#### Inflection by default

Niger-Congo Syntax & Semantics 6, edited by V. Manfredi & K. Reynolds, 91-112. Boston University African Studies Center.

Significant empirical wrinkle: *contra* the standard description exemplified in ex. (5b) on p. 92, Adéşolá (2005, 190f.) observes two examples of  $\delta r a tio oblīqua$  in which the possible reference of an embedded 3sg. nominative clitic can include the main clause subject. Specifically,  $\delta$  may optionally share the referent of Ol u in the following examples:

- (i) Olú ti gbà [kí ó má .je ìrẹṣì mó].
   O. AUX receive COMP 3SG AUX eat rice any.more 'Olú agreed that s/he (= Olú or someone else) should not eat rice again thereafter'
- (ii) Olú ti kéde [pé ó ń bộ l'óla].
   O. AUX cry.proclamation COMP 3SG AUX come tomorrow 'Olú announced that s/he (= Olú or someone else) is coming tomorrow'

Granting that these data entail a breakdown of referential complementarity between the independent ( $\partial un$ ) and clitic ( $\phi$ ) 3sg pronominal expressions, such breakdown is not unusual for morphological competition among pronominals across the binding literature as a whole (as reviewed here). The more relevant question is whether Adésolá's observations disprove domain extension and by implication any syntactic account of antilogophoricity, motivating instead an a-syntactic mechanism for logophoric effects, such as a *de se* dreamtime operator (Anand 2006, cf. Lakoff 1970).

Note that the dreamtime account doesn't come free of charge: it must pay the incalculable price of insulating semantic interpretation from syntax in principle, via the general possibility of "overwriting semantic parameters" (Anand 2006, 64, cf. Chierchia 1998), besides incurring the more limited tax of treating as strictly accidental the uncontested absence of phenomena like (i) and (ii) in cognate languages where "logophoricity" has been studied, such as Gbè (BK2), lgbo and Abe (BK1).

Before jumping to unfalsifiable conclusions demanding unlimited bailouts from the Semantical Central Bank, it's worthwhile to check the more economical possibility, that some independent syntactic factor explains the nominative clitic's lack of antilogophoric behavior in Adésolá's data. Pending systematic investigation, it jumps out from both examples that the indirect discourse containing the anomalously interpreted nominative clitic is presumptively *not* a syntactic complement, but rather a paratactic adjunct. If so, then domain extension (antilogophoricity) would not be expected to occur, so the data don't falsify the null, syntactic theory *pace* Anand.

To a casual observer, English translation may conceal what is generally accepted in Yorùbá literature, namely (i) that the surface L tone of *gbà* 'receive' diagnoses surface *in*transitivity and marks the subsequent clause as an adverbial adjunct (Déchaine 2001, cf. Rosenbaum 1965), and (ii) that the predicate *kéde* 'announce' decomposes transparently as an unergative expression with immediate constituents *ké* 'cry' plus *òde* 'proclamation' (Abraham 1958, 361), similarly entailing that an immediately following clause necessarily occupies a *non*complement position. Parallel considerations of philological adequacy refuse Schlencker's philosophical "plea for monsters" (2003). In general, logophoric construal may reflect a structurally loose condition on information flow in discourse (Safir 2004), but *antil*ogophoric effects apparently reflect narrow c-command. This noncomplementarity is obscured by the functionalist notion of "logophoric pronoun".

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### INFLECTION BY DEFAULT\*

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#### 1. Logophoricity and SPELLOUT

In argument positions of certain complement sentences, many Kwa languages contrast a third person pronominal clitic with a distinct third person form: a clitic or nonclitic, depending on the language. For one item of this contrast set, the antecedent is the 'Source' or subject argument of a matrix clause which selects the embedded sentence either locally or at long distance. Hagège (1974) and Clements (1979) call this morpheme *a logophoric pronoun*. The other item lacks this reading, and is thus a *non- or anti*-logophor.

Why is this pattern common in Kwa, while languages of other families (Latin, Norwegian, Japanese) choose other logophoric strategies such as indirect reflexives (Kuno 1977, 1987)? Déchaine (1993A) relates Kwa-type logophoricity to another Kwa characteristic: default inflection. The idea is that inflectional features repel or allow antecedents in a governing clause in accordance with general principles such as government-domain extension (Kayne 1984, Koster 1987) and morphological economy (Burzio 1989). If the matrix clause is part of the extended government domain, then embedded ungoverned pronominal features are disjoint (free) in it. This effect has two premises. Default agreement is ungoverned: the pronunciation of agreement features counts as an ECP effect, either as argued by Koopman and Sportiche (1986) or on the analogy of epenthetic vowels as ungoverned prosodic positions (Kaye *et al.* 1990, Charette 1990). Binding theory regulates inflectional features, not just pronoun words: this is familiar from the *pro*-drop literature (Borer 1983, Jaeggli and Safir 1989). If Déchaine is correct, Kwa-type logophoricity demonstrates a close interdependency between head-government, clitics, Case, agreement, *pro*-drop and overt phonetics—all matters which plausibly coincide in a theory of feature-SPELLOUT operations.

Logophoric default inflection effects are not limited to Kwa. In Modern Hebrew (Borer 1989), a referential (i.e. non-expletive) matrix *pro* subject requires an agreement element (hu) in the third singular, (1a), not in other persons, (1b). But in embedded clauses, a third singular bare *pro* subject is fine, cf. (2).

(1)a.Hu 'axal-∅ 'et ha-banana. 3MS eat.PAST-S ACC the-banana	(2)a.	Talila; 'amra le-Itamarj se <i>pro</i> ; hicliax-a. [FS] said to-[MS] that succeed.PAST-FS
'He ate the banana' b. 'Axal-ti 'et ha-banana.	b.	'Talila <sub>i</sub> told Itamar <sub>j</sub> that she <sub>i</sub> succeeded' Talila <sub>i</sub> 'amra le-Itamar <sub>j</sub> se $pro_j$ hiclix- $\emptyset$
eat.PST-1s ACC the-banana 'I ate the banana'		[FS] said to-[MS] that succeed.PAST-S 'Talila; told Itamar; that he; succeeded'

In the so-called 'present' tense, a non-third person matrix *pro* subject is impossible, cf. (3). In Hebrew as in English, a present event is nonreferential and hence interpretable only as quantified (generic or habitual). An inflected present tense verb is defective in a second way: it necessarily lacks person features. An embedded third singular bare *pro* subject is correspondingly impossible in the present, cf. (4).

(3)	*'Oxel-Ø 'et ha-banana.	(4) *Talila <i>i</i> 'amra le-Itamar <i>i</i> se <i>proi/j</i> macliax-Ø.
	eat-S ACC the-banana	[FS] said to-[MS] that succeed-S
	['I/you/he usually eat(s) the banana']	['Talila <i>i</i> told Itamar <i>j</i> that s/he <sub>i/j</sub> usually succeeds']

From these paradigms Déchaine (1993A: 416-21) concludes that a morphologically unsupported *pro* subject is possible only if embedded, and if embedded T<sup>o</sup> is referential (in Hebrew: past or future, but not 'present'). This suggests some generalizations. Third singular, which is being economized by the interpretive system of binding theory, is not a person feature but a projection of a referential head (T<sup>o</sup>) that must be pronounced unless it's governed. Government of embedded T<sup>o</sup> occurs in indirect discourse, which is where sequence-of-tense effects typically obtain, so domain extension renders an ungoverned third singular antilogophoric.

<sup>&</sup>lt;sup>\*</sup>The late R. G. Armstrong recommended this problem in 1976. Thanks to A. Akinlabí, C. Adopo, R.-M. Déchaine, M. Guerssel, K. Hale, Ų.P. Íhìónú, S. Kuno, Y. Láníran, J. Martin, C.P. Mbáwúike, N.P.N'Guessan, P. A. Nwáchukwu, Q. Oyèlárán, P. Pica, N. Ruwet, K. K. Saah, O. Sónaiya, D. Sportiche, J. B. Whitman, A. Zribi-Hertz and my UMass-Boston students in Spring 1993.

