

BINDING DOMAINS IN HAITIAN*

Like many Kwa languages of West Africa (Awóyalé 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 *kò* ‘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’.

- (1)a. Li wè l (nan glas la).
 3sg see 3sg Loc mirror Det
 S/he saw her(self)/him(self)/it (in the mirror).
- b. Yo wè yo.
 3pl see 3pl
 They saw them(selves)/each other.

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

- | | | |
|-------|--|--|
| (2)a. | M wè m.
<i>1sg see 1sg</i>
I saw myself. | Jak wè m.
<i>see 1sg</i>
Jak saw me. |
| b. | Ou wè w.
<i>2sg see 2sg</i>
You saw yourself. | Jak wè w.
<i>see 2sg</i>
Jak saw you. |
| c. | Nou wè n.
<i>1/2pl see 1/2pl</i>
We saw ourselves/each other/you (pl.).
OR You (pl.) saw us. ¹ | Jak wè n.
<i>see 1/2pl</i>
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.
<i>3pl see head 3pl</i>
They saw themselves/each other OR They saw their head/the heads. ³ |
| (2')b. | Ou wè tèt ou.
<i>2sg see head 2sg</i>
You saw yourself OR You saw your head. |

¹ 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 categorially a Determiner.

- (2')c. Nou wè tèt nou.
1/2pl see head 1/2pl
We/you saw our/yourselves/each other.⁴

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., Yorùbá *ara à rẹ̀ her/his body* OR ‘herself/himself’.

- (1')a. Li wè tèt li.
3sg 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)
 $x = \{\textit{anaphor}, \textit{pronominal}\}$

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[[tèt nou] yo]*.

- configurational domains (syntactic entities)
 $y = \text{governing category of } x$
- referential dependencies (semantic entities)
 $z = \{\text{bound, anti-bound (free)}\} \text{ in } y$

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):

	<i>morphological features</i>	<i>equivalent domain diacritics</i>
(3)a. reflexive, reciprocal	[+anaphoric, -pronominal]	[+condition A, -condition B]
b. pronoun	[-anaphoric, +pronominal]	[-condition A, +condition B]
c. intrinsically referential N	[-anaphoric, -pronominal]	[-condition A, -condition B]
d. (default = PRO)	[+anaphoric, +pronominal]	[+condition A, +condition B]

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).⁵ Because the domain requirements of conditions A and B conflict, an element with both features positive cannot be lexically realized.⁶

Long-distance reflexives and bound pronominals 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 [\pm anaphoric, \pm pronominal] with pure domain features [\pm c-commanding, \pm local].⁷

⁵ Revising *LGB* on this point, Thráinsson drops the assumption that "all binding properties of NPs follow from their lexical content" (1991: 70). His admittedly "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 [\pm referential] to the features in (3), and Enç (1989), which adds [\pm pronominal] to the features in (4). In our reduction, all pronouns and reflexives are [-R], and [\pm R] replaces the *LGB* features.

(4)a.	anaphor	[+c-commanding antecedent, +local antecedent]
b.	operator-bound variable	[+c-commanding antecedent, -local antecedent]
c.	discourse-bound pronoun	[-c-commanding antecedent, -local antecedent]
d.	*	[-c-commanding antecedent, +local antecedent]

(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 *tèt 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', *tèt 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

⁸ All three lines may be lexically distinct in Fulfulde (Sportiche 1986: 372 fn.).

grammar altogether (Rizzi 1982; Koster 1987).⁹ 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:¹⁰

<i>thematic binding</i>	Binding domains are computed in terms of local s-selection and predication, and not of position (Brame 1983; Williams 1989).
<i>lexical constants</i>	Predicates marked [+null complement] or [+inherent reflexive] contain syntactically inert or inalienably possessed arguments in conceptual representation (Fischer 1971; Hale and Keyser 1986).
<i>syntactic classifiers</i>	[±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 *tèt li* are complementary just as *LGB* expects:

- (5)a. Jak_i mòde l_{j/*i}.
bit 3sg
 Jak bit him/her/it.
- b. Jak_i mòde [tèt li]_{i/*j}.
bite head 3sg
 Jak bit himself.
- (6)a. Jak_i tchwe l_{j/*i}.
kill 3sg
 Jak killed him/her/it.
- b. Jak_i tchwe [tèt li]_{i/*j}.
kill head 3sg
 Jak killed himself.

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

If the complementarity of *li* and *tèt 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 *tèt li*.

For at least one verb, *blese* ‘injure’, *tèt 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).

- (7)a. Jak_i blese l_{i/j}.
injure 3sg
 Jak injured him(self)/her/it.
- b. Jak_i blese [tèt li]_{i/*j}.
injure head 3sg
 Jak injured himself [NOT Jak injured his/her/its head].
- c. Jak_i blese kò l_{i/j}.
injure body 3sg
 Jak wounded his/her/its body.

⁹ E.g., “D-structures’ are reduced to properties of chains read off from S-structures . . .” (Rizzi 1986: 69). Our reduction of syntactic machinery is therefore partly grammar-internal, not a full reduction of grammar to pragmatics as proposed by Levinson (1991).

¹⁰ The same factors can be seen to interact in Norwegian, cf. section 4.5 below.

- (7)d. Jak_i blese l_{i/j} nan tèt (li_{i/j}).
injure 3sg on head 3sg

Jak injured himself/someone on the head.

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

Even more mysteriously, if *tèt li* were the 'core' reflexive, some speakers do not give it a reflexive interpretation as the object of *benyen* 'bathe': *benyen tèt 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

- (8)a. Jak_i benyen l_{i/j} de fwa pa jou.
bathe 3sg two times per day

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

- b. #Jak_i benyen tèt li_{i/j} de fwa pa jou.
bathe head 3sg two times per day

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

- c. Jak_i benyen [kò l]_{i/*j} 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 tèt li* and *benyen kò l* improve if *benyen* is contextually purged of reflexivity, as in *benyen ak pafim* 'drench with perfume':

- (i) Jak_i benyen tèt li_{i/j} ak pafim.
bathe head 3sg with perfume

Jak drenched his/her/its head with perfume.

- (ii) Jak_i benyen kò l_{i/j} 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 Faltz (1987) dub a similar effect *Doppelgänger*, with distinct, coreferent agent and theme roles.

