prefer object reflexives in the form of an expression which independently means ‘x’s head’ (where x is any pronoun).2

(1’b).  
Yo wè tèt yo.  
\[3pl \text{ see head } 3pl\]  
They saw themselves/each other OR They saw their head/the heads.3

(2’b).  
Ou wè tèt ou.  
\[2sg \text{ see head } 2sg\]  
You saw yourself OR You saw your head.

But even such speakers accept (1a) and (2a) as reflexive.

Expressions like tèt li (1’a), ambiguous between literal-referential and nonliteral-reflexive interpretations, also occur in Kwa languages, e.g., Yorubá ara à ṛè her/his body’ OR ‘herself/himself’.

(1’a).  
Li wè tèt li.  
\[3sg \text{ see head } 3sg\]  
She saw herself OR He saw himself OR S/he saw her/his/its head.

The above establishes that object li has no local domain of disjoint reference from a potential antecedent; that object tèt li, tèt yo etc. are not morphological reflexives like English herself/himself/itself, themselves; and that Haitian is not unique in either respect. Now consider how binding theory might accommodate these observations.

1.1. Annotation or Reduction

In the modular, derivational framework of generative grammar (Chomsky 1981), there is a tension between the stratified definition of a principle or constraint, holding at a certain level of representation, and its annotation at other levels. Although the binding conditions hold at the level of Logical Form (or perhaps at s-structure), nevertheless reconstruction can “undo” wh-movement by annotating LF with pre-s-structure (Chomsky 1977: 84). Again, the Case filter holds at s-structure (or perhaps in Phonetic Form), but “inherent” Case is conditional on \(θ\)-assignment, defined at d-structure (Chomsky 1986: 194). We review some proposed annotations of LGB conditions A and B, then embark on an alternative which can be called reductivist.

Lectures on Government and Binding derives sets of possible/impossible referential dependencies \{z\} in terms of morphological classes \{x\} and configurational domains \{y\}.

- morphological classes (lexical entities)
  \[x = \{\text{anaphor, pronominal}\}\]

3 Although nou is ambiguous between 1pl and 2pl, a reflexive/reciprocal reading is mysteriously out for 2pl nou: (2c) cannot mean ‘You (pl.) saw yourselves/each other’.

2 Carden and Stewart (1988) cite speakers who have (1–2) ambiguous as indicated. To express regional, class, and diachronic variation, they parametrize binding principles across time and space.

3 Tèt yo can mean ‘the heads’ because yo ‘3pl’ is categorically a Determiner.

4 For (2’c) to have the literal interpretation ‘We saw our heads’/‘You (pl.) saw your heads’, the object would require a final yo: Nou wè[lit nou] yo.
configurational domains (syntactic entities)
\( y = \text{governing category of } x \)

• referential dependencies (semantic entities)
\( z = \{\text{bound, anti-bound (free)}\} \) in \( y \)

Formulated in this way, binding depends on three successive derivational levels.

LGB’s two morphological binding features define four classes of NPs with respect to the domain of an (im)possible antecedent, via two domain conditions, as in (3):

\[
\begin{array}{c|c|c}
\text{morphological features} & \text{equivalent domain diacritics} \\
\hline
\text{a. reflexive, reciprocal} & [+\text{anaphoric}, \text{−pronominal}] & [+\text{condition A}, \text{−condition B}] \\
\text{b. pronoun} & [+\text{anaphoric}, \text{+pronominal}] & [+\text{condition A}, \text{+condition B}] \\
\text{c. intrinsically referential N} & [\text{−anaphoric}, \text{−pronominal}] & [\text{−condition A}, \text{−condition B}] \\
\text{d. (default = PRO)} & [\text{+anaphoric}, \text{+pronominal}] & [\text{+condition A}, \text{+condition B}] \\
\end{array}
\]

An element respects condition A (bound in its governing category) iff it is [+anaphoric], and respects condition B (free in its governing category) iff it is [−pronominal]. An element with both features negative has no antecedent, and so must be “intrinsically” referring (Chomsky 1981: 191). Because the domain requirements of conditions A and B conflict, an element with both features positive cannot be lexically realized.

Long-distance reflexives and bound pronouns present domain anomalies for conditions A and B, and have inspired various annotations of the LGB framework. Huang (1983) offers a special definition of governing category for anaphors, thereby annotating a syntactic domain in terms of a morpheme class. Inversely, Bouchard (1984, 1985) gives precedence to the syntactic definition of anaphor, with pronominals as the elsewhere case, thus forcing some morphological anaphors to be syntactically annotated as “false reflexives” (i.e., covert pronouns). Defining morpho-lexical binding classes directly in syntactic terms, Sportiche (1986) replaces the morphological class features [±anaphoric, ±pronominal] with pure domain features [±c-commanding, ±local].

(4a). anaphor
b. operator-bound variable
c. discourse-bound pronoun
d. *

(4) separates two domain properties conflated in (3): the antecedent c-commands its dependent element and is inside its local governing category. In principle, any adjacent lines of (4) can be lexicalized together. If English pronouns represent the union of lines (4b) and (4c). Sportiche suggests that Japanese unites (4a) and (4b) as zibun, an element with both local and long-distance antecedents, leaving (4c) to a separate item, kare.⁸

The ambiguity of object li ‘3sg’ in (1a) is expressible in (4), if li occupies lines (4a) and (4c). If only adjacent lines can co-lexicalize, this predicts that li also functions as a bound variable (4b) – a prediction borne out in (14–16) below. However, neither (3) nor (4) can accommodate other facts. As the object of verbs like tchwe ‘kill’, the domains of tēt li and li correspond to the predictions of lines (3a) and (3b) respectively, falsifying the claim that li ‘3sg’ spells out (4a). As the object of verbs like benyen ‘bathe’, tēt li has two different interpretations: either reflexive (only with a special ‘Instigator’ reading, to be discussed) or as a literal, independently referential phrase ‘her/his/its head’.

Domains are not the only problem in (3). A morphological binding feature defines a relationship between the form of a lexical element and its referential domain. For example, [+anaphoric] presumes an independent definition of the class of anaphors and predicts a cross-linguistic correlation between this class and the condition A effect (bound in its governing category). Neither claim can be sustained. Anaphors come in two shapes, XP and X⁰, both cross-linguistically and within a language (Faltz 1985; Everaert 1986; Pica 1987; Yang 1988). Moreover, the Dogrib “disjoint anaphor” shows that there is greater diversity among lexical anaphors (Saxon 1984: 242) than condition A allows. More generally, not all anaphors are essential, where “an essential anaphor . . . denotes an anaphor on all interpretations” (Keenan 1988).

The alternative to annotation is reduction. For example, Reinhart (1986) limits syntactic binding to obligatory coreference (“bound anaphora”), excluding pragmatic (“intended”) coreference. This step simplifies the configuration of binding to c-command. Others reduce the binding module to control and θ-theory (Farmer 1984; Koster 1984; Williams 1987, 1989; Bouchard 1988) or eliminate derivational structure from the

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⁵ Revising LGB on this point, Thrainnsson drops the assumption that “all binding properties of NPs follow from their lexical content” (1991: 70). His admitted “diacritic” (p.c.) disjunction of lexical and syntactic binding features defines a [−anaphoric, −pronominal, −independently referential] expression as “neutral” to LGB conditions A and B, so that its antecedent is purely “semantic”, e.g., logophoric.

⁶ For Bouchard (1984), PRO is an anaphor iff it receives Case, otherwise it is a pronoun.

⁷ Other annotations include those of Lasnik (1989), which adds [± referential] to the features in (3), and Enc (1989), which adds [± pronominal] to the features in (4). In our reduction, all pronouns and reflexives are [−R], and [±R] replaces the LGB features.

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⁸ All three lines may be lexically distinct in Fulfulde (Sportiche 1986: 372 fn.).
grammar altogether (Rizzi 1982; Koster 1987). Most reductionists reject the level of Logical Form, computing all binding relations at s-structure.

Haitian offers empirical support for reduction over annotation in two ways. Because Haitian has no morphological reflexives, domain complementarity of pronouns and reflexives is an accidental effect with a few verbs, not a general property. Sensitivity of reflexive interpretation to verb classes shows that Haitian binding domains are derived thematically. Our reductionist alternative appeals to three general mechanisms:

- **Thematic Binding**
  Binding domains are computed in terms of local s-selection and predication, and not of position (Brame 1983; Williams 1989).

- **Lexical Constants**
  Predicates marked [+null complement] or [+inherent reflexive] contain syntactically inert or inalienably possessed arguments in conceptual representation (Fischer 1971; Hale and Keyser 1986).

- **Syntactic Classifiers**
  [±R(eferential)] ranges over inalienably possessed nouns. [−R] nouns “anaphorize” phrasal reflexives (Helke 1970; Pica 1987).

These mechanisms give an account of Haitian which parametrizes morphemes and not principles of grammar. The starting point of any such account is noncomplementarity.

2. Noncomplementarity

For a few verbs, object *li* and *tét li* are complementary just as *LGB* expects:

(5a.) Jak, mòde l_{jr}.

\[
\begin{array}{ll}
\text{bit} & 3sg \\
\text{Jak bit him/her/it.}
\end{array}
\]

b. Jak, mòde [tét lil]_{jr}

\[
\begin{array}{ll}
\text{bite head} & 3sg \\
\text{Jak bit himself.}
\end{array}
\]

(6a.) Jak, tchwe l_{jr}

\[
\begin{array}{ll}
\text{kill} & 3sg \\
\text{Jak killed him/her/it.}
\end{array}
\]

b. Jak, tchwe [tét lil]_{jr}

\[
\begin{array}{ll}
\text{kill head} & 3sg \\
\text{Jak killed himself.}
\end{array}
\]

Unlike *li* in (1a), *li* in (5a, 6a) excludes Jak as an antecedent, a condition B effect.

If the complementarity of *li* and *tét li* in (5–6) was the ‘core’ phenomenon, then ambiguous *li* in (1–2) might be restricted to certain predicates. However, most verbs resemble *wè* in freely taking both types of reflexive: *li* and *tét li*.

For at least one verb, *blese* ‘injure’, *tét li* does not even allow a literal reading in an argument position (7b), although a literal reading is possible in a locative adjunct (7d). *Blese* also allows as an object the noun *kò*, literally ‘body’ (7c).

(7a.) Jak, blese l_{ij}.

\[
\begin{array}{ll}
\text{injure} & 3sg \\
\text{Jak injured him(self)/her/it.}
\end{array}
\]

b. Jak, blese [tét li]_{ij}

\[
\begin{array}{ll}
\text{injure head} & 3sg \\
\text{Jak injured himself [NOT Jak injured his/her/its head].}
\end{array}
\]

c. Jak, blese kò l_{ij}

\[
\begin{array}{ll}
\text{injure body} & 3sg \\
\text{Jak wounded his/her/its body.}
\end{array}
\]
(7d.) Jak, blese l_{ij} nan têt (l_{ij}).

   injure 3sg on head 3sg

Jak injured himself/someone on the head.

If the 'core' reflexive in Haitian is têt li, then the reflexive reading of li in
(7a) is surprising, especially since a reflexive reading is the unique possibility
for têt li in (7b).