To date, there are a handful of generative analyses of logophoricity in languages from different ends of Kwa. Most of these—unlike the default-inflection analysis—are couched in terms of LF-licensing. Thus, Kwa logophoricity presents an opportunity both to compare a phenomenon in related languages, and to evaluate different UG frameworks, e.g. as to derivational vs. representational architecture.

Pulleyblank (1986) traces the Yoruba logophoric pattern to the clitic/nonclitic distinction. He assumes that the 3s nonclitic is pronominal and that the 3s clitic is a variable bound at LF. Manfredi (1987) makes two objections based on comparison with Ìgbo, another eastern Kwa language. First, although embedded clitics are antilogophoric in some southern Ìgbo dialects as in Yoruba, the parallel is incomplete for nonclitics, for clitics in matrix contexts, and for antilogophors in Standard Ìgbo and northern dialects. The intervening factor in these distributions is Kase (Case plus agreement) as in Fukui's (1986) theory of functional licensing. Second, operator-variable binding as the source of the anti-logophoric effect in the third singular says nothing about the partial logophoric effect which occurs in the third plural in Yoruba, nor can it deal with the full-blown logophoric effect in the third plural in Ìgbo dialects like Mbaisén.

This paper continues the critique of LF in both respects, restating a Kase analysis of default inflection, and carrying it to western Kwa. §2.1 reconsiders the category of the Yorùbá logophor and that of its antilogophoric counterpart, and §2.2 revisits the comparison with Ìgbo. §3 brings in two western Kwa languages—Àbé and Àkyé—which received LF-analyses from Koopman and Sportiche (1987) and Zribi-Hertz and Adopo (1982), respectively. The authors show that these languages economize inflectional features directly; the question is whether LF adds anything to the story. §4 gives a new argument against LF-logophoricity, based on s-structure subjacency effects in Ìgbo and (more tentatively) in Yorùbá. If these effects are reliable, then the LF analyses merely mimick s-structure, whereas an s-structure analysis based directly on inflection is motivated independently on language-internal grounds, as well as by pan-Kwa comparisons and wider typological considerations. Finally, §5 rounds out the cross-Kwa survey by asking why there are no comparable logophoric phenomena in Àkán, and how Èvè logophors might work.

Looking further to UG consequences, successful reduction of Kwa logophoricity to default inflection plus domain extension supports relativized minimality. Rizzi (1991, 1994) distingushes long-distance relations that are built up from a chain of local head-government links, from those based on referential dependency. A domain-extension analysis puts logophoric effects in the former basket rather than the latter, where it is placed by those who let LF do the work. Domain extension ties interpretion to licensing at a morphosyntactic 'level' which is skipped by LF-based accounts. In this way, Kwa-type logophoricity would challenge the minimalist separation of PF and LF interfaces (Chomsky 1993); it surely undermines any narrow characterization of logophoricity as 'semantic' or as computed strictly in A-bar terms (e.g. *à la* Reinhart and Reuland 1991). On the positive side, the phenomenon suggests a kind of reduction which is perhaps more radical than the minimalist interfaces, namely reduction to a government-based representation which determines both pronunciation (including SPELLOUT) and meaning.

### 2. Eastern Kwa

#### 2.1 Yorubá

(5) and (6) exemplify the phenomenon in embedded subject and direct object positions in Yorubá.<sup>1</sup> The 3S logophor is a nonclitic (*dun*), while the 3S clitics (nominative d, accusative i) are non- or anti-logophoric.

Yorùbá

(5)a.Jímộ $_i$ ớ wí pế ôún $_i$ lọ. AGR say COMP 3S.AGR go	Jímộ; $\phi$ wí pé Bósè é rí dun;. AGR say COMP AGR see 3S
'Jímò said that he [= Jímò] went'	'Jímộ said thát Bộsệ saw him [= Jímộ]'
b. Jímọ̀ <i>i</i> ợ́ wí pé ó <i>j</i> lọ. AGR say COMP 3S go	Jimò <i>i</i> ó wi pé Bósè é ri i <i>j.</i> AGR say COMP AGR see 3S
'Jímò said that 3S [≠ Jímò] went'	'Jímò said that Bósè saw 3S [≠ Jímò]'

<sup>&</sup>lt;sup>1</sup>Following Bámgbósé (1986), *pé* 'say' is glossed as COMP in these examples, but Oyèlárăn (1982A) and Déchaine (1993B) treat it as a synchronic verb (which was undoubtedly the historical situation). *N.b. oùn* (LH) = *oun* (LM) + H tone subject AGR. The literature is circumspect about marking H-tone AGR, but nonclitic subject 'pronouns' in all persons bear H-tone AGR wherever an ordinary noun subject would (Bámgbósé 1965: 11)—that's one reason they are treated categorially as nouns.

The nonclitic status of *oun* explains why it can be coordinated or focused (7a, 8a). Replacing *oun* with a 3S clitic in either context yields ungrammaticality (7b, 8b), cf. Bámgbósé (1967: 10), Pulleyblank (1986: 46).

(7)a.Jímò <i>i</i> ó rí [òun <i>j</i> àti Adé].	(8)a.	Òun ni Jímọ̀ ợ́ rí.
AGR see 3S and		3S COMP AGR see
'Jímọ̀ saw her∕him [≠ Jímọ̀] and Adé'		'It's her/him that Jimo saw'
b. *Jímọ̀ ợ́ rí́ [i àti Adé].	b.	*Ó ni Jímọ ợ rí.
AGR see 3s and		3S COMP AGR see

The same two tests for clitichood yield analogous results with corresponding items, nonclitic and clitic respectively, in the other persons and in the plural.<sup>2</sup> For Standard Yoruba, the two sets are listed in (9).

		nonc				
(9)		NOM/ACC	GEN	NOM	ACC <sup>3</sup>	GEN
	1 S	èmi	èmi	mo	mi/mĺ	L+mi
	28	ìwọ	tìrẹ	0	ọ/ợ	L+rę
	38	4	tirę̀	Ø/ó	M/H	M+re
	īР	àwa	àwa	a	wa/wa	M+wa
	2P	èyin	èyin	ę	(M) yin	M+yin
	3P	àwọn	àwọn	wọn/wọn	wọn/wón	M+wọn

The nonclitic/clitic contrast is maintained consistently across the dialects surveyed by Fresco (1970: 63-82), and it has stable prosodic consequences throughout Kwa. Following similar observations in Schachter and Fromkin's (1968) study of Àkán, Stahlke (1969) and Fresco (1970) note that Yorùbá clitics are monosyllabic while nonclitics are bisyllabic. Clitics lack a prefix, a reliable cross-Kwa diagnostic of noun-hood (Stahlke 1973, 1975). Kwa nouns are minimally bisyllabic, but Kwa verbs (V<sup>o</sup>'s) can consist of a single syllable.

# 2.1.1 Oun is not [+ pronominal]

In the X-bar framework of Fukui (1986) and Abney (1987), the above suggests that a clitic nonlogophor is a  $D^{\circ}$  element, i.e. a head, while a logophoric nonclitic is a phrase, either NP or DP.<sup>5</sup> Pulleyblank's (1986) analysis assumes that *oun*, together with all the nonclitics in (9), are [+ pronominal]. This translates the standard West-Africanist view of *oun* as a 'lexical pronominal' or 'independent pronoun', and allows Pulleyblank to claim that the distribution and interpretation of *oun* and the others is regulated by the LGB "Avoid Pronoun" rule (Chomsky 1981: 65). However, doubts are created by some examples from Abraham (1958: 150, 494, 527) where *oun* has the force of an argument-coordinating conjunction:

- (10)a. Obè ata oun eran ni o fi fun mi. stew pepper 3S meat COMP 3S use give 1S
  'Stew, pepper and meat is what s/he gave me'<sup>6</sup>
  - b. Bí òrun òun ayé ń wó ó bò ... if sky 3S world PROG topple AGR come '[Even] if sky and earth should collapse...'7
  - c. Ará-òrun kìn-kin, òòsà òun aso o rè.
     sky-inhabiter only divinity 3S cloth GEN 3S
     'Just the extraterrestrial is there : the òrisà and its cloth'<sup>8</sup>

<sup>&</sup>lt;sup>2</sup>Yorùbá logophoric contrasts in the third person plural—data which I botched in my 1987 paper—are deferred to  $\S3$ .