Apparently then, literal 'head' and 'body' readings are available for *tèt* 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 *tèt li* and *kò l*, and allow *tèt li* as the only reflexive object. *Blese* 'injure' allows reflexive *tèt li* and (for some speakers) *kò l*, blocks literal *tèt li* and takes literal *kò l*, cf. (29–30) below. For *benyen* 'bathe', literal *tèt li* is marginal, and reflexive *tèt li* and literal *kò l* are both blocked.

In some examples, the marginality of literal *tèt li* or *kò l* can be overcome in appropriate context. Thus, literal *benyen tèt 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 tèt li* shows selectional mismatch between classifier *tèt* 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 *tèt 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 *tèt 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:

		[+R] (literal)	[-R] (reflexive)
(5b/6b)	<i>mòde/tchwe tèt li</i> bite/kill head 3sg	*	✓ (Instigator?)
(7b)	<i>blese tèt li</i> injure head 3sg	*	✓ (Instigator?)
(7c)	<i>blese kò l</i> injure body 3sg	✓ anti-reflexive ('wound')	*
(8b)	<i>benyen tèt li</i> bathe head 3sg	#	*
(8c)	<i>benyen kò l</i> bathe body 3sg	✓ anti-reflexive ('drench')	✓ Instigator

Tèt 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 (✓ Instigator). 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 li* and *kò l* objects can be represented by the lexical features [+ inherent reflexive] and/or [+ null complement].

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

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 wash
I am washing myself. | Jean me lave.
1sg wash
Jean is washing me. |
| b. Tu te laves.
2sg 2sg wash
You are washing yourself. | Jean te lave.
2sg wash
Jean is washing you. |

¹⁴ This is essentially Hellan's (1988) approach for Norwegian *seg*, which, is locally bound with [+ inherent reflexive] verbs, long-distance bound elsewhere (cf. section 4.5).

- | | |
|---|--|
| (9)c. Nous nous lavons.
1pl 1pl wash
We are washing ourselves/each other. | Jean nous lave.
1pl wash
Jean is washing us. |
| d. Vous vous lavez.
2pl 2pl wash
You are washing yourselves/each other. | Jean vous lave.
2pl wash
Jean is washing you (pl.) |

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) Bouchard 1984: 60]
- 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 _i se _{i/*j} lave.
3refl wash
Jean washes himself. | Jean _i le _{*i/j} lave.
3sg wash
Jean washes him. |
| (12) Ils _i se _{i/*j} lavent.
3pl 3refl wash
They wash themselves/each other. | Ils _i les _{*i/j} lavent.
3pl 3pl wash
They wash them. |

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) Bouchard 1984: 60]
- a. ≠ Jean considered himself stupid and his sister [considered him stupid]

- (13)b. = 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 *mèn m jan ak NP* 'just like NP'.¹⁵

- (14) *Mèn m jan ak Pyè, Jak lave l.*
same kind with wash 3sg
- a. = Just like Pyè [washed Jak], Jak washed himself
 b. = Just like Pyè [washed Pyè_i], Jak washed him_i
 c. = Just like Pyè [washed someone else_i], Jak washed her/him_i
 d. = Just like Pyè [washed himself], Jak washed himself

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) *Mèn m jan ak Pyè, Jak panse ke li entèlijan.*
same kind with think Comp 3sg smart
- a. = Just like Pyè [thinks about Jak_i], Jak thinks he_i is smart
 b. = Just like Pyè [thinks about Pyè_i], Jak thinks he_i is smart
 c. = Just like Pyè [thinks about someone else_i], Jak thinks s/he_i 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: 115 ff.). That the *mèn m 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 entèlijan.*
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 l 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) *Mèn m jan ak Pyè, Jak panse ke foto l bèl.*
same kind with think Comp picture 3sg nice
- a. = Just like Pyè [thinks about Jak_i's picture], Jak thinks his_i picture is nice
 b. = Just like Pyè [thinks about Pyè_i's picture], Jak thinks his_i picture is nice
 c. = Just like Pyè [thinks about someone else_i's picture], Jak thinks her/his_i 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).

- (17)a. *Jean_i pense à lui_{i/j}.* (Zribi-Hertz 1980)
 b. *John_i saw a snake near him_{i/j}.* (Lakoff 1968)
 c. *John_i lost his_{i/*j} way.* (Helke 1970)
 d. *He_i cladde hym_{i/j}.* 'He dressed him(self)' (Faltz 1985)
 e. *Ik_i was me_{i/mij}.* 'I am washing myself' (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).¹⁶ Accordingly, Bouchard calls *himself* in (20) a “false reflexive” (1984: 36).¹⁷

- (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 *tèt li* is never interpretable with strict identity, parallel to *himself* in (20). Even with *mòde* ‘bite’, which allows only the reflexive interpretation of object *tèt li*, strict identity fails, cf. (21a):

¹⁶ Lebeaux (1983: 357) proposes that an element respects *LGB* condition A only if its minimal X^{max} 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):

- (i) Picasso drew himself much better than anyone else did.
- a. did = [drew a portrait of Picasso]
- b. did = [drew a portrait of herself/himself = anyone else]

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

- (ii) Picasso drew himself, and Bill did too.
- a. did ≠ [drew Picasso]
- 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*.