Even more mysteriously, if têt li were the 'core' reflexive, some speakers
do not give it a reflexive interpretation as the object of benyen 'bathe':
benyen têt li has just an anomalous literal reading (8b). 11 In forming a
reflexive, both benyen l (8a) and benyen kò l (8c) imply an extra, Instigator
θ-role, denoting a subject which acts on itself contra expectation. Intransitive
benyen (8d) has a non-Instigator reflexive reading. 12

(8a.) Jak, benyen l_{ij} de fwa pa jou.

   bathe 3sg two times per day

Jak bathes himself [all by himself] twice a day.
OR Jak bashes her/his/it twice a day.

b. "Jak, benyen têt li_{ij} de fwa pa jou.

   bathe head 3sg two times per day

Jak bathes his/her/its head twice a day.

c. Jak, benyen [kò l]_{ij} de fwa pa jou.

   bathe body 3sg two times per day

Jak bathes himself [all by himself] twice a day.

d. Jak benyen de fwa pa jou.

   bathe two times per day

Jak bathes twice a day.

11 M. DeGraff (p.c.) observes that literal benyen têt li and benyen kò l improve if benyen is
textually purged of refl exivity, as in benyen ak pafim 'drench with perfume':

(i) Jak, benyen têt l_{ij} ak pafim.

   bathe head 3sg with perfume

Jak drenched his/her/its head with perfume.

(ii) Jak, benyen kò l_{ij} ak pafim.

   bathe body 3sg with perfume

Jak drenched his/her/its body with perfume.

12 The term Instigator is due to K. Hale (cited in Sigler 1985). Oehrle and Falty (1987) dub
a similar effect Doppelgänger, with distinct, coreferent agent and theme roles.

Apparently then, literal ‘head’ and ‘body’ readings are available for têt
and kò, unless blocked by independent factors. This is borne out for wè
‘see’, cf. (1’) and (2’) above. However, there are several other patterns.
Mòde ‘bite’ and tchwe ‘kill’ block both literal têt li and kò l, and allow têt
li as the only reflexive object. Blese ‘injure’ allows reflexive têt li and (for
some speakers) kò l, blocks literal têt li and takes literal kò l, cf. (29–30)
below. For benyen ‘bathe’, literal têt li is marginal, and reflexive têt li and
literal kò l are both blocked.

In some examples, the marginality of literal têt li or kò l can be overcome
in appropriate context. Thus, literal benyen têt li ‘bathe her/his/its head’
can refer to a scalp wound. By contrast, benyen kò l forces an anti-
reflexive ‘immerse’ or ‘drench’ reading (cf. fn. 11), suggesting that an overt
object kò ‘body’ clashes with a lexical constant BODY in the conceptual
representation of this verb, a kind of θ-criterion effect which also occurs
with literal blese kò l. Similarly, the failure of reflexive benyen têt li
shows selectional mismatch between classifier têt and the lexical-semantic
constant BODY.

Mòde ‘bite’ and tchwe ‘kill’ are the only two verbs we know to strictly
require a 3sg reflexive object to be têt li. As a practical matter, biting and
killing are actions which a subject performs on itself only exceptionally.
If such actions entail an ‘extra’ subject θ-role, the requirement of têt li in
the reflexive forms of these verbs could be explained. 13

The pattern of phrasal objects in (5)–(8) can be summarized as follows:

<table>
<thead>
<tr>
<th>(5b/6b)</th>
<th>mòdetchwe têt li</th>
</tr>
</thead>
<tbody>
<tr>
<td>(+R)</td>
<td>blese têt li</td>
</tr>
<tr>
<td>(5c)</td>
<td>kò têt li</td>
</tr>
<tr>
<td>(7b)</td>
<td>blese kò l</td>
</tr>
<tr>
<td>(7c)</td>
<td>injure body 3sg</td>
</tr>
<tr>
<td>(7b)</td>
<td>benyen têt li</td>
</tr>
<tr>
<td>(8a)</td>
<td>bathe head 3sg</td>
</tr>
<tr>
<td>(8b)</td>
<td>bathe body 3sg</td>
</tr>
<tr>
<td>(-R)</td>
<td>benyen kò l</td>
</tr>
</tbody>
</table>

Têt li and kò l objects trigger various effects. As [+R] (literal) expressions
they yield either selectional mismatch (noted *), θ-criterion activity (√
anti-reflexive) or pragmatic anomaly (#). As [−R] (reflexive) expressions,
they yield either selectional mismatch (*) or θ-criterion activity (√ Insti-
gator). At first approximation, the semantic properties driving the inter-

13 This suggestion says nothing about the Instigator interpretation of benyen li (8a) and
benyen kò l (8c). We have found no verb which takes only kò l as its object reflexive.
pretation of tèt lì and kò l objects can be represented by the lexical features [+ inherent reflexive] and/or [+ null complement].

Of course, [+ inherent reflexive] can be used to distinguish homophonic variants of Haitian lì. The bound (reflexive) homophone of lì could be diacritically constrained to appear only as the complement of a [+ inherent reflexive] verb.\(^\text{14}\) However, not two but three verb classes are distinguished by the interpretation of object lì:

As these interpretations are not complementary, homophony offers no solution.

We observe two other implications in the data that homophony can't explain. A reflexive null complement implies a stative interpretation, and vice versa. If a verb assigns Instigator to a phrasal reflexive, it is stative with a null complement. These generalizations cannot be stated in terms of individual object morphemes but only in terms of some property of the verbs themselves, e.g., conceptual structure.

Before examining the verb classes in detail, we show that noncomplementary binding domains are not restricted to languages which lack lexical anaphors.

### 2.1. Morphological

1st and 2nd person clitics are as ambiguous in French as they are in Haitian, cf. (2):

(9)a. Je me lave.
   1sg 1sg lave
   I am washing myself.

b. Tu te laves.
   2sg 2sg lave
   You are washing yourself.

(9)c. Nous nous lavons.
   1pl 1pl wash
   We are washing ourselves/each other.

(9)d. Vous vous lavez.
   2pl 2pl wash
   You are washing yourselves/each other.

Bouchard (1984) shows that these ambiguous clitics have both "strict" and "sloppy identity" interpretations in gapped VPs. In (10a) me trouvais bête 'considered me stupid' is construed at the deletion site, but in (10b) me yields a reflexive interpretation in both conjuncts, construed as the bound variable x in trouvais x bête 'considered x stupid'.

(10) Je me trouvais bête et ma soeur aussi.
    1sg 1sg found stupid and 1sg sister too

\(^{[= (131) \text{ Bouchard 1984: 60}]^{\text{\textsuperscript{14}}}}\)

a. = I considered myself stupid and my sister [considered me stupid]
b. = I considered myself stupid and my sister [considered herself stupid]

Unlike Haitian, French third person reflexive and pronominal clitics are distinct:

(11) Jean, se\textsubscript{\textit{r}} lave.
    3refl wash
    Jean washes himself.

(12) Ils, se\textsubscript{\textit{r}} lavent.
    3pl 3refl wash
    They wash themselves/each other.

Se, as an unambiguous reflexive, allows only the sloppy interpretation (13b):

(13) Jean se trouvait bête et sa soeur aussi.
    3refl found stupid and 3sg sister too

\(^{[= (132) \text{ Bouchard 1984: 60}]^{\text{\textsuperscript{14}}}}\)

a. * Jean considered himself stupid and his sister [considered himself stupid]

\(^{\text{14}}\) This is essentially Hellan's (1988) approach for Norwegian se\textsubscript{g}, which is locally bound with [+ inherent reflexive] verbs, long-distance bound elsewhere (cf. section 4.5).
(13b.) Jean considered himself stupid and his sister [considered herself stupid]

Haitian disallows VP-deletion, but both strict and sloppy interpretations arise in a semantically similar context, with the phrase mènm jan ak NP just like NP. 15

(14) Mènm jan ak Pyè, Jak lave li.

same kind with wash 3sg

a. = Just like Pyè [washed Jak], Jak washed himself
b. = Just like Pyè [washed Pyè], Jak washed him

That li (like French me, te) is both strict and sloppy here is predictable from morphology: Haitian lacks an object reflexive comparable to French se. Li as object of lave ‘wash’ can trigger a strict, reflexive interpretation (14a), unlike French se (13a). The same thing goes for subject li (15) and for possessor li in a ‘picture’ NP (16):

(15) Mènm jan ak Pyè, Jak panse ke li entèljan.

same kind with think Comp 3sg smart

a. = Just like Pyè [thinks about Jak], Jak thinks he is smart
b. = Just like Pyè [thinks about Pyè], Jak thinks he is smart
c. = Just like Pyè [thinks about someone else], Jak thinks s/he is smart
d. = Just like Pyè [thinks about him (Pyè)], Jak thinks he (Jak) is smart

15 On the relevance of sloppy identity as evidence for constituency cf. Bach et al. (1974); Williams (1977: 115ff.). That the mènm jan ak NP construction involves VP construal is shown by the contrast with simple NP coordination, which lacks sloppy readings:

(i) Jak ak Pyè panse ke yo entèljan.

and think Comp 3pl smart

a. = Jak and Pyè both think that they (= Jak and Pyè) are smart
b. = Jak and Pyè both think that they (= other people) are smart
c. # Jak and Pyè [each] thinks that [the other] is smart

(ii) Jak ak Pyè panse ke foto 1 yo bèl.

and think Comp picture 3sg 3pl nice

a. = Jak and Pyè [both] think that his (= Jak’s) pictures are nice
b. = Jak and Pyè [both] think that his (= Pyè’s) pictures are nice
c. = Jak and Pyè [both] think that his (= someone else’s) pictures are nice
d. # Jak and Pyè [each] thinks that his [own] pictures are nice

(16) Mènm jan ak Pyè, Jak panse ke foto 1 bèl.

same kind with think Comp picture 3sg nice

a. = Just like Pyè [thinks about Jak’s picture], Jak thinks his picture is nice
b. = Just like Pyè [thinks about Pyè’s picture], Jak thinks his picture is nice
c. = Just like Pyè [thinks about someone else’s picture], Jak thinks her/his picture is nice
d. = Just like Pyè [thinks about his own picture], Jak thinks his own picture is nice

(14a), (15a) and (16a) are therefore evidence for the morphological indeterminacy of Haitian li with respect to the LGB binding categories.

2.2. Syntactic

Even if a language has morphological reflexives, not all pronominal binding domains may be complementary. The French nonclitic pronoun lui ‘3sg’, though distinct from reflexive soi, is nevertheless ambiguous between free and bound interpretations in (17a). Similar effects occur in Modern English (17b-c), Middle English (17d) and Dutch (17e).

(17a) Jean, pense à lui.

b. John, saw a snake near him.

c. John, lost his way.

d. He, cladded himself. ‘He dressed himself’

e. Ik, was me/mij. ‘I am washing myself’

(Zribi-Hertz 1980)

(Lakoff 1968)

(Helke 1970)

(Falz 1985)

(Everaert 1986)

Young children produce similarly ambiguous pronouns, even after having acquired morphological reflexives (Solan 1987, Hyams and Sigurjónsdóttir 1990).