<sup>&</sup>lt;sup>3</sup>The distribution of the M and H variants of clitic ACC is determined metrically, cf. Manfredi (1994, 1995).

<sup>&</sup>lt;sup>4</sup>The gap in this table for 3S nonclitic subject is addressed in §2.1.1 infra.

<sup>&</sup>lt;sup>5</sup>The choice between DP and NP is unclear because Yorùbá lacks obligatory definite or indefinite articles.

<sup>&</sup>lt;sup>6</sup>Equally possible is *Obè ata (oun) ati eran...*, where *ati* is the ordinary argument-conjunction 'and' (Y. Láníran, p.c.).

<sup>&</sup>lt;sup>7</sup>Y. L'aniran informs me that Bí orun (oun) pelu aye... is also OK. Pelu is a stative, prepositional predicate of accompaniment.

<sup>&</sup>lt;sup>8</sup>In other words, this *oríki* salutes the masked *egúngún*-dancer as not a physical person, but a spirit covered in an *ago*-shroud.

In these cases, *oun* behaves less like an argument than like a predicate meaning 'together-with'.<sup>9</sup>

Bámgbósé (1986: 83) gives an example where *oun*, though argumental, seems *anti*-pronominal, with the property of *avoiding* deictic reference. For cultural reasons, (11) is preferred to (11'), which makes a "taboo reference". It is not clear if *oun* in (11) is merely ambiguous or actually non-referential.

(11)	Adé ní [ara	òun	kò	dá	].	(11')	Adé ní [ara	.mi	kò	dá	].
	say bod	/ -		$\mathcal{O}$			say bod				d
	'Adé said that	a certai	n per	son i	s sick/crazy'		'Adé said tha	t I am s	ick/cra	azy'	

What do the usages in (10)-(11) say about logophoric oun in (5)-(6)? To be sure, they don't undermine Pulleyblank's explanation of the grammaticality of (7a) and (8a), which follows directly if oun is not a clitic (a circumstance not in doubt). But they do jeopardize the claim that the distributional contrast in (7)-(8), plus the assumption that oun is pronominal, yield the interpretive contrast in (5)-(6). This is so because oun in (10) does not have the distribution of an ordinary 3S nonclitic DP or NP, let alone a pronominal. There is something intuitively 'anaphoric' about oun in (10), and perhaps also in (5)-(6): if oun has any antecedent at all in (10), it is a local one. This intuition fits badly with the LGB definition of pronominal items in terms of binding condition B. Furthermore, oun in (11) also seems to contain a predicate, perhaps **3**. Two more examples along the same lines are found in Abraham's *trésor* (1958: 100, 136, 494):

- (12)a. Ó di oun. 38 become 38 'It turned out to be him' OR 'It became/has become something/a reality'
  - b. Òun tó ní òun yóò bé eni l'órí, tó bá sí eni ní filà, ká dúpé! 38 WH.38 say 38.AGR PROS cut person KASE.head WH-38 meet open person KASE cap HORT thank 'Any time someone says they will decapitate you, but [instead merely] de-caps you, be grateful!'

*Oun* in (12a) must mean 'an extant thing', and it has apparent existential force in (12b) as well.<sup>10</sup> Neither (12a) nor (12b) is referential in a way expected of a pronominal, i.e. linked to some antecedent in linguistic or extralinguistic context. On the contrary, both examples in (12) are quantificational, so they go along with (10) and (11) to recommend a treatment of *oun* as having internal predicational complexity of some kind.

But if this is true, then an account of the logophoric effect in (5) and (6) framed in terms of pronominal binding misses the point. Independently, there is another problem with the matrix distribution of *oun*: it is apparently referential in subject position (13), but neither as a direct nor a prepositional object (14).

(13)	Òun lọ.	(14)a. *Jímộ ố rí òun.
	3S.AGR go	AGR see 3S
	'S/he left'	['Jímo saw her/him/it']
		b. *Àwọn sójà á ji owó (ti) òun.
		3P soldier AGR steal money of 3S
		['Soldiers stole her/his money']

<sup>&</sup>lt;sup>9</sup>The examples in (10) fulfil a pragmatic condition that the things listed go together canonically or inseparably. This meaning, if necessary to the coordination meaning of *oun*, might come not from *oun* but from the constituent structure that licenses it. (10) is not the only situation in Yorùbá where argument coordination is marked by something other than a conjunction, cf. (i), an example of verb serialization. Note further that VP coordination in Yorùbá (a.k.a. multi-event serialization) also disallows an overt conjunction, cf. (ii). Both paradigms are cited from Déchaine (1993B: 808f.).

i–a.	Jímọ $_i$ $\phi$ ta eran ta bàtà.	ii-a. Jímọ $_i$ $\phi$ se eran tà (*á).	ii-a.	
	AGR sell meat sell shoe	AGR cook meat sell 3 S		
	'Jímò sold both meat and shoes'	'Jímọ̀ cooked [some] meat and sold it'		,
i-b.	*Jímò <i>;</i> ó ta eran àti bàtà. AGR sell meat and shoe	ii-b. *Jímò <i>;</i> ó se eran àti tà (á). AGR cook meat and sell 3S	ii-b.	

To emphasize the parallel between these examples and the ones in (10), the latter could aptly be described as 'serial nouns'.

<sup>10</sup>The syntax of (12b), with its double instance of *oun*, is challengingly complex. Abraham finesses the issue by giving one of the opaquely idiomatic British glosses — "One must be thankful for small mercies" — that he often resorts to for Yorubá proverbs. Notwithstanding the absence of an overt temporal word, I believe there is temporal quantification in this sentence, arising from WH-movement of an existential subject over the predicate *ni* 'have'. But this matter is orthogonal to the point at hand.

This contrast suggests that the distribution of *oun* is not regulated by the Avoid Pronoun principle, a device for economizing the morphological content of referential categories. Rather, *oun* is referentially defective; its referential capacity is always derived compositionally with respect to syntactic context.

The preceding point is consistent with the fact that *oun* also occurs in matrix subject positions where no overt pronominal clitic possible, as in (15) and (16) from Abraham (1958: 1, 494); or else as in (17) from Abraham (1958: 417) it precedes a complex auxiliary where neither a clitic nor simple *pro*-drop is a possible alternative.<sup>11</sup>

(15)	(Òuń) á lọ.	(17)a.	*(Òun) a máa lọ.
	3S.AGR MOD go		3S DUR HAB go
	'S/he will go'		'S/he is in the habit of going'
(16)	(Òun) kò lọ.	b.	*Ó (a) máa lọ. <sup>12</sup>
	3S NEG go		3S DUR HAB go
	'S/he did not go'		[ <i>n.b.</i> OK, without DUR, as a future]

All these seeming instances of 'matrix subject' *oun* are arguably left dislocated: *oun* in these examples is not a structural subject but rather an Ā-topic (Cinque 1983, 1990), and hence not referential.