- (iii) Eliot perjured himself much more than Casper did.
- a. ‘did’ ≠ [sc. Eliot committed perjury]
- b. ‘did’ = [sc. Casper committed perjury]

- (21) Mènm jan ak Pyè, Jak mòde tèt li.
same kind with bite head 3sg
- a. ≠ Just like Pyè [bit Jak], Jak bit himself
- 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:

- (22)a. I dreamed that I was Brigitte Bardot and that [γ I kissed *me*].
 (Lakoff 1970)
- b. I dreamed I was Jesus and [γ I forgave *me* for my sins].
 (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 [$\pm R$] 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:

- (23) I dreamed I was Jesus and I forgave me...
- | | | | | | |
|--|------------------------|--------------------------|--------------------------|--------------------------|------------------------|
| <i>lexical content</i> | [-R, 1sg] | [-R, 1sg] | [+R, 3sg] | [-R, 1sg] | [-R, 1sg] |
| <i>s-structure</i> | | | | [-R, 1sg] _i | [-R, 1sg] _j |
| <i>space-building operator</i> | | [+R, 1sg] _i | | [+R, 1sg] _i | |
| <i>counterpart coreference</i> | | [+R, 1sg] _i → | [+R, 3sg] _i | | |
| <i>discourse antecedence</i> | [-R, 1sg] _j | | | | [-R, 1sg] _j |
| <i>φ-feature interpretation</i> | [-R, 1sg] _j | [+R, 1sg] _{i=j} | [+R, 3sg] _{i=j} | [+R, 1sg] _{i=j} | [-R, 1sg] _j |

In (23), embedded *I* and *me* are disjointly indexed at s-structure. Conversion of the two embedded *I*s 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*.¹⁸ As the discourse antecedent of embedded *me*, with which it shares

¹⁸ On pragmatic anaphora, see also Nunberg (1978) and C. Roberts (1987).

φ -features, matrix I is indexed $\{j\}$. Finally, interpretation of φ -features $[1, \text{sg}]$ between matrix I and both instances of embedded I makes the indices $\{i, j\}$ referentially equivalent ($i = j$), indirectly linking the embedded clausemate pronouns I and me .

If the referentiality feature can license a local antecedent of a pronoun in special pragmatic contexts in English, the same feature operates syntactically in Haitian.

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.¹⁹ English has all four types:

		[+null complement]	[-null complement]
(24)	[+inherent reflexive]	<i>bathe</i>	<i>perjure</i>
	[-inherent reflexive]	<i>eat</i>	<i>hit</i>

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).

- (25)a. Anne_i bathed \emptyset _i. Anne_i bathed herself_i. Anne_i bathed her_j.
 b. Bart_i ate \emptyset _j. Bart_i ate himself_i. Bart_i ate him_j.
 c. *Bart perjured \emptyset . Bart_i perjured himself_i. *Bart_i perjured him_j.
 d. *Bart hit \emptyset . Bart_i hit himself_i. Bart_i hit him_j.

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:

		[+null complement]	[-null complement]
(26)	[+inherent reflexive]	<i>benyen</i> 'bathe'	*
	[-inherent reflexive]	<i>wè</i> 'see'	<i>defann</i> 'defend'

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

¹⁹ N.B. [+null complement] doesn't mean intransitive, just 'not obligatorily transitive'. For discussion of reflexivity in terms of "personation", cf. Talmy (1985: 93–96).

- (27)a. Jak_i benyen \emptyset _i de fwa pa jou.
bathe two times per day
 Jak bathes twice a day.
- b. Jak_i wè \emptyset _j nan glas la.
see Loc mirror Det
 Jak sees [someone/something] in the mirror.
- c. Jak_i defann li_{i/j} 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 [+inherent reflexive] → [+null complement]. In a reductionist analysis, this redundancy follows from Haitian's lack of obligatorily reflexive argument expressions like *himself*.²⁰ We now present details of the three verb classes attested in Haitian.

3.1. Null Complement Bound

With a null complement, some verbs (*blese* 'injure', *abiye* 'dress', *benyen* 'bathe') are obligatorily reflexive. With these verbs, an overt object *li* is either bound (Instigator) or free, and object *tèt li* or *kò l*, if reflexive, signals an Instigator.

Both our main consultants agree that *blese* plus null complement is reflexive and either perfective or adjectival passive.²¹

- (28) Jak_i blese \emptyset _i. [perfective or adjectival passive]
injure
 Jak is/has been injured.

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

²⁰ Haitian translates 'perjure' in a light verb construction:

- (i) Jak fè 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 *blese*'s intransitivity in (28) is syntactic or lexical, these aspectual readings are unavailable for verbs like *wè*, *mòde*, which reject a bound null complement.

			P-MD	J-RP
(29)a.	Jak blese l.	Jak injured himself	✓	✓
	<i>injure 3sg</i>	Jak injured him/her	✓	✓
b.	Jak blese tèt li.	Jak injured himself	✓	✓
	<i>injure head 3sg</i>	Jak injured her/his/its head	*	*
c.	Jak blese kò l.	Jak injured himself	✓	*
	<i>injure body 3sg</i>	Jak injured her/his/its/body	✓	✓

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

- (30)a. Jak_i blese Ø_i nan tèt li_{i/*j}.
injure on head 3sg
 Jak is/has been injured on the head.
- b. Jak_i blese l_{i/j} nan tèt li_{i/j}.
injure 3sg on head 3sg
 Jak injured him(self)/her on the head.
- c. Jak_i blese tèt li_{i/*j} nan tèt li_{i/*j}.
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

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_i blese pwòp tèt li.
injure own head 3sg
 Jak hurt his own head.
- b. Jak_i blese tèt pa li_{i/j}
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_i repoze Ø_i pou inè de tan.
each day rest for 1hr of time
 Each day, Jak rests for an hour.

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_i abiye Ø_i 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*.

- | | | P-MD | J-RP |
|--------|---|------|------|
| (32)a. | Jak _i abiye l _{i/j} two bwòdè.
<i>dress 3sg too fancy</i>
Jak got dressed up too fancy. | | ✓ |
| | Jak dressed him/her up too fancy. | ✓ | ✓ |

- (ii)b. Chak jou, Jak_i repoze l_{i/j} 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_i fè yon ti repoze Ø_i pou inè de tan.
each day make a little rest for 1hr of time
 Each day, Jak takes a little rest.
 Chak jou, Jak_i fè yon ti repoze l_i 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_i repoze tèt li_{i/j} pou inè de tan.
each day re-position head 3sg for 1hr of time
 [Each day, Jak repositions his head . . .].
- b. #Chak jou, Jak_i repoze kò l_{i/j} pou inè de tan.
each day re-position body 3sg for 1hr of time
 [Each day, Jak repositions his body . . .].

- (32)b. Jak_i abiye tèt li_{i/j} two bwòdè.
dress 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. # #
- c. Jak_i abiye kò li_{i/j} two bwòdè.
dress body 3sg too fancy
 Jak got dressed up too fancy. * *
 Jak dressed his body 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

- (33)a. Jak_i benyen Ø_i yè. [past or adjectival passive]
bathe yesterday
 Jak (was) bathed yesterday.
- b. Jak_i benyen Ø_i 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'.