Besides locally bound pronouns, English also has nonlocally bound reflexives. Lebeaux (1983) observes that in certain nonlocal contexts, English reflexives are in free variation with morphological pronouns and have pronominal properties. Pronouns in deleted VPs are interpreted with either strict or sloppy identity (18); locally bound reflexives get only a bound variable (sloppy) interpretation (19b); but a reflexive in a nonlocal context such as a ‘picture’ NP is unexpectedly ambiguous under VP-
deletion (20). Accordingly, Bouchard calls himself in (20) a “false reflexive” (1984: 36).

(18) John thought he would win, and Bill did too.
   a. = John thought that John would win, and Bill [thought that John would win]
   b. = John thought that John would win, and Bill [thought that Bill would win]

(19) John likes himself, and Bill does too.
   a. ≠ John likes John, and Bill [likes John]
   b. = John likes John, and Bill [likes Bill]

(20) John thought those pictures of himself were nice, and Bill did too.
   a. = John thought those pictures of John were nice, and Bill [thought those pictures of John were nice]
   b. = John thought those pictures of John were nice, and Bill [thought those pictures of Bill were nice]

In Haitian, to our knowledge, a form like têt li is never interpretable with strict identity, parallel to himself in (20). Even with môde ‘bite’, which allows only the reflexive interpretation of object têt li, strict identity fails, cf. (21a):

\[ \text{(21)} \quad \text{Mènm jan ak Pyè, Jak mòde têt li.} \]
\[ \text{Same kind with bite head 3sg} \]
\[ \text{a. ≠ Just like Pyè [bit Jak], Jak bit himself} \]
\[ \text{b. = Just like Pyè [bit himself], Jak bit himself} \]

That Haitian has no “false” reflexives follows straightforwardly in an analysis which claims that Haitian lacks morphological reflexives altogether.

2.3. Pragmatic

In dreamlike contexts, two pronouns in the same local domain γ may co-refer:

\[ \text{(22a)} \quad \text{I dreamed that I was Brigitte Bardot and that [γ I kissed me].} \]
\[ \text{(Lakoff 1970)} \]
\[ \text{b. I dreamed I was Jesus and [γ I forgave me for my sins].} \]
\[ \text{(Katz 1980)} \]

Chomsky (1981: 315, fn. 3) suggests that these examples reflect a special discourse mechanism which overrides (syntactic) condition B. In our reductionist framework, however, they reflect the same feature [±R] already seen above.

In Fauconnier’s (1985) analysis of pragmatic anaphora, I dreamed in (22) is a “space-building” operator, in whose scope the pronoun I acquires the referential opacity of a name – in effect, becoming [+R] without changing its φ-features. We can represent this phenomenon as follows:

\[ \text{(23)} \quad \text{I dreamed I was Jesus and I forgave me . . .} \]
\[ \text{lexical content s-structure} \]
\[ \text{space-building operator} \]
\[ \text{counterpart coreference} \]
\[ \text{discourse antecedence} \]
\[ \text{φ-feature interpretation} \]

In (23), embedded I and me are disjointly indexed at s-structure. Conversion of the two embedded Is to [+R], within the dreamscape, entails their sharing the index [i]. The copula was establishes “counterpart coreference” between its two arguments, copying [i] from the first embedded I onto Jesus. As the discourse antecedent of embedded me, with which it shares

\[ \text{18} \]

16. Lebeaux (1983: 357) proposes that an element respects LGB condition A only if its minimal X∗ is predicated of its antecedent. This is lacking in (20), so Lebeaux needs a rule of referential dependency (1983: 353) just for non-Condition A anaphors.

17. A reviewer points out that strict/sloppy ambiguity also occurs in (i):

\[ \text{(i)} \quad \text{Picasso drew himself much better than anyone else did.} \]
\[ \text{a. did} = \text{[drew a portrait of Picasso]} \]
\[ \text{b. did} = \text{[drew a portrait of himself/himself = anyone else]} \]

But no strict reading is available in ordinary examples of reflexive VP ellipsis:

\[ \text{(ii)} \quad \text{Picasso drew himself, and Bill did too.} \]
\[ \text{a. did} ≠ \text{[drew Picasso]} \]
\[ \text{b. did = [drew himself = Bill]} \]

We conclude that the unexpected strict reading (i-a) is induced by a comparative scopal operator absent in (ii). Even in a comparative, H. Thráinsson (p.c.) notes that the strict reading fails with an obligatory reflexive like perjure.

\[ \text{(iii)} \quad \text{Eliot perjured himself much more than Casper did.} \]
\[ \text{a. ‘did’ ≠ [sc. Eliot committed perjury]} \]
\[ \text{b. ‘did’ = [sc. Casper committed perjury]} \]

18. On pragmatic anaphora, see also Nunberg (1978) and C. Roberts (1987).
3. Verbs Classified by Null Complement Phenomena

Verbs differ in the referential potential of a complement. There are four logical possibilities according to whether a verb allows a null complement, and whether the complement (be it null or overt) is obligatorily bound. English has all four types:

\[ [\text{null complement}] \rightarrow [\text{null complement}] \]

\[ [\text{null complement}] \rightarrow [\text{null complement}] \]

Bathe allows a null, bound complement (25a); eat differs in that its null complement must be free (25b). Perjure requires an overt, bound complement (25c), while hit requires an overt complement which may be bound or free (25d).

(25a) Anne, bathed ō. Anne, bathed herself, Anne, bathed her,
b. Bart, ate ō. Bart, ate himself, Bart, ate him,
c. Bart, perjured ō. Bart, perjured himself, Bart, perjured him,

In English, the two features are independent: bathe and perjure are both inherently reflexive, yet only bathe allows a null complement. The picture in Haitian is different:

\[ [\text{null complement}] \rightarrow [\text{null complement}] \]

\[ [\text{null complement}] \rightarrow [\text{null complement}] \]

A null complement is bound with benyen ‘bathe’ (27a), but free with wé ‘see’ (27b). Defann ‘defend’ requires an overt complement, which may be bound or free (27c).

(27a) Jak, benyen ō, de fwa pa jou.
    bathe two times per day
Jak bathes twice a day.

b. Jak, wè ō, nan glas la.
    see Loc mirror Det
Jak sees [someone/something] in the mirror.

c. Jak, defann li, devan makout yo.
    defend 3sg front makout Det
Jak defended him(self)/her from the death squads.

Haitian’s lack of perjure-type verbs shows a language-particular redundancy \([\text{null complement}] \rightarrow [\text{null complement}]\). In a reductionist analysis, this redundancy follows from Haitian’s lack of obligatorily reflexive argument expressions like himself. We now present details of the three verb classes attested in Haitian.

3.1. Null Complement Bound

With a null complement, some verbs (blesé ‘injure’, abiye ‘dress’, benyen ‘bathe’) are obligatorily reflexive. With these verbs, an overt object li is either bound (Instigator) or free, and object têt li or kò li, if reflexive, signals an Instigator.

Both our main consultants agree that blesé plus null complement is reflexive and either perfective or adjectival passive.

(28) Jak, blesé ō, [perfective or adjectival passive]
    injure
Jak is/has been injured.

With blesé, object li is either bound or free. Both speakers accept reflexive blesé têt li and find literal blesé têt li ill-formed.

20 Haitian translates ‘perjure’ in a light verb construction:

(i) Jak fé bouch li
    make mouth 3sg
Jak made her/him tell a lie OR Jak perjured himself/committed perjury.

21 From the ambiguity of examples like (28), Massam (1987: 8) concludes that there is no syntactic complement, cf. Sylvain (1936). We revisit this question in Section 4.4. Whether blesé’s intrasitivity in (28) is syntactic or lexical, these aspectual readings are unavailable for verbs like wé, mòde, which reject a bound null complement.
The paradigm of abiye ‘dress’ follows the same pattern. Abiye + Ø is reflexive and, as with blese, has either perfective or adjectival passive aspect.

(31) Jak, abiye Ø, two bwòdè. [perfective or adjectival passive]

  dress too fancy

Jak is has been too dressed up.

Object li is either bound or free. Reflexive abiye kò l is out for consultant P-MD. Consultant J-RP gives abiye tèt li an Instigator reading, and rejects reflexive abiye kò l.

(32a) Jak, abiye lì, two bwòdè.

dress 3sg too fancy

Jak got dressed up too fancy.

Jak dressed him/her up too fancy.

---

(ii)b. Chak jou, Jak, repoze lì, pou inè de tan.

  each day rest 3sg for 1hr of time

  Each day, Jak rests himself for an hour.

  OR Each day, Jak repositions it for an hour.

With both types of complement, the reflexive meaning is preserved in the light verb construction fè (yon ti) repoze ‘take a little rest’, where repoze is a deverbal noun.

(iii)a. Chak jou, Jak, fè yon ti repoze Ø, pou inè de tan.

  each day make a little rest for 1hr of time

  Each day, Jak takes a little rest.

  Chak jou, Jak, fè yon ti repoze lì, pou inè de tan.

  each day make a little rest 3sg for 1hr of time

  Each day, Jak takes a little self-rest (i.e. treats himself to a nap)

However, with tèt li or kò l as its object, the verb repoze loses the reflexive meaning, and can only have the literal (and here bizarre) meaning ‘re-position’:

(iii)a. #Chak jou, Jak, repoze tèt li, pou inè de tan.

  each day re-position head 3sg for 1hr of time

  [Each day, Jak repositions his head . . . ]

b. #Chak jou, Jak, repoze kò lì, pou inè de tan.

  each day re-position body 3sg for 1hr of time

  [Each day, Jak repositions his body . . . ]

---

22 For other speakers, examples corresponding to (30) have nan tèt with a bare noun.

23 Consultant J-RP notes other examples with an unambiguous, literal reading of tèt:

(i)a. Jak, blese pwòp tèt li.

  injure own head 3sg

  Jak hurt his own head.

b. Jak, blese tèt pa lì.

  injure head of 3sg

  Jak hurt his/her/its head.

Consultant P-MD observes that phrasal reflexives are blocked with the verb repoze. Repoze + Ø means ‘rest, relax’ (ii-a); repoze + li means either ‘rest’ or ‘reposition’ (ii-b).

(ii)a. Chak jou, Jak, repoze Ø, pou inè de tan.

  each day rest for 1hr of time

  Each day, Jak rests for an hour.

   ```
   ```

Both speakers express ‘injured her/his head’ with a locative PP nan tèt li:22

(30a) Jak, blese Ø, nan tèt li, injure on head 3sg

Jak is has been injured on the head.

b. Jak, blese lì, nan tèt li.

  injure 3sg on head 3sg

Jak injured him(self)/her on the head.

c. Jak, blese tèt li, nan tèt li.

  injure head 3sg on head 3sg

Jak injured himself on the head.