The result that *oun* is not pronominal is welcome from a typological perspective. The standard idea is that Kwa languages minimally contrast clitic and phrasal argument-pronominals but, for some reason, just in embedded contexts in the third singular. But this is curious, because phrasal subject-pronominals of the French type systematically fail to be exploited in any of 27 surveyed Italian dialects, all of which are *pro*-drop (Rizzi 1986B). On reflection, therefore, the treatment of *oun* as pronominal is both stipulative and exoticist, solving a language-internal problem only by positing a highly marked synchronic grammar.

Conclusion: the logophoric effect needs a closer look at its morphological exponents. Turning first to Ìgbo, Yorùba's semi-neighbor in eastern Kwa, we can ask if logophoricity is consistently a matter of a clitic/nonclitic distinction, and which inflectional and Case features spell out in the relevant paradigms.

### 2.2 Ìgbo : uniformity, clitics and Kase

Linked to the clitic/nonclitic contrast is the property of morphological uniformity. Unlike the antilogophor, the Yorubá logophor *oun* is uniform in all contexts. In (5b) and (6b), the 3S clitic is spelled o' (NOM) and *i* (ACC). Nominative 3S spelled o' is restricted to the (nonlexical) subject positions of main verbs and of a subset of auxes (roughly, the aspectual or non-Tense auxes, cf. Oyelarăn 1970, Déchaine 1992). Tense-related auxes license *pro*-drop, cf. (15)-(16), while the subject AGR of infinitives and of sentences with lexical subjects before aspectual auxes is just the H tone without the vowel elements that yield o'.<sup>13</sup> Accusative 3S, too, is nonuniform. After a H-tone verb it is realized as M, elsewhere as H, on a copy of the preceding vowel.<sup>14</sup> Both NOM 3S and ACC 3S contrast with the genitive 3S clitic, spelled ro', cf. (9).<sup>15</sup>

(i) Béè ni
 (ó) máa n rí.
 thus COMP 3S HAB PROG see
 (That is how set to a short to a set of the set of

<sup>12</sup> When the order is a máa, there is a sense of perduration in respect of the habit in question, over the period of reference. But when the 3SG clitic subject o, or the HTS, occurs obligatorily, n surfaces instead of a in the complex unit máa n. In other words, n surfaces whenever a is morphologically suppressed and the sense of perduration is important. In addition, máa alone surfaces in nominalized habituals... (Oyèlárăn 1989: 8)

In the Yorùbá syntax literature, H[igh] T[one] S[yllable] is the standard label for subject agreement, here glossed AGR. The DUR element *a* is arguably generated in Tense ( $T^{o}$ ), since it excludes AGR and can't occur in nominalizations.

- <sup>13</sup>For phonetic reasons, this H tone agreement is pronounced on the preceding vowel, i.e. on the subject or the controller of the infinitive, not on the verb, cf. Abraham (1958), Bámgbósé (1967, 1971); Awóyalé (1983).
- <sup>14</sup>As noted since Ward (1952), the 3S accusative clitic optionally contracts in the Èkó dialect and some others. I do not know whether this contraction is as possible in embedded contexts—like (6b)—as it is in matrix ones.
- <sup>15</sup>G enitive occurs after bisyllabic verbs and after all nouns (Elimelech 1982, Oyèlárăn 1982B). This fact is consistent with an analysis in which bisyllabic verbs contain an incorporated N<sup>o</sup>, cf. Oyèlárăn (1994).

<sup>&</sup>lt;sup>11</sup>Along the same lines, notice that with an expletive subject, habitual *maa* remarkably—albeit optionally—licenses *pro*-drop in the following example from Abraham (1958: 418):

<sup>&#</sup>x27;That is how matters always turn out' (more literally, 'That is how it is always appearing')

All this nonuniformity is expected if a clitic spells out "Kase" à la Fukui (1986), i.e. Case plus agreement features. Kase spellout ought to be nonuniform insofar as the features that must be pronounced or recovered in the absence of an overt argument vary contextually: they are defaults, not autonomous morphemes. This idea has precedents in generative grammar: Perlmutter (1971: 49) suggests that the order of stacked clitics is determined in French by Case assignment, and in Spanish by person agreement. Ìgbo shows another type.

In some Igbo dialects, embedded clitic 3S is uniform., and the nonclitic/clitic distribution in (18)-(19) is not quite parallel to (5)-(6). Yá, like Yorùbá *oun*, is a nonclitic—it can be focused and coordinated, and is a subject logophor, (18a). But unlike *oun*, Ìgbo yá is the ordinary object pronoun and thus is fully ambiguous if embedded, (19a). O, like Yorùbá *o*, is a clitic in complementary distribution with subject AGR, and antilogophoric, (18b).<sup>16</sup> As an embedded object, Ìgbo o like its Yorùbá counterpart is antilogophoric, (19b).

Ìgbo

	Ógù <i>i</i> sị na yá <i>i</i> byà-ra. say COMP 3S come-Asp 'Ógù said that he [= Ógù] arrived'	(19)a.	Ógù į sị na Merí hụ-rụ yá į/k. say COMP see-Asp 3S 'Ógù said that Mary saw him [± Ógù]'
b.	Ógù; sị na ój byà-ra. say COMP 3S come-Asp 'Ógù said that 3S [≠ Ógù] arrived'	b.	Ógù <i>i</i> sị na Meri hụ-rụ ó <i>j.</i> say COMP see-Asp 3S 'Ógù said that Mary saw 3S [≠ Ógù]'

Example (19b) is limited to (roughly) Mbàisén and Òweré.<sup>17</sup> In most other dialects and in Standard Ìgbo, the embedded clitic/nonclitic contrast in object position is neutralized by structural Case, so that (19b) is unavailable, leaving only ambiguous (19a). What this restriction obviously does is replicate the matrix Case pattern, whereby all dialects restrict matrix objects to the nonclitic form (ya). No Ìgbo dialect has been reported to have matrix object clitics in the relevant sense, which might look like (20a), cf. Yorùbá (21a).<sup>18</sup>

Ìgbo	Yorùbá
(20)a. *Ógù hụ-rụ - ó.	(21)a. Jímò ó rí i.
see-Asp 3S	AGR see 3S 'Jímọ saw her/him/it'
b. Ógù hụ-rụ yá. see-Asp 3S 'Ógù saw her/him/it'	b. *Jímọ ợ ri òun. AGR see 3S

<sup>16</sup>In most Ìgbo dialects, subject AGR is inaudible in the aspectual form illustrated in (18)-(19), but it *is* overt in perfective and negative forms, where it consists of a metrically conditioned tone whose default value is H (as in Yorùbá) plus a harmonizing vocalic element *e*-/*a*-, cf. (i)-(ii) and Déchaine (this volume). The prefix is suppressed with a clitic subject, cf. (iii)-(iv).

(i)	Mèri á-bya-(bè-)ghi. AGR-come-yet- NEG	(iii)	Ò byá-(bè-)ghi. 3S come-yet-NEG
	'Mèri did not (yet) arrive'		'S/he did not (yet) arrive'
(ii)	Mèrí á-bya-a-la. AGR-come-COMPLET-PERF 'Mèrí has arrived'	(iv)	Ó byá-a-la. 3S come-COMPLET-PERF 'S/he has arrived'

<sup>17</sup>(19b) represents the speech of C. P. Mbáwúike (from Òweré), P. A. Nwáchukwu and U. P. Íhiónú (from Mbàisén). A similar paradigm occurs in Swift *et al.*'s Mbàisén (1962: 410-15), with the difference that the 3S object clitic is hộ instead of ộ.