²⁴ "In general, an object controller can always be phonetically missing . . . provided that the sentence has a generic time reference" (Rizzi 1986: 503).

- | | P-MD | J-RP |
|--|------|------|
| (34)a. Jak _i benyen li _{i/j} de fwa pa jou.
<i>bathe 3sg two times per day</i> | | |
| Jak bathes himself twice a day. | √ | * |
| Jak bathes all by himself twice a day. | * | √ |
| Jak bathes her/him twice a day. | √ | √ |
| b. Jak _i benyen tèt li _{i/j} de fwa pa jou.
<i>bathe head 3sg two times per day</i> | | |
| Jak bathes all by himself twice a day. | * | √ |
| Jak bathes her/his head twice a day. | # | # |
| c. Jak _i benyen kò li _{i/j} de fwa pa jou.
<i>bathe body 3sg two times per day</i> | | |
| Jak bathes all by himself twice a day. | √ | * |
| Jak bathes her/his/its 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* + Ø.

²⁵ 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 antye (so) lekor.
3sg bathe entire 3Poss body
 He washes himself all over.

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.

(35) Jak_i wè Ø_j nan glas la. [imperfective]

see Loc mirror Det

Jak sees [someone/something] in the mirror.

As the object of *wè*, *li* may be bound or free, and *tèt li* is either literal or reflexive:

(36)a. Jak_i wè l_{i/j} nan glas la.

see 3sg Loc mirror Det

Jak saw him(self)/her/it in the mirror.

b. Jak_i wè tèt li_{i/j} nan glas la.

see head 3sg Loc mirror Det

Jak saw himself in the mirror OR Jak saw her/his head in the mirror.

Lave 'wash' also requires its null complement to be free. As an eventive verb (unlike *wè*), *lave* receives a past interpretation in its 'bare' form. With *lave*, object *li* is either bound or free, and object *tèt li* is either literal or reflexive.²⁷

(38)a. Jak_i lave Ø_j nan dlo a. [past event]

wash Loc water Det

Jak washed [something, someone] in the water.

b. Jak_i lave l_{i/j} nan dlo a.

wash 3sg Loc water Det

Jak washed him(self)/her/it in the water.

c. Jak_i lave tèt li_{i/j} nan dlo a.

wash head 3sg Loc water Det

Jak washed himself in the water OR Jak washed her/his head in the water.

²⁷ Unlike *wè* and *sonje*, *lave* + Ø gets a past reading. This difference between respectively noneventive and eventive bare verbs is predictable, as described by Damoiseau (1982).

A reviewer suggests that "Ø" in English *John washes Ø every day* is ambiguously bound or free. To us it is not ambiguous, so far as the reading 'washes himself' is preferred. A reading 'does the wash' is possible just if the established discourse topic is 'laundry' (cf. Huang 1984; Otani and Whitman 1991). As we argue that a null complement is licensed by an incorporated lexical-semantic constant, a hypothetical verb meaning 'wash [Ø = the laundry]' could not also mean 'wash [Ø = self]', since two different constants would be competing for a single conceptual representation.

Sonje 'remember' follows the same general pattern. A null complement is free, object *li* is either bound or free, and object *tèt li* is either reflexive or literal/anomalous. *Sonje* differs from *wè* and *lave* in that a null complement must be discourse-linked.²⁸

(39)a. Mariz_i sonje Ø_j. [imperfective]

remember

Mariz remembers [something/someone previously mentioned].

b. Mariz_i sonje l_{i/j} lè li tou piti.

remember 3sg when 3sg very small

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

c. Mariz_i sonje tèt li_{i/j} lè li tou piti.

remember head 3sg when 3sg very small

Mariz remembers herself when she was very little.

OR ≠ 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 *tèt li* is either reflexive or literal.

(40)a. *Jak defann Ø devan makout yo.

defend front makout Det

b. Jak_i defann li_{i/j} devan makout yo.

defend 3sg front makout Det

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

c. Jak_i defann tèt li_{i/j} devan makout yo.

defend head 3sg front makout Det

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

Mete bwòdè 'make fancy' differs from *defann* just in that literal *tèt li* is anomalous (39c).

²⁸ Thanks to M. DeGraff for clarifying this point.

(39)a. *Jak mete \emptyset bwòdè.

put fancy

b. Jak_i mete li_{ij} bwòdè.

put 3sg fancy

Jak got him(self)/her dressed up.

c. #Jak_i mete tèt li_{ij} 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 *tèt li* and *kò l* suggest that the nouns *tèt* and *kò* allow both values of the lexical feature $[\pm R]$. Some $[+R]$ instances of *tèt li* are ruled out pragmatically. $[-R]$ *tèt li* is generally available; with *benyen* and *abiye*, however, $[-R]$ *tèt li* has a special, Instigator interpretation.²⁹

(41)

		\emptyset		<i>li</i>		<i>tèt li</i>	
		pronominal	reflexive	pronominal	reflexive	$[-R]$	$[+R]$
<i>blese</i>	injure		perf./adjpass.	+	+	+	
<i>abiye</i>	dress		perf./adjpass.	+	+	Instigator	#
<i>benyen</i>	bathe		past/adjpass.	+	+ ³⁰	Instigator	#
<i>wè</i>	see	imperf.		+	+	+	+
<i>sonje</i>	remember	imperf.		+	+	+	+
<i>lave</i>	wash	past		+	+	+	+
<i>mete bwòdè</i>	dress up			+	+		#
<i>defann</i>	defend			+	+	+	+
<i>mòde</i>	bite			+	+	+	#
<i>tchwe</i>	kill			+	+	+	#

(41) supports our claim that Haitian lacks binding condition A because it lacks morphological reflexives.³¹ 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.

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 *blese l*.

³¹ As would follow from this claim, Haitian arguably lacks NP-trace (cf. *fn.* 21).