This PP option fills the gap in (29b) for literal blese tèt li, otherwise expected.23
(32b).  Jak i abiye tèt li té two bwòdè.
   
   fleece head 3sg too fancy
   
   Jak got dressed up too fancy √ *
   Jak got dressed up too fancy, on his own. * √
   Jak dressed his head up too fancy. # #
   
   Benyen 'bathe' diverges only slightly from the paradigm of the other two verbs. Even with a past temporal adverb, null complement benyen preserves the possibility of adjectival passive interpretation (33a). With a nontemporal adverbial such as de fwa pa jou 'twice a day', null complement benyen is generic (33b). 24

(33a).  Jak, benyen 0i yè.  [past or adjectival passive]
   
   bathe yesterday
   
   Jak (was) bathed yesterday.
   
   b.  Jak, benyen 0i de fwa pa jou.  [generic]
      
      bathe two times per day
      
      Jak bathes twice a day

   If benyen has an overt object, judgments differ systematically. For both our main consultants, benyen li is optionally reflexive (bound). For J-RP, bound li has the extra, Instigator role. J-RP gets Instigator reflexive tèt li, but for P-MD, object tèt li has only an anomalous literal meaning; P-MD reports an Instigator reading for reflexive kò l and finds literal kò l anomalous. For J-RP, object kò l has just the literal meaning 'her/his body', yielding anomaly unless benyen is understood as 'sponge off'.

(34a).  Jak, benyen li té de fwa pa jou.
   
   bathe head 3sg two times per day
   
   Jak bathes himself twice a day. √ *
   Jak bathes all by himself twice a day. * √
   Jak bathes her/him twice a day. √ √
   
   b.  Jak, benyen tèt li té de fwa pa jou.
      
      bathe head 3sg two times per day
      
      Jak bathes all by himself twice a day. * √
      Jak bathes her/his head twice a day. # #
   
   c.  Jak, benyen kò li té de fwa pa jou.
      
      bathe body 3sg two times per day
      
      Jak bathes all by himself twice a day. √ *
      Jak bathes her/his body twice a day. # #

   To summarize. For both speakers, the null complement is obligatorily bound, and li is either bound or free. 25 The preferred phrasal reflexive (kò l for P-MD, and tèt li for J-RP) has an Instigator reading. 26

3.2. Null Complement Free

With a second class of verbs (wè 'see', sonje 'remember', lave 'wash'), a null complement is interpreted as free of the subject. With wè 'see', a null complement is free and the reading is imperfective, as opposed to the perfective interpretation of blese + 0.

24 Corne (1988: 74) reports the same pattern in Mauritian:

   (i)  Li bizen benye avan li al dormi.
      3sg need bathe before 3sg go sleep
      
      He must bathe before he goes to sleep.

   (ii) Li bizen benye li avan li al dormi.
      3sg need bathe 3sg before 3sg go sleep
      
      He must bathe him(self) before he goes to sleep.

   (iii) Li beny anye (so) lekor.
      3sg bathe entire 3Poss body
      
      He washes himself all over.

   25 "In general, an object controller can always be phonetically missing... provided that the sentence has a generic time reference" (Rizzi 1986: 503).

   26 The main difference is that J-RP never accepts kò l as a reflexive, and this is consistent for the other verb classes. Hereafter, we suppress kò l and speaker variation.
Sonje ‘remember’ follows the same general pattern. A null complement is free, object li is either bound or free, and object têt li is either reflexive or literal/anomalous. Sonje differs from wè and lave in that a null complement must be discourse-linked.\footnote{Thanks to M. DeGraff for clarifying this point.}

(39)a. Mariz, sonje əŋ. [imperfective]

\textit{remember}

Mariz remembers [something/someone previously mentioned].

b. Mariz, sonje liəŋ lè li tou piti.

\textit{remember 3sg when 3sg very small}

Mariz remembers her(self)/him when s/he was very little.

c. Mariz, sonje têt liəŋ lè li tou piti.

\textit{remember head 3sg when 3sg very small}

Mariz remembers herself when she was very little. OR $\neq$ Mariz remembers her/his head when she/it was very little.

3.3. Obligatory Complement

A third class of verbs rejects a null complement. Defann ‘defend’ cannot take a null complement, object li is bound or free, and têt li is either reflexive or literal.

(40)a. *Jak defann əŋ devan makout yo.

\textit{defend front makout Det}

b. Jak, defann liəŋ devan makout yo.

\textit{defend 3sg front makout Det}

Jak defended him(self)/her against the death squads.

c. Jak, defann têt liəŋ devan makout yo.

\textit{defend head 3sg front makout Det}

Jak defended himself OR her/his head against the death squads.

\textit{Mete bwôde} ‘make fancy’ differs from defann just in that literal têt li is anomalous (39c).
(39)a. *Jak mete ø bwòdè.
   put fancy

b. Jak, mete li徭 bwòdè.
   put 3sg fancy
   Jak got him(2self)/her dressed up.

c. #Jak, mete têt li徭 bwòdè.
   put head 3sg fancy
   Jak got her/his head dressed up.

3.4. **Summary**

A null complement, if available, is either free or bound but never ambiguous and has a characteristic aspectual effect depending on the verb type. Object li is in general ambiguous. The interplay of literal and reflexive readings of the expressions têt li and kò l suggest that the nouns têt and kò allow both values of the lexical feature [+R]. Some [+R] instances of têt li are ruled out pragmatically. [−R] têt li is generally available; with benyen and abiye, however, [−R] têt li has a special, Instigator interpretation.  

(41) supports our claim that Haitian lacks binding condition A because it lacks morphological reflexives. The question is then what mechanisms are responsible for the reflexive interpretation of overt elements. We maintain the reductionist view that all reflexive interpretations arise compositionally.

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29 Similar considerations apply to kò l, not tabulated in (41).
30 For J-RP, benyen plus reflexive li has the Instigator reading. Neither consultant reports an Instigator reading for abiye l or blee l.
31 As would follow from this claim, Haitian arguably lacks NP-trace (cf. fn. 21).
syntax. Thus, nothing in principle keeps him in (44) from bearing the same index as John:

(44) *John, shaved him,

Though syntactically well-formed, (44) is ruled out by an elsewhere condition in the morphology: Bouchard’s version of this condition (1985: 125, fn. 8) is as follows:

[I]f a position is in a Binding relation with an antecedent, then the element in that position will have to be coreferential with the antecedent; and since there is a more restricted morphological form that is usually used in this kind of relation, one must use it.

Burzio draws an explicit link from binding to agreement: “A bound NP must be maximally underspecified” (1989: 3). If a language doesn’t have a “more restricted morphological form” with requisite agreement features, then free indexing permits examples corresponding to (44). This is our analysis of Haitian li ‘3sg’ in (45): like French me ‘1sg’ and te ‘2sg’, it is a pronominal clitic that lacks a reflexive counterpart.

(45) Jak, wè l, nan glas la.  
    see 3sg Loc mirror Det  
    Jak saw him/self/her/it in the mirror.

For the preceding to work, Haitian tèt li cannot qualify as a morphological reflexive, despite its reflexive reading in many examples. Two reasons support this. One: if tèt li is morphologically reflexive, then li in (45) cannot have a bound reading since a “more restricted morphological form” exists; but bound li is freely available. Obviously, this is not independent of the claim that li is freely indexed, which is what we wish to demonstrate. Two: a reflexive interpretation for tèt li is sensitive to lexical semantics (cf. Section 3), but if tèt li is a morphological reflexive, this is unexpected. A related fact is the availability for consultant P-MD of kò l in addition to tèt li as phrasal reflexive expressions, with predictable selectional and interpretive differences.

We have argued that li is basically pronominal and that the lack of a morphologically distinct reflexive allows referential indices to be freely assigned to li. Of course, an annotationist can always construct an analysis of Haitian which preserves the standard morphological binding categories. We briefly consider one such analysis.

4.2. Against Diacritic Homophony

A lexical diacritic analysis could simply posit homophones liₐ (an anaphor respecting the standard binding condition A) and liₐ (a pronominal respecting condition B):

    see 3sg  
    Jak saw himself. . . .

b. Jak wè lₐ . . .  
    see 3sg  
    Jak saw her/him/her/it. . . .

Since subject anaphors are impossible in general, the diacritic correctly rules out liₐ in subject position, while still permitting liₐ to occur there:

(47)a. *Liₐ wè lₐ . . .

b. *Liₐ wè lₐ . . .

c. Liₐ wè lₐ . . .
    3sg see 3sg  
    S/he saw herself/himself. . . .

d. Liₐ wè lₐ . . .
    3sg see 3sg  
    S/he say her/him/her/it. . . .

An analysis of this type is given by Sigler (1985), citing Seychellois data from Corne (1977). Sigler suggests that anaphoric li is licensed in one of two ways. The first way is as the object (direct or indirect) of an inherently reflexive verb:

(48)a. I asize, i bèy liₐ partu.  
    he sit he bathe him all over  
    He sits down and bathes himself all over.

b. I uar ē palto i met lor liₐ.  
    he sees a jacket, he put on him  
    He sees a jacket, he puts it on (himself).
(48)c. I gây li_A ē sok.
he get him a shock
He got (himself) a shock.
d. I sorti də lapay kòt i ti-n maske li_A.
he come.out inside hay where he Asp hide him
He comes out of the hay in which he had hidden himself.

As the object of a nonreflexive verb like uar ‘see’, li_A is claimed to be a reduced form of the expression li-menm, which Sigler assumes to be a morphological reflexive:

(49)a. I uar li_A dà glas.
he see him in mirror
He saw himself in the mirror.
b. I, di rị li-menm, ...
he say to him-self
He says to himself.

Corne states that li and li-menm are in free variation, but Sigler supposes that li_A is preferred to li-menm in object position, just if the verb is optionally reflexive. If so, one could argue that the availability of li_A is determined by a lexical diacritic.

An approach along these lines cannot work for Haitian, for two reasons. First, as shown in section 3, bound object li is not restricted to inherently reflexive verbs. Second, though Haitian does have an emphatic form li menm, this is never reflexive (unlike Seychellois li-menm). Haitian x menm cannot occupy an argument position, but is always an adjunct, as in the following examples (from Valdman 1981: 376, 388, 574):

(50)a. Mwen menm, m pa jann nan rans ak moun.
1sg same 1sg Neg never in joke with people
As for me, I never joke with people.
b. Yo menm, ou pa bezwen okipe yo.
3pl same 2sg Neg need take.care 3pl
As for them, you don’t need to take care of them.

(50)c. Se msye Chal memm, mèt-travay la, ki vin wè kouman
Cop Mr. Chal same boss Det who come see how
bagay la ap mache.
thing Det Prog work
It’s Mr. Chal himself, the boss, who came to see how the thing’s working.

Li menm may also adjoin to the right of an argument, whether the pronoun li or a full NP such as Jak. Adjoined to object li in (51a), li menm adds no binding restriction.

(51)a. Jak, wè li_[[li menm]_ij].
see 3sg 3sg same
Jak saw him, himself OR Jak saw her, herself OR Jak saw himself, himself.
b. Jak, [li menm], wè li_[ij].
3sg same see 3sg
Jak, himself, saw him(self)/her(it).

In the absence of even indirect evidence for li menm→li reduction, and given the principled indifference of li_A to inherent reflexivity of the verb, Haitian offers no independent support for homophonous li_A and li. The failure of annotation leaves the reductionist alternative, which we now resume.33

33 A different kind of annotation is proposed by Chung (1989: 149–151). Chamorro object pronouns and reflexives are not morphologically distinct, cf. (i).