<sup>18</sup>Bædecker (1986) calls object yá as in (20b) a "clitic" because of tone and linear order effects in double object constructions. But these diagnose syntactic clitic-hood only if double objects are sequential A-positions (e.g. à la Larson) and not a small clause predication, e.g. the SPEC and complement of a dative PP/possessive KP with a null head (cf. Kayne 1984, Tremblay 1990). Consistent with the latter view, both effects occur in other constructions where syntactic clitic-hood is not involved. Inherent H tone is lost by lexical noun subjects in yes/no questions (Green and Ígwe 1963: 91); and applicative DPs of any weight usurp the object position right-adjacent to the verb (Nwáchukwu 1985). That ó can't be coordinated or focused suffice to distinguish it from yá morphosyntactically. Another property that might be thought to diagnose Ìgbo yá as a clitic is coalescent assimilation (Éménanjo 1972), but perhaps yá is not an underlying C+V sequence but rather comprises an epenthetic onset y plus a default V spelling out K° (the head of KP). Ágbò, a near Ìgbo-relative, resembles Yorûbá (21a) with a matrix 3S object clitic (harmonic é or á). Ágbò also lacks *-rV* verb inflection and thus may differ radically from Ìgbo in structural Case pattern. Available Ágbò texts (Manfredi 1991: 316-41) contain no single nonclitic 3S object (±embedded), and embedded object clitics in Ágbò have the same ambiguity as embedded object nonclitics in examples like (19a) in Standard/northern Ìgbo. Ágbò embedded subjects pattern like the Standard/northern Ìgbo counterparts of (18a) vs. (18b). I return to Case typology directly.

For embedded subjects, some dialects allow null COMP after  $s_i^{\prime}$  'say', e.g. (22) from Swift *et al.*'s Mbàisén, but this need not affect the embedded subject contrast: (22) is homologous to (18), but other Mbàisén varieties have (22'), where the embedded subject as ambiguous as the embedded object in Standard Ìgbo (19a).<sup>19</sup> In its own way then, (22') also reflects the imposition of matrix Case in embedded contexts.

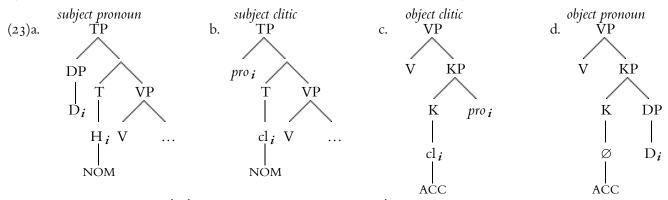
- (22)a. Ógù*i* sị ayà*i* bya-ra. say 3S come-Asp 'Ógù said that he [= Ógù] arrived'
  - b. Ógù; śi ohòn; bya-ra.
    say 3S come-Asp
    'Ógù said that 3S [≠ Ógù] arrived'

22') Ógù*i* sị ayá*i/j* byà-ra. say 38 come-Asp 'Ógù said that 38 [± Ógù] arrived'

Summarizing, although some Ìgbo dialects exploit the clitic/nonclitic distinction to the same extent as Yorùbá, with partly similar interpretive effects, others utilize it in a more limited way, with corresponding limits on the interpretative contrasts available. A single analysis for the logophoric effect in both languages is possible only in terms of the distribution of argument clitics, which is apparently determined by Kase.

What is the empirical task for a Kase-based analysis in Western Kwa? There is a partial match of readings between Yorùbá (5)-(6) and Mbàisén Ìgbo (18)-(19). One could mechanically generate the same sets of readings for the two languages, since the formal pattern in embedded contexts is identical in the two languages, but the embedded object readings differ in a way corresponding to how the languages differ in the clitic/nonclitic pattern in matrix contexts. In matrix contects, Yorùbá chooses object clitic+*pro* (21), Ìgbo has object nonclitic (20). In embedded contexts, Yorùbá *oun* is a logophor (6a), Ìgbo *yá* is a 'non-antilogophor' (19a). A related point is that the Ìgbo pattern is fragile: (19b) is merged in some dialects with an already ambiguous (19a), and unambiguous (22) coexists in some dialects with ambiguous (22'). No comparable fragility or ambiguity has been reported for Yorùbá. Both of these Ìgbo mergers can be seen as an extension of the matrix ban on object clitics. Nevertheless, there is no Yorùbá/Ìgbo difference in the matrix subject pattern, which is consistently a clitic. In 1987 I addressed these issues parametrically by adapting Fukui's system. The analysis can now be revised in view of proposals by Bittner and Hale (1994).

If subject pronouns, like lexical subjects, require SPEC-head agreement with features in Tense (23a), this accounts for the above-noted complementarity of H-tone AGR with those auxes that are base-generated in T (the non-aspectual auxes). If subject clitics (23b) appear in K<sup>o</sup> by joint spellout of T's head features plus the  $\varphi$ -features of the *pro* in SPEC, this accounts for the phonetic shape of the 3S subject clitic in both languages as ó. I further assume that object clitics are licensed in K<sup>o</sup> (23c), a non-projected category licensed by a governing V<sup>o</sup>, and that object pronouns are licensed in D<sup>o</sup> governed by null, governed K<sup>o</sup> (23d).<sup>20</sup>



In matrix clauses, Yorubá has subject and object clitics, Ìgbo has subject clitics and object pronouns. The first task is therefore to exclude (23a) in both languages. One independent fact which may be relevant here is the absence of obligatory articles (determiners). For Yorubá, it is enough to stipulate that D<sup>o</sup> is

<sup>&</sup>lt;sup>19</sup>U. Íhiónú, (p. c.). The locution *Standard/northern Ìgbo* doesn't imply that Standard Ìgbo is northern, but the unavailability of embedded object clitic antilogophors in the north, and their occurrence in the south, may be no accident, as I'll discuss directly.

 $<sup>^{20}</sup>$ Or, in the appropriate ATR-harmonic context in Ìgbo (and in some Yorùbá dialects, cf. Fresco 1970) as  $\acute{
ho}$  .

always null, in order to make both subject and object clitics forced options. But this isn't quite right: Yorùbá has apparent (non-3S) subject and object pronouns, cf. (9) above. The traditional solution, already alluded to, has been to treat *emi*, *iwo* etc. as categorial nouns, and this is unobjectionable. If 3S has neither person nor number features (Benveniste 1946), then the nonexistence of a 3S 'lexical pronoun' (i.e. 3S noun) parallel to 1S *emi*, 2S *iwo* etc. reduces to the requirement that a member of a lexical category (e.g. N) can't be completely empty. (Common nouns like *işu* 'yam' and *iwé* 'book' obviously have lexical semantics.)

Nether Ìgbo nor Yorùbá has definite or indefinite articles, though both languages can use deictics and quantifiers to identify a null D as [±definite]. But for direct object quantification, the languages part ways. In Yorùbá it is said that a bare noun object of a tensed verb can receive a referential reading, so that *Mo rí ajá* means 'I saw a/the dog', but the same is not true in Ìgbo. It has been claimed that Ìgbo but not Yorùbá has "V-to-I movement" (where *I* equals *T* for present purposes, cf. Manfredi 1989, Déchaine 1992). As a result of such movement in (23b-c), V<sup>o</sup> fails to govern K<sup>o</sup>, and so by Bittner and Hale's assumptions (matrix) ACC is not licensed in Ìgbo, leaving one option for marked structural Case: ERG(ative). Now this Case property has semantic consequences in Ìgbo (cf. Déchaine and Manfredi 1995): with the verb in T<sup>o</sup>, a definite object in an A-position nevertheless gets wide scope iff the subject is a bare noun, and a delimited aspectual interpretation is correspondingly blocked, leaving a conative reading as the default:

(24)a. Òké tà-ra okhà áhùn.
rat chew-ASP corn that
'Regarding that corn, some rat(s) gnawed on it'
[\* '...ate it up']
b. Òké (ndi rat thos
'The rat(s) on the rat thos
OR 'The rat(s) on the rat thos

 b. Oké (ndị) ahùn ta-ra okhà ahùn.
 rat those that chew-ASP corn that
 'The rat(s) in question gnawed on that corn ' OR 'The rat(s) in question ate that corn up'