4. THE LOCALITY OF *li*

Sections 1–3 establish that the indeterminacy of Haitian *li* contradicts the morphological binding features in (3), as well as any syntactic annotation of the lexicon with domain features. This section tests three reductionist claims: that the assignment of pronominal indices is free (Pica 1984; Bouchard 1985; Burzio 1989); that the domain of binding is the predicate (Brame 1983; Bouchard 1985; Chomsky 1986; Koster 1987); and that binding affects thematic roles, not syntactic positions (Williams 1987, 1989; Bouchard 1988).

4.1. *li* is Pronominal

We claim that *li*, despite its many possible reflexive readings, is basically pronominal. This state of affairs is predicted if LGB condition B is not a principle of grammar but rather the effect of an elsewhere condition which Burzio calls “morphological economy” (1989: 20). For example, Bouchard (1985: 124) defines binding as the assignment of a referential index (R-index) under government:

(42)a. In the structure $[\gamma \dots \beta \dots \alpha \dots \beta \dots]$, α binds β if and only if α governs β and α assigns its R-index to β .

(42)b. In the structure $[\gamma \dots \beta \dots \alpha \dots \beta \dots]$, α governs β if and only if

(i) α is the immediate constituent of γ .

(ii) where φ is a maximal projection, if φ dominates $[\alpha]$, then φ dominates $[\beta]$ (where maximal projections are NP, PP, AP, and S' (V^{\max})).³²

By (42), a subject NP governs an object NP, and this government relation in turn licenses the binding of an object by a subject. In (43), from Bouchard (1985: 125), *himself* is governed by *John* and so is assigned an R-index by *John*:

(43) $[_{IP} [John_i] \text{shaved himself}_i]$.

$\gamma \quad \alpha \quad \beta$

Let $\alpha = \text{John}$, $\beta = \text{himself}$, and $\gamma = \text{IP}$. α is an immediate constituent of γ , and α and β are dominated by the same maximal projection γ , so α governs β .

For Bouchard, an element not otherwise bound is freely indexed in the

³² Type of $[\alpha]$ for $[\beta]$ emended. Below, we translate Bouchard's “S' (V^{\max})” as IP.

syntax. Thus, nothing in principle keeps *him* in (44) from bearing the same index as *John*:

(44) *John_i shaved him_i

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_i wè l_{i/j} 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 homophonous *li_A* (an anaphor respecting the standard binding condition A) and *li_B* (a pronominal respecting condition B):

- (46)a. Jak wè l_A . . .
see 3sg
Jak saw himself. . . .
- b. Jak wè l_B . . .
see 3sg
Jak saw her/him/it. . . .

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

- (47)a. *Li_A wè l_A . . .
- b. *Li_A wè l_B . . .
- c. Li_B wè l_A . . .
3sg see 3sg
S/he saw herself/himself. . . .
- d. Li_B wè l_B . . .
3sg see 3sg
S/he say her/him/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 bēy li_A partu.
he sit he bathe him all over
He sits down and bathes himself all over.
- b. I uar ē palto i met lor li_A.
he sees a jacket, he put on him
He sees a jacket, he puts it on (himself).

- (48)c. I gāy li_A ē sok.
he get him a shock
 He got (himself) a shock.
- d. I sorti dā lapay kot 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-mem*, which Sigler assumes to be a morphological reflexive:

- (49)a. I uar li_A dā glas.
he see him in mirror
 He saw himself in the mirror.
- b. I_i dir a li-mem_i . . .
he say to him-self
 He says to himself. . . .

Corne states that *li* and *li-mem* are in free variation, but Sigler supposes that *li_A* is preferred to *li-mem* 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-mem*). 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 janm 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 menm, 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_i wè li_{ij}, [li menm]_{ij}.
see 3sg 3sg same
 Jak saw him, himself OR Jak saw her, herself OR Jak saw himself, himself.
- b. Jak_i [li menm]_i 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_B*. 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 pära u-latatdi gui?
UNM Maria will INFL-scold 3sg
 Maria_i is going to scold him_j/herself_j.

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

- (ii) *Pära uma-fa? gasi i lalahi i nä?yan.
will INFL-wash the men the dishes
- (iii) Ma-fa? mänggua? siha i famalao?an.
INFL-ridicule them the women
 The women_i ridiculed themselves_i/*them_j.

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 *tèt 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) $_i$ Mary $_x$ treated $_y$ 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: 220*f.*). 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: 124*f.*, *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-sugun $_i$ famalao² an [$_i$ kareta-nñiha *pro*].
INFL-drive the women the car-AGR
The women $_i$ drove their $_i$ car.

Her description implies that (vi) cannot mean 'The women $_i$ drove their $_i$ 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).

- (53)a. *John $_i$ believes [Mary $_j$ to like himself $_i$]
[$_y$ α β]
b. *John $_i$ saw [Mary $_j$ kiss himself $_i$]
[$_y$ α β]
(54) In the structure [$_y$. . . β . . . α . . . β . . .], α binds β if and only if
a. α governs β and α assigns its R[efferential]-index to β
b. $_y$ is the *minimal category projection* containing a Binder for β .

(54b) makes the domain of binding the projection of a verb and its arguments.³⁴ 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).³⁵

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].
 \uparrow \leftarrow i \rightarrow \uparrow

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*

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^{\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 pronominals like *li*, some complex expressions containing pronominals 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 θ -roles and not over the morphological contents of argument positions. Conversely, θ -assignment is part of binding theory insofar as it licenses anaphoric relations between θ -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 θ -roles and θ -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) *admiration* (Admirer, Admiree)

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

(57) In January 1991, admiration of the flag went up 8.1%.

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

(58)a. Admiration of oneself is difficult at times.
(Admirer_i, Admiree_{i/*j})

b. Admiration of him increased during the war.
(Admirer_i, Admiree_{*i/j})

(58)c. Admiration of Quayle boosted sales of Ken dolls.
(Admirer_i, Admiree_{*i/j})

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

(59)

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

(60) John_i

*John_i took a picture of him_i.
*John_i took his_i 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.

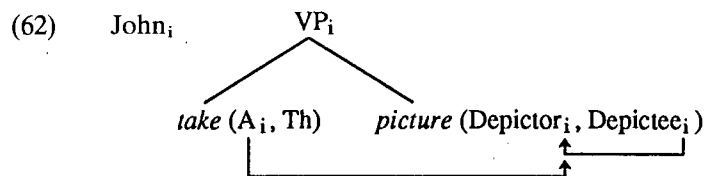
(61) John_i

John_i took a picture of him_j.
John_i took his_j picture.