(i) Si Maria pára u-latatái gui?.
UNM Maria will INFL-scold 3sg
Maria, is going to scold him/her/it.

Despite (i), Chung maintains LGB binding conditions A and B, based on interactions of transitivity with anaphorocity. She notes that a transitive verb cannot have a 3pl subject unless the object is reflexive:

(ii) *Pára uma-fa? gasi i lalali i na?yan.
will INFL-wash the men the dishes
INFL-ridicule them the women
The women, ridiculed themselves,*them,

Chung delivers this with filters. One filter excludes 3pl subjects of transitive verbs:

(iv) *V [Nom] [Obj], order irrelevant, where [Nom] is third plural.
4.3. Predicate Domain I: Core Locality

We have established that li is a pronominal element which is freely indexed and that tét li is not a morphological reflexive. The next question is the domain of reflexive binding. Brame, Bouchard, and Koster have argued that the domain is the predicate.

Brame (1983: 139) defines the antecedent-anaphor relation as the sum of two local, thematic relations. The agreement features of the reflexive are bound to the subject features of the governing predicate, by a rule of Local Bound Anaphora. In turn, the predicate is identified with the antecedent’s φ-features (person, number . . . ) by Subject-Verb Agreement. In (52), the (abstract) φ-features of the verb treated are noted by the left subscript x, and those of herself are noted by the left subscript y. Despite the global effect of an anaphoric relation between two arguments Mary and herself, both sub-relations are independently given and strictly local in character.

(52) Mary treated herself with a clay poultice.

(Brame 1983: 140)

Bouchard’s claim that “government does play a crucial role in determining the domain where anaphoric referential properties hold” (1985: 121) explicitly rejects Chomsky’s annotationist split between “binding category” and “governing category” (1981: 220f.). Noting that the definition of binding in (42a) above incorrectly analyzes the examples in (53) as well-formed since himself is governed by John in both, he revises (42) so that the domain of binding is the minimal predicate (cf. 1985: 124f., fn. 6):

A second filter suspends the first, just in case there is an anaphor in object position:

(v) Filter (iv) is inapplicable if [Obj] contains an anaphor that is not bound within [Obj].
Possessive pro has the same sensitivity to a 3pl subject:

(vi) Ma-sa-gun i famalao? an [i kareta-nũha pro].
INFL-drive the women the car-AGR
The women, drove their, car.

Her description implies that (vi) cannot mean ‘The women, drove their, car’.

Chung takes (vi) as evidence for a distinction between ‘pronominal’ and ‘anaphoric’ pro. Specifically, if a pronominal element (overt or null) can be the object of a verb with a 3pl subject, then it is an anaphor. However, that this distinction is limited to the context of 3pl subjects is curious. Prima facie, Chamorro pronouns are freely indexed as in (i), and agreement restricts examples (ii), (iii), (vi).

(53a) *John, believes [Mary to like himself,]
\[
\begin{array}{c}
\gamma \\
\alpha \quad \beta
\end{array}
\]

b. *John, saw [Mary, kiss himself,]
\[
\begin{array}{c}
\gamma \\
\alpha \quad \beta
\end{array}
\]

(54) In the structure \(\gamma \ldots \beta \ldots \alpha \ldots \beta \ldots\), α binds β if and only if
a. α governs β and α assigns its R[eferential]-index to β
b. γ is the minimal category projection containing a Binder for β.

(54b) makes the domain of binding the projection of a verb and its arguments. Chomsky takes nearly the same step by making the local domain of binding “the least complete functional complex containing a governor of α in which α could satisfy the binding theory with some indexing” (1986: 171).

The unification of locality across modules of grammar is complete in Koster (1987). Addressing module-specific divergences from a core notion of government (the “domain unification problem”), Koster argues that the hypothesis of syntactic movement (Move-α) is an obstacle to domain unification because it enters into the derivation of some s-structure relationships (e.g., wh-chains) but not others (e.g., pronoun binding). In a non-derivational approach to domain unification, Koster (1987: 70) formulates locality as a relation of property sharing between syntactic positions. As an instance of core government, property sharing is constrained by a universal “configurational matrix” with four characteristics: obligatoriness, uniqueness, c-command, locality. In (55), by definition the reflexive himself does not have its own R-index, so it must acquire one by property sharing with an antecedent, namely John.

(55) John [saw himself].

The relation between John and himself is obligatory – if they don’t share an R-index, (55) is uninterpretable. The antecedent John is unique, and it c-commands himself (John is contained in the minimal \(X^{\max}\) containing the anaphor). The relation is also local: the dependent element himself

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34 A reviewer rightly observes that for Bouchard (1985: 121) it is the antecedent NP which governs the anaphor, and strictly speaking the verb is not relevant for the definition of binding domains.

35 As already noted, this argument is foreshadowed by Rizzi (1982).
cannot be free in the minimal X\textsuperscript{max} containing it (and its governor). The result is one R-index \(i\), associated with two distinct NP positions.

As seen in (52), (53) and (55), Brame, Bouchard, and Koster all reduce the binding domain of a morphological reflexive to its mother predicate. But morphological reflexives are not found in Haitian. Haitian's nonreferential elements consist of pronouns like \(li\), some complex expressions containing pronouns like \(li\), and, for some verbs with inherent reflexive semantics, the null complement. A reductionist account of these elements requires an explicitly thematic binding framework.

4.4. Predicate Domain II: Thematic Binding

Adopting a version of the predicate domain hypothesis just described, Williams (1987, 1989) proposes that binding ranges over \(\theta\)-roles and not over the morphological contents of argument positions. Conversely, \(\theta\)-assignment is part of binding theory insofar as it licenses anaphoric relations between \(\theta\)-roles. Bouchard (1988) takes a similar step.

As a first step, Williams shows that implicit arguments trigger binding condition effects. If implicit arguments are inert \(\theta\)-roles and \(\theta\)-roles are the locus of binding, then the sensitivity of binding to implicit arguments is expected. There are two cases to consider: implicit argument as antecedent and as dependent element.

In (56), *Admiration* has two arguments, the Admirer and thing admired (Admiree):

\[(56) \textit{ admiration (Admirer, Admiree)}\]

In (57), the Admiree is syntactically realized; the implicit Admirer is generic:

\[(57) \text{ In January 1991, admiration of the flag went up } 8.1\% \text{.} \]

Williams then shows that the \(LGB\) binding conditions detect an implicit Admirer, to which \textit{oneself} is bound as if by condition A, cf. (58a), from which \textit{him} is disjoint as if by condition B, cf. (58b), and from which \textit{Quayle} is disjoint as if by condition C, cf. (58c).

\[(58a) \text{ Admiration of oneself is difficult at times.} \quad \text{(Admirer}_1, \text{Admiree}_v^1)\]

\[(b) \text{ Admiration of him increased during the war.} \quad \text{(Admirer}_1, \text{Admiree}_v^1)\]

Implicit arguments likewise trigger binding effects as dependent elements. If \textit{take a picture of x} is a complex predicate meaning 'make a film exposure of x', the implicit argument of \textit{picture} (call it the Depictor) is controlled by the overt Agent of \textit{take}:

\[(59) \text{ take (A}_1, \text{Th) picture (Depictor}_1, \text{Depictee}_1) \]

Given (59), it follows that if the Depictee of \textit{picture} is linked to a pronoun, condition B requires that it be distinct from the Depictor, which is controlled by the Agent of \textit{take}. If the implicit Depictor binds a pronominal Depictee, a condition B violation results:

\[(60) \text{ John}_1 \quad \text{VP}_1 \]

\[\text{take (A}_1, \text{Th) picture (Depictor}_1, \text{Depictee}_1) \]

\[\text{*John}_1 \text{ took a picture of him}_1. \]

\[\text{*John}_1 \text{ took his}_1 \text{ picture.} \]

Contra-indexation of the two arguments in (60) does not violate condition B since the pronominal Depictee is not bound by its implicit co-argument.

\[(61) \text{ John}_1 \quad \text{VP}_1 \]

\[\text{take (A}_1, \text{Th) picture (Depictor}_1, \text{Depictee}_1) \]

\[\text{John}_1 \text{ took a picture of him}_1. \]

\[\text{John}_1 \text{ took his}_1 \text{ picture.} \]

Conversely, condition A requires \textit{John} to be coreferent with a reflexive Depictee like \textit{himself} or \textit{his own}, which in turn is controlled by the Agent of \textit{take}:

\[36 \text{ Williams does not call \textit{his own} a "full" anaphor since it need not be locally bound:} \]

\[(i) \text{ His own mother wouldn't do it. (1987: 156)} \]
Implicit arguments aside, the empirical results of \( \theta \)-binding coincide with standard predictions: the referential values assigned to \( \theta \)-roles respect the LGB morphological binding classes in (3) above. The two frameworks differ in that \( \theta \)-binding is indifferent to structural position, to the point that the NP need not be overt at all.\(^{37}\) They also differ in that \( \theta \)-binding is reductionist in the familiar sense:

The semantic rationale for applying binding theory to \( \theta \)-roles is that it is the \( \theta \)-roles themselves to which referential value is ultimately attached; the NP that a \( \theta \)-role is assigned to simply helps determine the reference of the \( \theta \)-role.

(Williams 1989: 429)

Haitian provides more radical examples of the indifference of binding to position and of the insufficiency of morphology to determining reference. Lacking morphological reflexives, assignment of indices to \( \theta \)-roles should be free within the domain of the predicate. This prediction is borne out straightforwardly for the overt pronominal \( li \) but not for the binding of null complements. Consider each in turn.

Recall that with all but two verbs (mòde and tz̥w̥e) object \( li \) may, but need not, be bound by a locally c-commanding NP. Some paradigms are repeated in (63).

(63a) Jak blese \( l \). (Injurer\(_r\), Injuree\(_e\), OR Injuree\(_r\))

\[ injure \ 3sg \]

Jak injured him(self)/her.

(b) \( \lambda \) \{dresser\(_r\), dressee\(_e\), OR dressee\(_r\)\}

\[ dress \ 3sg \ too \ fancy \]

Jak got dressed up too fancy OR Jak dressed her/him up too fancy.

c. \( \lambda \) \{bather\(_r\), bathee\(_e\), OR bathee\(_r\)\}

\[ bathe \ 3sg \ two \ times \ per \ day \]

Jak bathes him(self)/her twice a day.

\( \theta \)-indexing is free: if the internal and external \( \theta \)-roles are assigned the same index, then \( li \) is bound; if they are contra-indexed, then \( li \) is free (in the normal sense: anti-bound). In Williams' terms, \( li \) does not "determine the reference of the \( \theta \)-role".\(^{38}\)

Null complements differ: those in (64) are free, but those in (65) are bound. The freedom of the null complements in (64) follows from the contraindexed \( \theta \)-roles.