Accepting that this contrast follows from the unavailability of ACC in Igbo, due to inflectional type, we can appeal to the same fact to rule out object clitics (23c) and force object pronouns. This restriction holds in all Igbo dialects, since all dialects have obligatory V-to-I.<sup>21</sup>

The preceding point notwithstanding, why are some Ìgbo dialects nevertheless partly like Yorùbá in embedded clauses? Recall that there are two kinds of embedding. Overt COMP makes possible embedded object clitics alongside object pronouns, as in (19b); null COMP ( $\emptyset_C$ ) makes subject pronouns the only option, as in (22). The second point follows directly, assuming (with Bittner and Hale) that  $\emptyset_C$  brings the embedded subject into the matrix Case domain. The impact on logophoricity is double. In (22), after the verb 'say' with its lexical H tone, there is a contrast between proximate 3S  $\dot{aya}$  and obviative 3S  $\dot{\phihon}$ ; and in (22') after the verb 'say' with a derived L tone there is but one, ambiguous option:  $\dot{aya}$  The L tone-bearing prefix on  $y\dot{a}$  in (22') can be related to government by a null C<sup>0</sup>; something similar happens to a subject clitic in yes/no questions (25a), which presumably have interrogative root  $\emptyset_C$ , minimally contrasting with root declaratives (25b). 'Spurious' L tone is also seen in expletive and raising examples (26a-b), where the pronounced COMP  $k\dot{a}$  is presumably also ungoverned because it follows a copula ( $d\dot{t}$ ).<sup>22</sup>

(25)a.	Ò bịa-ra.	(26)a.				hụ-rụ	
	3S come-ASP		3S CO	P COM	IP 2S+I	see-ASI	Р
	'Did s/he arrive?'		'It seer	ns that	you sa	aw Ézè'	
b.	Ó bìa-ra.	b.				rí-ri	
	3S come-ASP		, CC	P CON	ИР 3S+	L eat-AS	SP akpu
	'S/he arrived'		'Éze se	ems to	have	eaten <i>ák</i>	рџ'

The appearance of embedded object clitics in (19b) might follow from a core property of indirect discourse, namely extension of lexical government by the matrix verb into the embedded clause. Once the matrix  $V^{o}$  counts as a governor of the embedded sentence, it presumably governs the embedded object's K<sup>o</sup> as in (23c), making accusative Case suddenly possible (according to the same assumptions of configurational Case theory which permit matrix object clitics in Yorùbá) and hence allowing for an embedded object clitic.

<sup>&</sup>lt;sup>21</sup>The configuration for Ìgbo object pronouns will look like (23d) except that the null case assigned to the pronoun will not be ACC, but ERG, because null K<sup>0</sup> is governed by T not V, cf. Bittner and Hale (1994). The one Ìgbo dialect/near-relative which apparently lacks V-to-I altogether is Ágbộ. As mentioned two footnotes above, Ágbộ also has object clitics (like Yorùbá and unlike Standard Ìgbo). This would be no coincidence, on the assumptions of (24).

<sup>&</sup>lt;sup>22</sup>Apparent tone 'lowering' in all these cases would actually be failure of default H on a weak head. Note the lexical H on  $d\dot{i}$ . The Ágbộ counterparts of both (25a) and (25b) have L tone on the clitic $\dot{\rho}$ , H tone on the lexical root  $b\dot{i}a$  and no inflectional suffix.

Now for the crux of the argument. If extended government permits embedded structural ACC in Ìgbo (despite embedded V-to-I), Ìgbo (19b) is the exact homologue of Yorùbá (6b). Some questions arise at this point. First, why isn't embedded object clitic the only option, if (as seems reasonable) domain extension itself is obligatory in indirect discourse? This question also applies in Yorùbá. Second, why don't all Ìgbo dialects allow the embedded object accusative, i.e. why do most most dialects lack the outcome in (19b), leaving just (19a) which is ambiguous in every dialect? Third, what about embedded subjects following overt COMPs, again in both languages? Ingredients of answers are at hand.

Take the last question first. The existence, in both languages, of two options for embedded subjects after overt COMP can be said to follow from the fact that an embedded subject is structurally the *second* subject in the sentence, i.e. it is the lower of two subjects in a single extended government domain. By hypothesis, a subject clitic as in (23b) is nothing more than the joint spellout of *pro* (which contributes the "o" part) and T (which contributes the H tone). But embedded T in indirect discourse is not independent of matrix T, as witnessed by the sequence-of-tense effect. If embedded T in indirect discourse is governed T, then the *pro* in the SPEC of embedded T is automatically free in matrix T, assuming that *pro* is pronominal in the sense of binding condition B. Therefore, the only spellout option for *pro* in the SPEC of embedded T is default features: the subject clitic. So far, this just restates the domain extension analysis. Now, *oun* (Yorubá) and *yá* (Ìgbo) are neither one of them clitics; the former is probably no pronoun at all but some kind of portmenteau predicate, while the latter is a marked-Case pronoun, i.e. both of them instantiate structure (23a) not (23b). The question is why both of these items, as subjects, are restricted to embedded clauses and must be coreferent with the matrix subject. Déchaine's answer is that, if they occupy the SPEC of the lower, governed TP, and since by definition they have no independent featural content, they are obliged to be coreferent with the SPEC of the higher, governing TP. This is a consequence of domain extension.

Next, the second question: why don't all Ìgbo dialects permit embedded accusatives (antilogophoric clitics)? Here I will appeal to the fact that the relationship between V and T itself varies across the Ìgbo-speaking area. *Grosso modo*, Éménanjo (1981/84) reports less agglutination and more auxes toward the north and west, than in the south and east.<sup>23</sup> This is what we need, if more agglutination means a closer morphological relationship between V and I, since it is precisely in the more agglutinative south-east that embedded ACC is possible. Here we must assume that matrix V is more likely to govern embedded K from an agglutinative [ $_{T^{O}} V^{O}+T^{O}$ ] complex, i.e. that agglutination is 'government transparency' *à la* Baker (1988). Conversely, embedded K in a more isolating dialect will be less visible to government by matrix V.

Now for the first question. In a highly agglutinating variety of Ìgbo like Mbàisén, or in a non-V-to-I language like Yorùbá, why doesn't domain extension restrict the possibilities for embedded objects to just one? Why do Mbàisén and Yorùbá have (19a) and (6a) alongside (19b) and (6b)? Recall that both the object clitic (23c) and object pronoun (23d) configurations are licensed by a K<sup>o</sup> that is governed by V<sup>o</sup>. In Yorùbá, indeed, matrix argument pronouns are always available alongside matrix object clitics; the problem with matrix argument *oun* is that it's not pronominal. What saves embedded object *oun* can only be its internal structure. Assuming that *oun* contains an **B**-predicate of some kind, its hypothetical subject is c-commanded by this predicate. If ungoverned pronominal features are free in the (extended) domain, governed nonpronominal features are bound. In this way, *oun* acts like a variable or an anaphor. Embedded object *yá* as in (19a) is licensed for a completely different reason, in this case a trivial one: as in matrix object position, it receives ERG from a K<sup>o</sup> which is governed by a T<sup>o</sup>. But unlike object *oun*, object *yá* is always ambiguous in every dialect, and this follows directly from its uniform manner of licensing.

### 2.3 Eastern Kwa summary

This sample of eastern Kwa suggests, *contra* Pulleyblank, that the source of the logophoric effect is not the clitic/nonclitic contrast. More basic is inflection. Inflection, and its role in extended government, explain why, and in some detail how, the logophoric effect is restricted to indirect discourse. A restriction to embedded clauses recalls verb-second patterns, where embedded contexts display greater word order variety than matrix ones. But logophoricity is less like V-2, and more like *pro*-drop, insofar as a morphological contrast affects interpretation. (V-2, by contrast, has no inherent meaning.) The literature on western Kwa, as reviewed in the next section, provides further evidence of the inflectional basis of logophoricity.