Conversely, condition A requires *John* to be coreferent with a reflexive Depictee like *himself* or *his own*, which in turn is controlled by the Agent of *take*:³⁶

³⁶ Williams does not call *his own* a "full" anaphor since it need not be locally bound:

(i) His own mother wouldn't do it. (1987: 156)



John_i took a picture of himself_i.

John_i took [his own]_i picture.

Implicit arguments aside, the empirical results of θ -binding coincide with standard predictions: the referential values assigned to θ -roles respect the *LGB* morphological binding classes in (3) above. The two frameworks differ in that θ -binding is indifferent to structural position, to the point that the NP need not be overt at all.³⁷ They also differ in that θ -binding is reductionist in the familiar sense:

The semantic rationale for applying binding theory to θ -roles is that it is the θ -roles themselves to which referential value is ultimately attached; the NP that a θ -role is assigned to simply helps determine the reference of the θ -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 θ -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 *tchwe*) object *li* may, but need not, be bound by a locally *c*-commanding NP. Some paradigms are repeated in (63).

(63)a. Jak blese l. (Injurer_i, Injuree_i OR Injuree_j)

injure 3sg

Jak injured him(self)/her.

(63)b. Jak abiye l two bwòdè. (Dresser_i, Dressee_i OR Dressee_j)
dress 3sg too fancy

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

c. Jak benyen l de fwa pa jou.

bathe 3sg two times per day

(Bather_i, Bathee_i OR Bathee_j)

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

θ -indexing is free: if the internal and external θ -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 θ -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 conraindexed θ -roles.

(64)a. Jak wè \emptyset nan glas la. (Viewer_i, Viewee_j)

see Loc mirror Det

Jak sees [someone/something] in the mirror.

b. Mariz sonje \emptyset . (Rememberer_i, Rememberee_j)

remember

Mariz remembers [something/someone previously mentioned].

c. Jak lave \emptyset nan dlo a. (Washer_i, Washee_j)

wash Loc water Det

Jak washed [something, someone] in the water.

(65)a. Jak blese \emptyset . (Injurer_i, Injuree_i)

injure OR (Injurer_j, Injuree_j)

Jak is/has been injured.

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

³⁸ A reviewer observes that the coindexing of θ -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.

- (65)b. Jak abiye \emptyset two bwòdè. (Dresser_i, Dressee_i)
dress too fancy OR (Dresser_j, Dressee_i)

Jak is/has been too dressed up.

- c. Jak benyen \emptyset yè. (Bather_i, Bathee_i)
bathe yesterday OR (Bather_j, Bathee_i)

Jak (was) bathed yesterday.

The data in (64) and (65) pose a dilemma. On the one hand, the contrast between the two sets of verbs shows that assignment of indices to the null complement is not free. Maintaining Williams' proposal, the two sets may differ in terms of implicit arguments. However, the binding of the null complement in (65) does not entail coindexing the two roles *à la* Williams; rather, the verbs in (65) simply allow for coindexing, which is impossible in (64). The direct application of thematic binding would wrongly exclude the adjectival passive reading of the null complement.³⁹

One could say that the null complement of an inherently reflexive verb may be bound syntactically, simulating NP movement, without being bound thematically. But this contradicts our specific hypothesis (a null complement must be licensed by lexical material) and ignores the difference between affix-mediated English passive, which allows a fully verbal, achievement reading (*John was washed in two hours*), and Haitian "pseudo-passive" (Sylvain 1936: 110) which doesn't (**Jak lave nan dezè*).⁴⁰ We must therefore look more closely at how inherently reflexive verbs license null complements.

Citing Fischer (1971), Hale and Keyser (1986: 32–35) represent syntactically inert (i.e., implicit) objects as "semantic constants" which fill the open internal variable in a verb's conceptual structure. In the partial, informal conceptual structure of transitive *eat* in (66a), the semantic constant FOOD encodes the main selectional property of the internal argument of *eat*. Hale and Keyser go on to propose that the null-complement version of *eat* is derived by a lexical operation which substitutes FOOD

³⁹ 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 *de fwa pa jou* 'twice a day':

- (i) Jak_i benyen \emptyset _i de fwa pa jou. (Bather_i, Bathee_i)
bathe two times per day

Jak bathes twice a day.

⁴⁰ "Le créole n'a pas de forme passive exprimant que le sujet subit une action" (Sylvain 1936: 112).

for the internal variable. This change yields a derived conceptual structure on the lines of (66b).⁴¹

- (66)a. *eat* [affect x , where x qualifies as FOOD [come to be ingested . . .]]
 b. *eat* [affect FOOD [come to be ingested . . .]]

For Hale and Keyser, the potential incorporation of a lexical constant into an open variable expresses the fact that the internal argument of *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).

- (67)a. *wè* [have x , where x is a VISIBLE ENTITY, in awareness . . .]
 b. *sonje* [have x , where x is a MEMORABLE ENTITY, in awareness . . .]
 c. *lave* [affect x , where x is a WASHABLE ENTITY [come to be clean . . .]]

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

- (68)a. *wè* [have VISIBLE ENTITY in awareness . . .]
 b. *sonje* [have MEMORABLE ENTITY in awareness . . .]⁴²
 c. *lave* [affect WASHABLE ENTITY [come to be clean . . .]]

Now, if an incorporated lexical constant indeed determines the reference of its verb's internal θ -role, then the null complement of such a verb is obligatorily free of its subject, since the internal θ -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

⁴¹ (66a) departs from the format employed by Hale and Keyser, which includes external argument variables in lexical entries, and has CAUSE instead of *affect*, e.g.,

eat [x CAUSE [y come to be ingested, where y qualifies as FOOD . . .]]

This difference doesn't affect the incorporation of constants into variables.

⁴² For some reason, incorporation with this verb entails discourse linking, cf. (39a).

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:

- (69)a. *blese* [affect x [x 's BODY come to be impacted by a forceful object . . .]]
 b. *abiye* [affect x [x 's BODY come to be covered with clothing . . .]]
 c. *benyen* [affect x [x 's BODY come to be momentarily covered with water . . .]]