(64a) Jak wè \( \emptyset \) nan glas \( l \). (Viewer\(_r\), Viewee\(_e\))

\[ see \ Loc \ mirror \ Det \]

Jak sees [someone/something] in the mirror.

b. Mariz sonje \( \emptyset \). (Rememberer\(_r\), Rememberee\(_e\))

\[ remember \]

Mariz remembers [something/someone previously mentioned].

c. Jak lave \( \emptyset \) nan dlo \( a \). (Washer\(_r\), Washee\(_e\))

\[ wash \ Loc \ water \ Det \]

Jak washed [something, someone] in the water.

(65a) Jak blese \( \emptyset \). (Injurer\(_r\), Injuree\(_e\))

\[ injure \ OR \ (Injurer\(_r\), Injuree\(_e\)) \]

Jak is/has been injured.

---

\(^{37}\) The observation that implicit arguments trigger binding condition effects, requires that the \( \theta \)-Criterion be relativized: every NP must be assigned a \( \theta \)-role, but not every \( \theta \)-role must be assigned to a syntactic position. Rizzi (1986) makes a similar point.

\(^{38}\) A reviewer observes that the coindexing of \( \theta \)-roles should always lead to a bound variable (sloppy identity) reading in ellipsis. This incorrect prediction might follow in the framework of Williams (1989), but because we exclude external arguments from lexical representations, the indexing system in section 4.4 makes no such prediction.
for the internal variable. This change yields a derived conceptual structure on the lines of (66b).\footnote{\textit{eat} \{affect \(x\), where \(x\) qualifies as \textsc{food} [come to be ingested \ldots]\}}

\begin{align*}
(66a) &. & \textit{eat} & & \{affect \(x\), where \(x\) qualifies as \textsc{food} [come to be ingested \ldots]\} \\
(66b) &. & \textit{eat} & & \{affect \textsc{food} [come to be ingested \ldots]\}
\end{align*}

For Hale and Keyser, the potential incorporation of a lexical constant into an open variable expresses the fact that the internal argument of \textit{eat} can be saturated at either of two derivational levels: in the syntax (66a) or in the lexicon (66b).

The fact that a null complement of a non-reflexive verb is obligatorily free follows straightforwardly from the nature of its lexical constant. Suppose that the conceptual structures of the verbs in (64) include the selectional restrictions expressed in (67).

\begin{align*}
(67a) &. & \textit{wè} & & \{\text{have } \(x\), where \(x\) is a \textsc{visible entity}, in awareness \ldots\}\} \\
(67b) &. & \textit{sonje} & & \{\text{have } \(x\), where \(x\) is a \textsc{memorable entity}, in awareness \ldots\}\} \\
(67c) &. & \textit{lave} & & \{\text{affect } \(x\), where \(x\) is a \textsc{washable entity} [come to be clean \ldots]\}\}
\end{align*}

Incorporating the constants for the variables yields the null-complement entries in (68):

\begin{align*}
(68a) &. & \textit{wè} & & \{\text{have \textsc{visible entity} in awareness} \ldots\} \\
(68b) &. & \textit{sonje} & & \{\text{have \textsc{memorable entity} in awareness} \ldots\}\footnote{For some reason, incorporation with this verb entails discourse linking, cf. (39a).} \\
(68c) &. & \textit{lave} & & \{\text{affect \textsc{washable entity} [come to be clean} \ldots\]\}
\end{align*}

Now, if an incorporated lexical constant indeed determines the reference of its verb's internal \textit{\(\theta\)}-role, then the null complement of such a verb is obligatorily free of its subject, since the internal \(\theta\)-role is saturated. This is exactly the implication we require.

As for the bound reading of the null complement of inherently reflexive verbs in (65), this is predictable if such verbs contain an inalienably

\footnote{(66a) departs from the format employed by Hale and Keyser, which includes external argument variables in lexical entries, and has \textit{cause} instead of \textit{affect}, e.g., \textit{eat} \{\text{\(x\) cause [\(y\) come to be ingested, where \(y\) qualifies as \textsc{food} \ldots]\}\}}

\footnote{Thanks to M. DeGraff for this important observation. As noted in (33) above, the adjectival passive reading is disfavored in a generic (or other stative) aspectual context such as \textit{de \(fwa\) pa jou} 'twice a day':}

\begin{align*}
(65b) &. & \text{Jak abiy \(\emptyset\) two \(bwodè\).} & \text{(Dresser\(_r\), Dresseee\(_e\))} \\
& & \text{dress too \emph{fancy}} & \text{OR (Dresser\(_r\), Dresseee\(_e\))} \\
& & \text{Jak is/has been too dressed up.} \\
(65c) &. & \text{Jak benyen \(\emptyset\) yè.} & \text{(Bather\(_r\), Bathee\(_e\))} \\
& & \text{bathe yesterday} & \text{OR (Bather\(_r\), Bathee\(_e\))} \\
& & \text{Jak (was) bathed yesterday.}
\end{align*}

\footnote{\textit{Le créole n'a pas de forme passive exprimant que le sujet subit une action} (Sylvain 1936: 112).}
possessed constant BODY. If such a verb may also be syntactically transitive, then it must contain a lexically unsaturated variable. The only way to include both is for the variable to appear twice:

(69a)  blesè  [affect \(x\) \([x’s\) BODY come to be impacted by a forceful object \(\ldots\)]

b.  abiyè  [affect \(x\) \([x’s\) BODY come to be covered with clothing \(\ldots\)]

c.  benyen  [affect \(x\) \([x’s\) BODY come to be momentarily covered with water \(\ldots\)]

As in (67–68), we might suppose that for each verb in (69) the constant may substitute for the variable. Notice, however, that BODY cannot substitute for \(x\) in (69) since BODY is inalienably possessed by \(x\) in the intransitive variant as well as in the intransitive one. Notice too the perfective or adjectival-passive aspect of the sentences in (65), as compared to those in (64). These two facts are potentially related.

Uncontroversially, events contain the inchoative expression *come to be* in conceptual structure. Perfectives and adjectival passives are states which result from events; the question in Haitian is whether (or how) this stativity is related to the inalienable (specifically, corporal) constant’s failure to incorporate into \(x\).

Minimally, the intransitivity of the sentences in (65) shows that there is no open argument variable in the relevant conceptual representation. Yet the ECP arguably forbids the incorporation of BODY into this variable (cf. Baker 1988: 101). The only alternative is to delete the outer predicate *affect \(x\)*, as normally in the anticausative alternation, and delete the related *come to* part of the inner predicate, as in the lexical process of “inchoative stativation” (Guerssel 1986: 12). This maps (69) to (70), in which the non-argument variable \(x\) denotes an implicit argument coreferential with the subject. To indicate this coreference, which percolates from the specifier of the verb-internal NP to the specifier of IP, we add a subscript \(x\) to the predicates in (70).

(70a)  blesè  \([x’s\) BODY be impacted by a forceful object \(\ldots\)]

b.  abiyè  \([x’s\) BODY be covered with clothing \(\ldots\)]

c.  benyen  \([x’s\) BODY be momentarily covered with water \(\ldots\)]

As one indication that the inchoative stativation analysis is on the right track, notice that the conceptual structures in (70) make no reference to an agent. This correctly matches the judgment that the sentences in (65) are ambiguous as to the reference of the Agent \(\theta\)-role. In (65), the construal of any Agent — or in Guerssel’s terms, the choice between intrinsic and extrinsic change of state — can only be pragmatic.43

A final problem is the non-ambiguity of object *li* with the examples in (71):

(71a)  Jak môde l\(\) nan men.  (Biter\(_l\), Bitez\(_e\),)  
\(\text{b} 3^g\) Loc hand
Jak bit him/her/it on the hand.

b.  Jak tchwe \(\) ak kouto.  (Killer\(_l\), Kilee\(_e\),)  
\(\text{k} 3^g\) with knife
Jak killed him/her/it with a knife.

Notice that, with reference to the interpretation of object *li* and null complement, *môde* and *tchwe* are nearly the inverse of the inherent reflexive verbs:

\footnotesize
\(\text{43 A remaining difficulty is the difference between the translated meaning of } \text{benyen } = \emptyset \text{ in (70c) and the representation in (69c) which is supposed to underly it. The problem may be traceable to the adverb momentarily in our representation of benyen. The rationale behind this adverb is the fact that the state produced by the activity of bathing is relatively ephemeral compared to that produced by dressing or especially injuring. Thus, a ‘very temporary’ state converges with an event.}

M. DeGraff (p.c.) points out a correlated aspectual property of benyen. The auxiliary *ap* normally yields a progressive reading with eventive verbs like *vann* ‘sell’, but it yields a future reading with noneventive verbs like *renmen* ‘like’:

(i)  Jak ap vann bëf yo.  \(\text{AP sell} \ \text{cow Det}\)
Jak is selling the cattle.

(ii)  Jak ap renmen Titid.  \(\text{AP like}\)
Jak will like Titid.

\(\text{Ap} \) evinces the same aspectual difference between null complement benyen and blesè:

(iii)  Jak, ap benyen \(\emptyset\).  \(\text{AP bathe}\)
Jak is taking a bath.

(iv)  Jak, ap blesè \(\emptyset\).  \(\text{AP bathe}\)
Jak will be/have been injured.

Possibly related is the Instigator reading of bound object *li* which some speakers get with benyen but not with other inherently reflexive verbs, cf. (34a) vs. (29a), (32a).}
null complement | object li
---|---
bound (stative) | bound or free
free | bound or free
* | free

Consider the approximate, partial conceptual representations in (73).

(73)a. *môde [affect x [extrinsically come to be pierced, by means of teeth . . . ]]

b. *tchwe [affect x [extrinsically come to be dead . . . ]]

Suppose that what distinguishes the lexical entries of môde and tchwe from the other verbs in (72) is not affectedness per se, but the “extrinsicity” of the change of state. As formulated by Guerssel (1986: 76), extrinsicity entails obligatory affectedness; it names that lexical-semantic property which underlies the failure of English kill to anticausativize (e.g. *John, killed ti). It accounts for both kinds of restrictions on môde/tchwe in (72). The lack of a well-formed null complement follows from the lack of a lexical constant which could incorporate in the variable x (on the pattern of wè), and by stipulation from the failure of anticausativization (on the pattern of blese). The obligatory disjoint index of object li with môde/tchwe also follows from extrinsicity. 45

This section sketched a lexically-driven analysis of the ambiguity of object li between bound (reflexive) and free interpretations – an ambiguity which is systematic for nearly all Haitian verbs and which is intractable for standard binding theory. Because our analysis is thematically-based, it extends straightforwardly to two lexically restricted binding phenomena: the obligatorily reflexive interpretation of a null complement with inherently reflexive verbs (benyen . . . ), and the obligatorily anti-reflexive interpretation of object li with inherently causative verbs (môde . . . ). The pattern in (72) suggests that all these effects are interrelated.

It might be thought that these thematic binding effects are restricted to languages which lack a morphological pronoun/reflexive distinction. Such a conjecture cannot be maintained, however. The determination of binding domains in Norwegian, a language with morphological reflexives, shows similar effects, as we will briefly show.

44 Cf. Fodor (1970). Though we have no explanation for its presence in kill-type verbs, extrinsicity is not ad hoc to binding theory and hence is sufficient for (73).