 $<sup>^{23}</sup>$ Ágbộ (cf. fn. 18) may be the limiting case of non-agglutination in the Ìgbo-related zone, of which it is the northwest extremity.

### 3. Adding Western Kwa, and continuing with questions of grammatical architecture

### 3.1 From discourse representations to Ā-binding

According to Hagège (1974) and Clements (1979), logophoric effects have nothing to do with pronominal binding. For them, logophoricity is a phenomenon *sui generis* by which some morphemes encode discourse roles directly. Kuno (1972, 1987) makes this idea formally explicit by positing a feature  $[\pm logo-1/2]$  which assigns a first or second person 'intended' referent (i.e. a direct-discourse counterpart) to a pronoun or reflexive which carries an appropriate value of this feature. More elaborately, Sells (1987) inscribes direct-discourse functions in the Kampian-boxlike DRT representations of certain morphemes. All of these approaches are functionalist to the extent that they don't need to correlate the possible discourse-marking content of a given lexical item with its morphosyntactic category. In other words: anything can be a logophor in any language. Even more problematic, in these approaches, is the notion of *anti*-logophor. It is purely diacritic to mark a morpheme (e.g. an embedded clitic in §2 above) as crucially *lacking* a certain functional property, especially if this lack itself depends on syntactic context.

Even some nonfunctionalists hesitate to take logophoricity as a core pheonomenon. Reinhart & Reuland (1991) exclude logophors from A-positions and their binding theory holds just for arguments.<sup>24</sup> An 'Ā-only' syntax of logophors is undeniably attractive. Theoretically, it consists with a restrictive definition of scope (e.g. Aoun and Li 1993: 88). Empirically, it fits the languages familiar to most of these theorists—languages whose logophors are morphological reflexives—given certain independent assumptions about how reflexive argument structures project in syntax. However, neither of these advantages survives in Kwa: Kwa logophors (at least, those discussed in this paper, excluding parenthetical or 'focus-logophors') are *not* reflexives (or otherwise emphatic, deictic etc.), and they *do* occur in A-positions.<sup>25</sup>

Confronting these two properties of Kwa logophors—argumental, nonreflexive—some West-Africanists have turned to abstract  $\bar{A}$ -binding. In diverse ways for various languages, Pulleyblank (1986), Koopman and Sportiche (1987) and Zribi-Hertz and Adopo (1992) all tie logophoricity to the presence of a null referential operator that binds a logical (LF) variable: in LGB terms, [-anaphoric, -pronominal].<sup>26</sup> An assumption shared by all three proposals is that a [+pronominal] item in the domain of this operator has a normal range of antecedents, excluding the operator itself (Pulleyblank 1986: 62; Koopman and Sportiche 1987: 568; Zribi-Hertz and Adopo 1992: 102). This exclusion follows indirectly from binding condition C as applied to a variable (Riemsdijk and Williams 1986: 209*f*.), or else directly from a general prohibition on coreference with a nonargument (Koopman and Sportiche 1989: 556*f*., 568*f*., following Evans 1980: 340, 345). By either assumption, however, an abstract  $\bar{A}$ -analysis encounters some instant glitches.

#### 3.2 Motivating the operator

The first problem with abstract  $\bar{A}$ -binding as an account of logophoric effects relates to the requisite null operator ( $\emptyset_{OP}$ ). If the  $\emptyset_{OP}$  occurs in all indirect discourse contexts, then whenever there is no variable in the embedded sentence – e.g., in Yorùbá, no NOM or ACC 3S clitic – it is a vacuous quantifier. Alternatively, if  $\emptyset_{OP}$  occurs only paired with a variable (as Koopman and Sporticheexplicitly assume), something other than indirect discourse must motivate its occurrence, or else it simply restates the problem in more abstract terms. For motivation, all three abovementioned studies look to COMP selection and/or  $\varphi$ -feature agreement. But if these properties have independent existence, then one can ask if  $\emptyset_{OP}$  adds anything to an analysis directly couched in terms of the selected COMPs and/or  $\varphi$ -features themselves.

<sup>&</sup>lt;sup>24</sup>"With respect to the binding theory..., a SELF-anaphor can always be used logophorically when it is not in an argument position" (1991: 673). Reinhart and Reuland necessarily assume that an argument focused *in-situ* occupies an Ā-position at LF.

<sup>&</sup>lt;sup>25</sup>That Kwa logophors occur *only* in (embedded) A-positions is probably false. One counterexample is genitive *dun* in Yorùbá, which is apparently always possible (Abraham 1958: 565), and presumably counts as an A-bar logophor of the type Reinhart and Reuland would expect. Then in Àkyé ("Attie"), Zribi-Hertz and Adopo describe a formal register in which pronominal items, whether logophors or antilogophors, occur as agreement heads as well as arguments. Apart from *pro*-drop contexts, however, these nonargument pronominals are optional, and not pronounced in "colloquial" Àkyé unless overt aspectual features are also present—their "perfective" aspect being a typical Kwa zero-tense construction (1992: 71). For their analysis to extend to the latter register, these nonargument Agr-items must be present abstractly (Zribi-Hertz p.c.), and this is possible if the featural content of (non *pro*-drop) agreement—unlike the content of A-positions—is always recoverable.

<sup>&</sup>lt;sup>26</sup>A related LF-licensing proposal for Dogrib's 'disjoint anaphor' *ye* (cf. Saxon 1983) is made by Enç (1989), cited by Zribi-Hertz and Adopo (1992). Although Pulleyblank treated Yorubá (an eastern Kwa language), I continue the critique of his analysis in this section alongside with the richer LF-mechanisms of Abé and Akyé (both from the western side of Kwa).

### 3.3 Pronouncing the variable and scoping the operator

Another issue is the phonetic shape/morphological content of the variable that  $\emptyset_{OP}$  binds. There are two possibilities: the variable may have a unique spellout (e.g. *n* in Koopman and Sportiche's analysis of Àbé)<sup>27</sup> or be homophonous with a pronominal. In Pulleyblank's view of Yorùbá and Zribi-Hertz and Adopo's of Àkyé, a pronominal clitic and a variable are both spelled  $o.^{28}$  In Yorùbá, we saw that *o* is *anti* logophoric, so  $\emptyset_{OP}$  must be "in the matrix COMP and not in the embedded COMP" (Pulleyblank 1986: 55) to correctly exclude the matrix subject as antecedent, cf. (27b) representing (27a) = (5b). In Àkyé, however, *o* is a logophor, hence if  $\emptyset_{OP}$  binds *o* it can have embedded scope only, cf. (28b) representing (28a).<sup>29</sup>

Yorùbá

Àkvé

Yorut	a			Акуе			
(27)a. Jimò <i>i</i>	ó wí pé	ój lọ.	(28)a.				ò <i>i</i> hœ Àpí.
A	GR say COM said that 3S [≠	P 3Š go		take. Yàpó thoug	H thougl ght that h	nt COM e [= Ya	MP_3S_see àpó] saw Àpi'
b. $\emptyset_j[S_1]$	Jímò <i>i</i> ó wí j	pé [ <sub>S2</sub> ó <i>j</i> lọ]].	b.	[ <sub>S1</sub> Yàpó <i>i</i> n	ú bw <b>ø</b> ká	$\delta \otimes_i [S_2]$	ò <i>i</i> hœ Àpí.] ].

This difference shows that that there is no way to treat the "o" element as a variable in both languages and also maintain a unified  $\overline{A}$ -binding analysis. That's not a problem unless there is some reason to expect a variable to bear a predictable relationship to morphological zero, and only in addition if one can show that subject "o" bears such a relationship in other contexts (e.g. subject or adjunct extraction). But if such reasons exist, then the difference between (27) and (28) is indeed a problem, because the scope of  $\emptyset_{OP}$  is arbitrarily matrix (nonlocal) in Yorùbá but embedded (local) in Àkyé.<sup>30</sup> And such reasons do exist.