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, corporeal) 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 stativization" (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).

- (70)a. *blese* x [x 's BODY be impacted by a forceful object . . .]
 b. *abiye* x [x 's BODY be covered with clothing . . .]
 c. *benyen* x [x 's BODY be momentarily covered with water . . .]

As one indication that the inchoative stativization 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 θ -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):

- (71)a. Jak mòde l nan men. (Biter_i, Bitee_j)
bite 3sg Loc hand
 Jak bit him/her/it on the hand.
 b. Jak tchwe l ak kouto. (Killer_i, Killee_j)
kill 3sg with knife
 Jak killed him/her/it with a knife.

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

⁴³ A remaining difficulty is the difference between the translated meaning of *benyen* + \emptyset 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 bèf yo.
AP sell cow Det
 Jak is selling the cattle.
 (ii) Jak ap renmen Titid.
AP like
 Jak will like Titid.

Ap evinces the same aspectual difference between null complement *benyen* and *blese*:

- (iii) Jak_i ap benyen \emptyset _i.
AP bathe
 Jak is taking a bath.
 (iv) Jak_i ap blese \emptyset _i.
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 <i>li</i>
(72) <i>blese, abiye, benyen, repose</i>	bound (stative)	bound or free
<i>wè, lave, sonje</i>	free	bound or free
<i>mòde, tchwe</i>	*	free

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

- (73)a. *mòde* [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 *mòde* 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_i killed t_i*).⁴⁴ It accounts for both kinds of restrictions on *mòde/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 *mòde/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 (*mòde* . . .). 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 kout* ‘beat’ (literally ‘give blow’) or *bay gann* ‘punch’ (‘give punch’) will pattern with *mòde* and *tchwe* in (72).

4.5. Morphological and Referential Economy Together: Norwegian *seg selv*

Observing that reflexives – especially reflexive clitics – in many languages are underspecified for agreement as compared to their pronominal counterparts, Burzio (1989: 4) argues that condition B describes an elsewhere-type effect like Chomsky’s Avoid Pronoun rule (1981: 65), whereby φ -feature agreement is “economized.”

The featureless character of reflexives cannot be incidental to their anaphoric character. (Burzio 1989:19)

Not all reflexives can be characterized as φ -feature deficient, however. Burzio cites English as a counterexample: although (unlike Scandinavian languages) English lacks a possessive reflexive, which is an inflectional defect *prima facie*, still English accusative reflexives are not less inflected than their pronominal counterparts. Thus, if an elsewhere condition is responsible for condition B effects in English, it must be economizing some property other than agreement. As an alternative, Burzio suggests that the head of an expression like *herself* is the referentially defective morpheme *self*.

Haitian suggests that morphological economy for clitics and referential economy for *self*-type forms are not alternative explanations but co-possibilities. The same lexical-semantic factors which determine the binding domains of Haitian *li*, *tèt li*, and null complement seem to govern 3sg reflexive *seg selv*, *seg*, and *ham selv* in Norwegian. These factors could also be at work in English, but their specific action would be obscured by the relatively close correspondence in English between locality and morphology. Both Haitian and Norwegian, however, show that such a correspondence is accidental.

Norwegian shows two types of noncomplementarity: environments where both *seg selv* and *seg* can be locally bound and environments where both *seg* and (pronominal) *ham* can be non-locally bound. The non-complementarity between *ham* and *seg* parallels that of English *him* and *himself*.⁴⁶ The *seg selv/seg* paradigm, by contrast, is sensitive to the same verb classes that are relevant in Haitian.

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_i fortalte meg om *ham selv_i/seg selv_i.
Jon told me about himself.

With canonical transitives like *forakte* ‘despise’ only *seg selv* is locally bound:

- (74) Jon_i foraktet seg selv_i/*seg_i.
despised SEGself/SEG
 John despised himself

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

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

- (75) Jon_i skammer *seg selv_i/seg_i.
shames SEGself/SEG
 Jon is ashamed.

Also in this class are *boltre* ‘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) Jon_i beundret seg selv_i/seg_i.
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).

- (77)a. Jon beundret seg (i speilet).
admired SEG in the mirror
 Jon admired himself (in the mirror).

- (77)b. Jon beundret seg selv
admired SEG selv
 Jon admired himself [i.e., Jon esteemed his own self image].

As with Haitian *abiye tèt li* ‘dress all by oneself’ and *benyen kò l* ‘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):

- (78)a. Jon_i bad oss forsakte seg_i.
asked us despise SEG
 Jon asked us to despise him.
- b. *Jon_i baad meg skamme seg_i.
asked me shame SEG
- c. Jon_i bad meg vaske seg_i.
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

- (ii) Vi fortalte Jon_i om ham selv_i/*seg selv_i.
 We told John about himself.

Here we can directly adopt Hellan’s compositional analysis (1988: 99*f.*) by which *seg selv* but not *ham selv* inherits the head-movement scope of the clitic *seg* while both forms equally inherit the thematic locality of *selv*. In other words, the complementarity in (i)–(ii) reduces to Burzio’s (1989) morphological economy.

⁴⁷ Cf. Kayne’s (1992) proposal that Italian reflexive *si* is categorially 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) Gianni_i ha parlato [_B di sé_i].
 Gianni talked about himself.
- (ii) Gianni_i ha fotografato [_B se_i stesso].
 Gianni photographed himself.

verbs like *benyen* 'bathe' trigger incorporation of an inalienably possessed lexical constant, deriving (70a) from (69a), repeated from above.

(69)a. *blese* [affect x [x 's BODY come to be impacted by a forceful object . . .]]

(70)a. *blese* x [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):

(79)a. *skamme* x [x 's BODY be in state of embarrassment, . . .]

b. *boltre* x [x 's BODY move playfully, . . .]

c. *târne* x [x 's BODY raise up to a conspicuous height, . . .]

The generalization is that, in the presence of BODY, *seg* is obligatorily 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_i skammer seg selv_i* and **Jon skammer Marit* 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).

(80)a. *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:

(81)a. *forakte* [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*, *tèt li* and *kò l*, or the interplay of literal and reflexive readings for the Haitian forms.

5. THE ANTECEDENT OF *tèt li*

Our analysis of literal and reflexive *tèt 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) II_i lève la_i (*belle) main.