45 One prediction of (73) is that light verbs like bay kou ‘beat’ (literally ‘give blow’) or bay gagann ‘punch’ (‘give punch’) will pattern with môde and tchwe in (72).

46 E.g., John pulled the blanket over him/himself (Kuno 1987: 66).

Hellan (1988: 67, 7) shows that seg selv and ham selv are complementary with respect to subject vs. nonsubject antecedents:

(i) Jon, fortalte meg om *ham selv/seg selv.
Jon told me about himself.
With canonical transitives like forakte 'despise' only seg selv is locally bound:

\[(74)\]  
\[\text{Jon} \text{, foraktet seg selv/*seg,} \]
\[\text{despised SEGself/SEG}\]

John despised himself

Other verbs from this class include snakke om ‘talk about’, avsky ‘abhor’, elskte ‘love’, and foretrekke ‘prefer’ (Hellan 1988: 104, 113).

With inherent reflexives such as skamme ‘shame’, only seg is locally bound.

\[(75)\]  
\[\text{Jon} \text{, skammer *seg selv/seg,} \]
\[\text{shames SEGself/SEG}\]

Jon is ashamed.

Also in this class are bølte ‘frolick’ and tårne ‘tower’ (Hellan 1988: 106).

Optional reflexives like beundre ‘admire’ allow either seg selv or seg to be locally bound (Hellan 1988: 108); other such verbs are vaske ‘wash’, henge ‘hang’, and klø ‘scratch’.

\[(76)\]  
\[\text{Jon} \text{, beundret seg selv/seg,} \]
\[\text{admired SEGself/SEG}\]

Jon admired himself.

On the dual possibility of seg selv or seg with beundre ‘admire’, Hellan remarks that seg “favors a reading where only the physical appearance is involved”, while seg selv implies a relation “with a mental object as second part, or . . . a ‘full personality’, rather than just a physical aspect of a person” (1988: 113, emphasis original).

\[(77a)\]  
\[\text{Jon beundret seg (i speilet).} \]
\[\text{admired SEG in the mirror}\]

Jon admired himself (in the mirror).

\[(77b)\]  
\[\text{Jon beundret seg selv} \]
\[\text{admired SEG selv}\]

Jon admired himself [i.e., Jon esteemed his own self image].

As with Haitian abiye tet li ‘dress all by oneself’ and benyen kò li ‘dress all by oneself’, the subject of beundret seg selv has the schizophrenic, Instigator/Doppelgänger flavor.

Unless the verb is inherently reflexive, seg may in general also be bound across non-finite clauses (Hellan 1988: 104–09):

\[(78a)\]  
\[\text{Jon, bad oss forskalte seg,} \]
\[\text{asked us despise SEG}\]

Jon asked us to despise him.

b. *Jon, baad meg skamme seg,  
\[\text{asked me shame SEG}\]

c. Jon, baad meg vaske seg,  
\[\text{asked me wash SEG}\]

Jon asked me to wash him.

To rephrase Hellan’s description: seg must be long-distance bound with canonically transitive verbs; it must be locally bound with inherently reflexive verbs; and optionally reflexive verbs allow for either possibility.

In Hellan’s analysis, which preserves the LGB binding conditions, long-distance seg is an argument, but local seg is a non-argument, detransitivizing, lexical affix.\(^{47}\) Conceptually, however, an argument/non-argument distinction for seg is mysterious. In our non-LGB analysis, Hellan’s ‘detransitivisation’ of certain verbs with seg corresponds to seg’s binding of a lexical constant BODY, while the long distance binding of seg is just expected by Pica’s (1984) head movement account of reflexive clitics.

Recall that in Haitian, with a null complement, inherently reflexive

\[^{47}\] Cf. Kayne’s (1992) proposal that Italian reflexive si is categorically pronominal and hence in principle regulated by condition B, except that it does not occupy an argument position – unless it is stressed (or ‘tonic’ sé), when indeed it shows condition B effects. However this crucially requires that the B-domain of sé is as marked in (i) and (ii):

\[(i)\]  
\[\text{Gianni, ha parlato [a di sé].}\]

Gianni talked about himself.

\[(ii)\]  
\[\text{Gianni, ha fotografato [a sé; stesso].}\]

Gianni photographed himself.

---

\[(ii)\] Vi fortalte Jon, om ham selv/*seg selv,  
We told John about himself.
verbs like benyen ‘bathe’ trigger incorporation of an inalienably possessed lexical constant, deriving (70a) from (69a), repeated from above.

(69a) bles [affect x [x’s BODY come to be impacted by a forceful object ...]]

(70a) bles [x’s BODY be impacted by a forceful object ...]

Presumably in Norwegian, too, the conceptual structure of inherently reflexive verbs involves the same inalienably possessed lexical constant, roughly as in (79):

(79a) skemme [x’s BODY be in state of embarrassment, ...]
  b. boltre [x’s BODY move playfully, ...]
  c. tårne [x’s BODY raise up to a conspicuous height, ...]

The generalization is that, in the presence of BODY, seg is obligatory locally bound and so is unavailable for long-distance binding. Since no argument variable is present in (79), there is no open internal argument position, excluding argumental objects; thus *Jon, skamme seg selv, and *Jon skammer Marii are both ungrammatical.

It follows directly that optionally reflexive verbs have an optional BODY constant. BODY, if present, licenses locally bound seg, expressing a relation with the “physical aspect of a person” (Hellan: 1988: 113). Absent BODY, the predicate has an open internal variable, hence the only local possible reflexive is argumental seg selv, yielding a local binding relation with the “full person” (Hellan: 1988: 113).

(80a) beundre [regard x (x = BODY) with approval, ...]
  b. vaske [affect x (x = BODY) [come to be clean ...]]
  c. henge [affect x (x = BODY) [come to be suspended ...]]
  d. klø [affect x (x = BODY) [come to be scratched ...]]

Finally, the canonically transitive verbs, which resist locally bound seg, all belong to the class of non-affecting verbs (Hellan: 1988: 144, fn. 8). For all these verbs, the open internal variable is introduced by a preposition, indicating weak s-selection:

(81a) forakse [feel contempt for x, ...]
  b. elske [feel love for x, ...]
  c. foretrekke [feel preference for x, ...]
  d. avsky [feel horror towards x, ...]
  e. snakket om [speak about x, ...]

Seg is always a clitic (non-argument); if it binds a lexical constant, it is locally bound; elsewhere, its domain is non-local because of (abstract) head-movement à la Pica. Thus, Hellan’s description of Norwegian seg encourages the view that thematic binding is active even in a language with morphological reflexives. The foregoing, however, does not explain the reflexive interpretation of seg selv, ham selv, têt li and kô l, or the interplay of literal and reflexive readings for the Haitian forms.

5. The Antecedent of têt li

Our analysis of literal and reflexive têt li follows proposals by Helke (1970), Lebeaux and Kitagawa (1987), and Pica (1987) concerning compound reflexives in Germanic and Romance languages. In various ways, these studies claim that expressions like English himself are not lexically stipulated as reflexive (in the LGB manner), but instead derive their reflexive interpretation compositionally, from their internal structure.

Pica compares compound reflexives to inalienable possession constructions like that in (82).

(82) Il lève la (*belle) main.

He is raising his (beautiful) hand

In (82), the body-part noun main ‘hand’ is inalienably possessed, as shown by the possessive interpretation of its determiner. In addition, if main was independently referring, it should be able to take a modifier such as belle. Pica argues that, in (82),

the body-part N acts as a blocking element and ‘anaphorizes’ the whole NP. The NP ... receives a θ-role from the verb but this argument is ‘deficient’ since it contains an open position. The NP consequently does not have complete reference and is identified as an anaphor (1987: 486f.)

Assuming a projection [NP SPEC + N], Pica proposes that the expression himself is referentially dependent (bound) for the same reason as la (*belle) main, namely that

the open position associated [with] the head noun self is not saturated by the specifier ... because ... coindexation of the open position with the specifier is blocked by the semantic nature of the N self which expresses a (metaphoric) inalienable possession ... (1987: 487)
Pica’s “anaphorization” advances the reductionist program, since it allows complex reflexives to be defined thematically in the syntax (s-structure), not morphologically in the lexicon. In this section, we will try to work out his idea for Haitian.

The Haitian reflexives tèt li and kò l strengthen the evidentiary link between compound reflexives and inalienable possession, a connection which Pica regards as only “metaphorical” in the x-self type forms of the Germanic languages. Instead of a ‘self’ morpheme, the head of a Haitian compound reflexive is a body-part noun in good standing: either tèt ‘head’ or (additionally, for some speakers) kò ‘body’. Although the resemblance between tèt ‘head’ and tèt li ‘her/him/itself’ might be coincidental, such a view offers no insight into the sensitivity of certain object reflexive readings to lexical semantic details of the verb. This phenomenon in Haitian is additional evidence that the “anaphorization” of a compound reflexive expression is indeed thematically based.

One may reasonably ask what permits a noun to be [−R] at all and why all inalienably possessed nouns do not form compound reflexives in all languages. On the second question, we have nothing to say. On the first question, it seems to be no accident that, across languages, certain body parts recurrently qualify as ‘anaphorizers’. In heads and bodies, two properties intersect: physical inalienability and canonical association with the salient qualities of intention/agency and individuality.

In this way, we see a similarity not just between tèt and self, but between the semantic function of the nouns {head, body} in compound or phrasal reflexives and their function in classifier expressions like head of cattle and body of water. 48 We therefore describe expressions like tèt li and kò l in their reflexive uses as classifier reflexives and posit the following classification of overt [+N, −V] elements:

48 As classifiers, English glass, body and head differ syntactically: body must be modified, (i-a) and head must be quantified, (i-b); head, unlike glass and body, does not pluralize. (i-c). Of the three, then, head is the most “classifier-like”.

(i) a glass of water
   a large glass of water
   one glass of water
   two glasses of water
   ?a body water
   a large body of water
   one body of water
   two bodies of water
   *a head of cattle
   *a large head of cattle
   one head of cattle
   two head(s) of cattle

Our analysis of classifier reflexives requires an independently valid method for assigning referential indices. For tèt li, there are two possibilities: tèt [+R] and tèt [−R]. The first is unproblematic: by standard assumptions, the referential index of a head percolates to its maximal projection, cf. Muysken and van Riemsdijk (1986) and (88) below. If tèt is [+R] as the head of a phrase such as tèt li, then so is the whole phrase.

The instances in which the head noun is [−R] can be represented as follows:

84a. \[
\begin{array}{c}
\text{DP} \quad \text{tèt}_{j} \quad \text{li}_{k} \quad \text{DP} \quad \text{kò}_{j} \quad \text{li}_{k} \\
\text{[−R]} \quad \text{[−R]} \quad \text{[−R]} \quad \text{[−R]} \\
\end{array}
\]

Since li is [−R] by definition, neither element of the phrases in (84) is referential. This raises the possibility that the two elements might be referentially identified, or else not. In other words, either \( j = k \) or \( j \neq k \). The question is how such a phrase is interpreted, for each option. Consider them in turn, assuming the structure in (85), which is a fuller representation of (84a) in the discourse context of a potential antecedent.