3sm raise Det beautiful hand

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_i (*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/agentivity 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:

- (83)
- | | |
|--------------------------|---|
| [-R] pronominals | { <i>li</i> '3sg', <i>yo</i> '3pl' . . . } |
| [±R] classifiers | { <i>pye</i> 'tree', <i>po</i> 'skin' . . . } ⁴⁹ |
| inalienable possessa | { <i>tèt</i> 'head', <i>kò</i> , body, . . . } |
| [+R] lexical NPs and DPs | { <i>glas</i> 'mirror', <i>Jak</i> . . . } |

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:

- (84)a. [DP *tèt_j* *li_k*]_j b. [DP *kò_j* *l_k*]_j
- | | | | |
|------|------|------|------|
| | | | |
| [-R] | [-R] | [-R] | [-R] |

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_i . . .
- | | | |
|--|------------------------|-----------------------|
| | DP _j | |
| | D | SPEC |
| | NP | <i>li_k</i> |
| | <i>tèt_j</i> | |
| | D | |
| | ∅ | |
| | | |
| | [-R] | [-R] |

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. | a glass of water | ?a body water | *a head of cattle |
| | a large glass of water | a large body of water | *a large head of cattle |
| b. | one glass of water | one body of water | one head of cattle |
| c. | two glasses of water | two bodies of water | two head(*s) of cattle |

⁴⁹ The classifiers *pye* 'tree' and *po* 'skin' are exemplified in these lexical items:

- | | | | | | |
|-----|------------------|-------------|------|-----------------|--------------|
| (i) | <i>pye dchèn</i> | 'oak tree' | (ii) | <i>po je</i> | 'eyelid' |
| | tree oak | | | skin eye | |
| | <i>pye rèzen</i> | 'grapevine' | | <i>po bouch</i> | 'lips' |
| | tree grape | | | skin mouth | |
| | <i>pye bagèt</i> | 'thin leg' | | <i>po liv</i> | 'book cover' |
| | tree stick | | | skin book | |

First suppose that $j \neq k$, making *tèt* referentially distinct from *li*. *Tèt*, 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 *tèt* 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 possessum) “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) [[Every_{\1\2} boy]’s_{1\2} mother]₂ thinks he₁ is a genius.
(Reinhart 1987: 155)

Every, which is not a noun, gets no referential index; as a specifier, it bears a complex index $\1\2$ 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

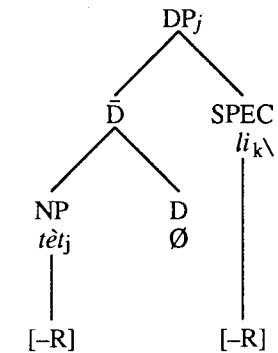
The specifier itself does not c-command anything outside its [DP]. However, its binding domain is identical to that of the [DP]. (1987: 155)

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 \jmath , the latter equal to the referential index

of *tèt* – 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) $DP_i \dots$



By definition, then, the specifier index of *li* is the referential index of *tèt*. But the head *tèt* happens to be $[-R]$. This means that *tèt* must itself be bound by an external NP, in this case NP_i 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 *tèt*, is also a potential binder of *li*, hence $k = i$. This means that the full index of *li* is $i = k\i = j$, 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 $j = k$: *tèt* 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 $i = k\i = j$, and this does not contradict $j = k$, so (87) is well-formed if $j = k$. Conclusion: a non-referential head like *tèt* $[-R]$ creates a “referential island” outside of which its Specifier *li* cannot be bound.

If *tèt* and *kò* are the referential nouns ‘head’ and ‘body’, the examples look like (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.

- (88)a. Jak_i wè [DP tèt_j li_k]_j b. Jak_i wè [DP kò_j l_k]_j
 | | | | | | | | |
 R_i Ag_iTh_j [+R] [-R] R_i Ag_iTh_j [+R] [-R]

The index of the head N is referential and, as before, percolates to the phrasal projection. This means that, in (88), $i \neq j$. As a pronoun, *li* is [-R]; it can acquire a referent either syntactically (by binding) or accidentally (in discourse). Nothing prevents either $i \neq k$ 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 selection. 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'.⁵³ 'Cheat' lacks a corresponding BODY expression, cf. (89b):

- (89)a. Úchè me-rụ-rụ Ógù ahụ.
 do-spoil-Asp body
 Úchè injured Ógù.
 b. Úchè me-gbu-ru Ógù (*ahụ).
 do-cut-Asp body
 Úchè cheated Ógù.

If implicit arguments are thematically active, the [+R] variant of *tèt* is blocked in *Jak blese 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. Íhiónú (1992).

6. "ON BINDING" AND HAITIAN BINDING

Haitian lacks the morphological distinction between 'anaphor' and 'pronominal' 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) coindexes 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 $\{a_1, \dots, a_n\}$ where a_j is the referential index of some NP c-commanding α (A maximal).
 (93) The anti-reflexive index $A = \{a_1, \dots, a_n\}$ 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*.

- (94)a. Anna₁ likes her_{2{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. Anna₁ likes her_{2(1)}}.
 b. Anna₁ likes herself_{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. Anna₁ likes her_{2(1≠2)}}.
 b. Anna₁ likes herself_{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) *Interpretive convention* The anaphoric index $\{a_1\}$ of α is interpreted to mean that relative to an NP with referential index a_i , either $a_1 = a_i$ or $a_1 \neq a_i$.

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

- (98) *Morphological restriction* If α is a morphological reflexive then $a_1 = a_i$, and any pronoun with non-contradictory φ -features has $a_1 \neq a_i$.

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

- (99) Mariz₁ renmen l_{2(1)}}.
 like 3sg
 Mariz likes her(self)/him/it.

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

- (100) *Lexical restriction* If α is an inalienably possessed incorporated constant, then $a_1 = a_i$. If α is an incorporated constant distinct from a_1 , then $a_1 \neq a_i$.

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 $1 \neq 2$ maps onto pronouns, while

the A-index $1 = 2$ maps onto reflexives and reciprocals. In Haitian, both $1 = 2$ and $1 \neq 2$ map onto the same class of morphemes, but this in turn makes the effects of (100) more visible.

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