85. DP, . . .

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49 The classifiers pye ‘tree’ and po ‘skin’ are exemplified in these lexical items:

(i) pye dhèn
   tree oak
pye pyèzen
   grapevine
pye bağô
   thin leg
(ii) po je
   skin eye
po bouch
   skin mouth
po liv
   skin book

‘eyelid’
‘lips’
‘book cover’
First suppose that \( j \neq k \), making \( t\acute{e}t \) referentially distinct from \( li \). \( t\acute{e}t \), being \([-R]\), depends on an antecedent to obtain reference, and therefore so does the whole phrase, which bears the index of its head by percolation. For concreteness, say that both the head \( t\acute{e}t \) and its phrase acquire reference from some DP\(_i\), so that \( i = j \). The problem concerns the potential equivalence of the indices \( i \) and \( k \). Either \( i = k \) or \( i \neq k \).

Intuitively, the binding of the specifier \( li_k \) depends on the binding of the lexical head of its projection. Informally, a specifier (e.g., a possessor) cannot refer unless its phrasal head (the possessee) “already” refers. Reinhart (1987) gives this idea an explicit representation, defining a subsidiary specifier index to be equal to the referential index of the lexical head. Notationally, a specifier index is preceded by a slash, whereas a referential index is not. A phrase with stacked specifiers, like every boy's mother, is represented with multiple backslash indices as in (86).\(^{50}\)

\[
(86) \quad [[\text{Every}_{n/2} \text{ boy}]_{s/2} \text{ mother}]_j \text{ thinks } \text{he}_1 \text{ is a genius.}
\]

(Reinhart 1987: 155)

Every, which is not a noun, gets no referential index; as a specifier, it bears a complex index \( \backslash n/2 \) which is equal to the entire index of boy \( 1/2 \), which is the head of its phrase. Boy, in turn, bears both a referential index 1 and a specifier index \( 2 \), the latter being equal to the referential index of mother \( 2 \), the lexical head of boy's phrase.

Reinhart notes (1987: 151) that the specifier index captures a notion of extended locality similar to Kayne's (1983) connectedness. By definition, the c-command domain of a specifier is connected to the c-command domain of its lexical head.\(^{51}\)

The specifier itself does not c-command anything outside its [DP]. However, its binding domain is identical to that of the [DP]. (1987: 155)

As already noted, Reinhart reduces the binding relation (her “bound anaphora”) to c-command. In (86), the domain extension effect of specifier binding ensures that, although the specifier every boy does not c-command the pronoun he (which is outside of its phrase), he is nevertheless bound by every boy.

With specifier indexing, (85) becomes (87) with \( li \) bearing referential index \( k \) and a specifier index \( \backslash j \), the latter equal to the referential index of \( t\acute{e}t \) – or, equivalently, the referential index of its hypothetical null determiner – namely \( j \). Notice too that, in DP representation, specifier indexing reduces to formal SPEC-head agreement.

\[
(87) \quad \text{DP}_i \ldots
\]

By definition, then, the specifier index of \( li \) is the referential index of \( t\acute{e}t \). But the head \( t\acute{e}t \) happens to be \([-R]\). This means that \( t\acute{e}t \) must itself be bound by an external NP, in this case NP, such that \( j = i \). The binding domain of a specifier is identical to that of the whole NP, which in turn is that of the lexical head. Therefore, DP\(_i\), by virtue of binding \( t\acute{e}t \), is also a potential binder of \( li \), hence \( k = i \). This means that the full index of \( li \) is \( i = k\backslash i = j \), making \( j \) and \( k \) non-distinct. However, this contradicts the initial assumption that \( j \neq k \). (87) is therefore ill-formed if \( j \neq k \).

The remaining possibility is \( j = k \): \( t\acute{e}t \) is referentially non-distinct from \( li \). It might be thought that \( j = k \) is ruled out by the “\( i \)-within-\( i \) constraint” (Chomsky 1981: 212), but it is not obvious that this condition applies to a structure whose head is not inherently referential.\(^{52}\) The indexing of \( li \) remains \( i = k\backslash i = j \), and this does not contradict \( j = k \), so (87) is well-formed if \( j = k \). Conclusion: a non-referential head like \( t\acute{e}t [-R] \) creates a “referential island” outside of which its Specifier \( li \) cannot be bound.

If \( t\acute{e}t \) and \( k\acute{e} \) are the referential nouns ‘head’ and ‘body’, the examples look like (88):

\[
(88)
\]

\(^{50}\) To distinguish it from the (forward) slash, used throughout this paper to indicate alternative indices, we convert Reinhart’s specifier index slash to a backslash.

\(^{51}\) For direct comparison with (85) and (87), we convert Reinhart’s NP to DP.

\(^{52}\) Guéron (1984) and Keach (1988) discuss other examples of thematic nondistinctness between inalienable possessions and their possessors.
The index of the head N is referential and, as before, percolates to the phrasal projection. This means that, in (88), i ≠ j. As a pronoun, li is [-R]; it can acquire a referent either syntactically (by binding) or accidentally (in discourse). Nothing prevents either i ≠ k or i = k, so these sentences are interpreted ‘Jak saw his own OR someone else’s head’ and ‘Jak saw his own OR someone else’s body’.

However, the interpretations predicted by (88) are not found with all verbs. For example, Jak benyen kò l is interpretable neither as ‘Jak bathed his own body’ nor as ‘Jak bathed someone else’s body’. Only the non-referential interpretation is possible: ‘Jak bathed [all by] himself’. Why this lexical sensitivity, and whence the blocking effect?

Evidently, verbs of the benyen class share some property which is lacking in the wè class. The null hypothesis is that this property blocks the reflexive interpretation of kò l through the mechanism of semantic selectivity. We propose that the property in question is the lexical constant BODY roughly as in (69c), repeated from above.

(69c) benyen [affect x [x’s BODY come to be momentarily covered with water . . .]]

Some Kwa languages overtly include BODY expressions in verbs like ‘bathe’ and ‘injure’. In Igbo, a predicate ‘physically injure x’ translates as ‘make-spoiled x body’.

(89a) Úchè me-ru-ru Ógù ahù.
    do-spoil-Asp body
    Úchè injured Ógù.

b. Úchè me-gbu-ru Ógù (*ahù).
   do-cut-Asp body
   Úchè cheated Ógù.

If implicit arguments are thematically active, the [+R] variant of tèt is blocked in Jak bleeze tèt li: tèt ‘head’ does not qualify as a projection of BODY.

53 That ‘body’ is inalienably possessed in (89a) is shown inter alia by the fact that it cannot take a determiner or possessive modifier, cf. ihiónu (1992).

6. ‘On Binding’ and Haitian Binding

Haitian lacks the morphological distinction between ‘anaphor’ and ‘pro-nominal’ as defined in Lectures on Government and Binding. Haitian binding paradigms are equally problematic for certain annotations of that framework, e.g., Sigler (1985), Sportiche (1986), Chung (1989). There are, strictly speaking, no condition A or B effects in Haitian; parts of both effects are found, but other parts are lacking, depending on the interplay of thematic properties of verbs and referential properties of nouns.

As an unintended consequence of our proposed reductionist analysis, we have partly reinvented the indexing conventions of ‘On Binding’ (Chomsky 1980). To conclude, we will show how our analysis of Haitian binding supports the ‘On Binding’ framework.

For Chomsky (1980), binding is determined by four rules. Referential indexing (90) applies in a top-down fashion to all NPs in a sentence. Construal (91) coinindexes anaphors (reflexives, anaphors, and PRO) with a c-commanding antecedent. Anaphoric indexing (92) and Disjoint reference (93) ensure that non-anaphors (wh-pronouns and lexical NPs) are interpreted as disjoint from a local c-commanding NP.

(90) Assign a referential index to an NP only if all NPs that c-command or dominate it have been indexed.

(91) If α is an anaphor, coindex α.

(92) The anaphoric index A of α is the set of indices \{a_1, \ldots, a_n\} where a_i is the referential index of some NP c-commanding α (A maximal).

(93) The anti-reflexive index \( A = \{a_1, \ldots , a_n\} \) of α is interpreted to mean that α is disjoint in reference from each NP with referential index \( a_i \).

In (94a), object her is assigned two indices: referential index 2, and anaphoric index \{1\}. (Hereafter: R-index and A-index.) In (94a), Disjoint reference ensures that her is interpreted as disjoint from Anna. In (94b) herself is co-indexed with Anna by Construal.

(94a) Anna₁ likes her₂[1].

b. Anna₁ likes herself₁.

Haitian departs from this system in one respect: all NPs are freely indexed, whether anaphoric or not. A-indices are assigned to both anaphors and non-anaphors (there is no separate rule of construal). The interpretation
of A-indices depends on thematic, syntactic, and pragmatic factors; these aside, a pronoun and a reflexive have the same A-index:

(95)a. Anna\textsubscript{1} likes her\textsubscript{2[1]}.
b. Anna\textsubscript{1} likes herself\textsubscript{2[1]}.

If a language like English morphologizes a pronominal/anaphor split, the A-index of a pronominal is interpreted as disjoint from its R-index. Conversely, the A-index of the anaphor is interpreted as coreferent with its R-index. Thus, Chomsky's (95) is our (96):

(96)a. Anna\textsubscript{1} likes her\textsubscript{2[1+2]}.
b. Anna\textsubscript{1} likes herself\textsubscript{2[1+2]}. If all NPs are assigned an A-index, then a convention like (97) is needed in order for this index to receive an appropriate interpretation, as disjoint or not.

(97) Interpreting convention The anaphoric index \{a\textsubscript{i}\} of \(\alpha\) is interpreted to mean that relative to an NP with referential index a\textsubscript{1}, either a\textsubscript{i} = a\textsubscript{1} or a\textsubscript{i} \neq a\textsubscript{1}.

In addition to (97), there is a morphological restriction which we rephrase as (98).

(98) Morphological restriction If \(\alpha\) is a morphological reflexive then a\textsubscript{1} = a\textsubscript{1}, and any pronoun with non-contradictory \(\varphi\)-features has a\textsubscript{1} \neq a\textsubscript{1}.

(98) straightforwardly accounts for the fact that Haitian \(\textit{li}\) is either bound or free in a local domain. In (99), the A-index of \(\textit{li}\) may equal its R-index (1 \# 2), or not (1 = 2).

(99) Mariz\textsubscript{1} remen \textsubscript{1[2]}.
like 3sg
Mariz likes her(self)/him/it.

The interpretive restrictions in (100) summarize null complements effects:

(100) Lexical restriction If \(\alpha\) is an inalienably possessed incorporated constant, then a\textsubscript{1} = a\textsubscript{1}. If \(\alpha\) is an incorporated constant distinct from a\textsubscript{1}, then a\textsubscript{1} \neq a\textsubscript{1}.

Thus, the difference between English and Haitian is expressible in the 'On Binding' framework in terms of restrictions on the mapping of indices. In English, (98) ensures that the A-index 1 \# 2 maps onto reflexives and reciprocals. In Haitian, both 1 = 2 and 1 \# 2 map onto the same class of morphemes, but this in turn makes the effects of (100) more visible.

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