As Zribi-Hertz and Adopo remark, Àkyé differs from Àbé in the uniformity of the logophoric effect. Àkyé's non-o item  $k\varepsilon$  is consistently antilogophoric as in (28). By contrast, Àbé's non-o item (spelled n) is weakly antilogophoric in 'believe' contexts like (29), but strongly logophoric in 'say' contexts like (30).<sup>31</sup>

	Àbɛ́: 'believe'+ $\gamma \varepsilon$		Àbé: 'say'+ <i>kɔ</i>
(29)a.	Yapi <i>i</i> bo wu ye n <i>j(?i)</i> mv Api. believe COMP 3S know 'Yapi believed that 3S (?Yapi) knew Api'	(30)a.	Yapi <i>i</i> he ko n <i>i</i> mv Api. say COMP 3S know 'Yapi said that 3S (=Yapi) knew Api'
b.	Yapi j bo wu ye f mư n <i>j(?i).</i> believe COMP 2S know 3S 'Yapi believed you knew her/him (?Yapi)'	b.	Yapi <i>i</i> hɛ kɔ f mư n <i>i</i> . say COMP 2S know 3S 'Yapi said that you saw him (=Yapi)'

The corresponding interpretation of o is not restricted under 'believe'+ $\gamma \varepsilon$  (31), but it is under 'say'+ $k_2$  (32).

(31)a.	Yapi <i>i</i> bɔ wu yɛ ɔ <i>i/j</i> mʊ Api. believe COMP 3S know 'Yapi believed that 3S (±Yapi) knew Api'	(32)a.	Yapiį hɛ kɔ ɔj mʊ Api. say COMP 3S know 'Yapi said that 3S (≠Yapi) knew Api'
b.	Yapi <i>i</i> bɔ wu yɛ f mư ɔ <i>i/j</i> . believe COMP 2S know 3S 'Yapi believed you knew her/him (±Yapi)'	b.	Yapi <i>i</i> hɛ kɔ f mư ɔ <i>j.</i> say COMP 2S know 3S 'Yapi said that you saw him (≠Yapi)'

Koopman and Sportiche's idea is that  $k_2$  contains (or is compatible with) the *n*-operator, making *o* antilogophoric in (32). Elsewhere, e.g. under  $\gamma \varepsilon$ , the *n*-operator is forced to take matrix scope, predicting *o*'s

<sup>&</sup>lt;sup>27</sup>Cf. a similar claim for Fulfulde by Sportiche (1986: 372 *fn*), repeated by Koopman and Sportiche (1987).

<sup>&</sup>lt;sup>28</sup>In Yorùbá this is true just in the nominative; in the accusative, the  $\varphi$ -features spelled out as *o* aren't prounouncd, cf. (9) above.

<sup>&</sup>lt;sup>29</sup>In Yorùbá, the *o* item always bears H tone, while its Àkyé counterpart is toneless. However, the H in Yorùbá is contextually (metrically) supplied, so *o* is toneless in both languages. The real difference concerns the non-*o* items. §2.2 noted that Yorùbá *oùn* is uniform like any other noun, including possession of inherent tone, but Àkyé  $k\varepsilon$  is nonuniform to the extent that it is toneless. A likely inference is that the clitic/nonclitic contrast may characterize Yorùbá *o* vs. *oùn*, but not Àkyé *o* vs.  $k\varepsilon$ .

<sup>&</sup>lt;sup>30</sup>Àbé can resemble Àkyé in this respect, in that the operator can be in the local COMP, but only sometimes, cf. directly below.

<sup>&</sup>lt;sup>31</sup>Tone is not indicated in the Àbé data because Koopman and Sportiche don't mark it—even though they admit that tone is relevant to verb inflection as well as to the distinction between indicative and subjunctive COMPs (1987: 559).

ambiguity in (31). Thus, their proposal has two necessary steps. (i) Y $\varepsilon$  must actually *exclude* the *n*-operator, forcing wide scope, or else the (weak) antilogophoric effect in (29) has another cause. (ii) A propositional matrix verb selects as its COMP either  $\gamma\varepsilon$  or  $k_2$ , which is a reasonable-sounding, 'lexical' choice. But even assuming that  $k_2$  is selected by the indirect discourse verb  $h\varepsilon$  'say', the LF approach still gets into trouble.

First, although 'believe' is not an indirect discourse verb in Àbɛ, 'think' is one in Àkyé, giving twin interpretive contrasts between (33)-(34) and (35)-(36). (33)-(34) repeats (29) and (31); (36a) repeats (28a).

Àbɛ́ 'believe'+ $\gamma \epsilon$ 

- (33)a. Yapi i bo wu yε nj(?i) mv Api.
  believe COMP 3S know
  'Yapi believed that 3S ('Yapi) knew Api'
  - b. Yapi *i* bɔ wu yε f mυ n*j(?i)*.
    believe COMP 2S know 3S
    'Yapi believed you knew her/him (?Yapi)'
- (34)a. Yapi *i* bɔ wu yɛ  $j_i/j$  mư Api. believe COMP 3S know 'Yapi believed that 3S (±Yapi) knew Api'
  - b. Yapi i bo wu yε f mυ oi/j.
    believe COMP 2S know 3S
    'Yapi believed you knew her/him (±Yapi)'

Àkyé 'think' + $k^{32}$ 

- (35)a. Yàpóinú bwố kố kếj hè Àpí. take.H thought COMP 3S see
  'Yàpó thought that s/he [≠Yàpó] saw Àpí'
  - b. Yàpó*i* nú bw $\acute{a}$  kó Àpí*j* hà kế*k*. take.H thought COMP see 3S 'Yàpó thought that Àpí saw 3S [ $\neq$ Yàpó]'
- (36)a. Yàpó $_i$ nú bwø kɔ́ ò $_i$  hœ Àpí. take.H thought COMP 3S see 'Yàpó thought that he [=Yàpó] saw Àpí'
  - b. Yàpó*i* nú bwá kó Àpí*j* hà ó*i*.
    take.H thought COMP see 3S
    'Yàpó thought that Àpí saw him [=Yàpó]'

The fortuitous fact that Àkyé and Àbé spell the indirect discourse COMP the same way -k –lets us restate the problem thus: why does 'think' take k in Àkyé, but 'believe' doesn't in Àbé? Of course, the problem may exist only in translation of the light verb constructions used for 'believe' and 'think' in both languages. But for now, the difference seems arbitrary – moreso because both 'think' and 'know' take indirect discourse complements in Yorùbá (with the COMP pe) as well as Ìgbo (with the COMP na or si na).<sup>33</sup>

This leads to a second puzzle for COMP-selection plus LF. Koopman and Sportiche observe that the intra-Àbé difference between 'believe'+ $\gamma \epsilon$  and 'say'+ $k_2$  disappears if the matrix subject is itself *n*. In that case, 'believe'+ $\gamma \epsilon$  acts as if it was covertly 'believe'+ $k_2$ , making the paradigm in (37) diverge from that in (33).

	Àbé <i>n</i> -subject of 'believe'+ $\gamma \varepsilon$		Àbέ <i>n</i> -subject of 'say'+k2
(37)a.	N bo wu yε n mυ Api. believe COMP 3S know 'S/he <sub>i</sub> believed that s/he <sub>i</sub> knew Api'	(38)a.	N hε kɔ n mυ Api. say COMP 3S know 'S/he <sub>i</sub> said that s/he <sub>i</sub> knew Api'
b.	N bo wu yε f mυ n. believe COMP 2S know 3S 'S/he <sub>i</sub> believed that you knew her/him <sub>i</sub> '	b.	N hε kɔ f mʊ n. say COMP 2S know 3S 'S/he <sub>i</sub> said that you knew her/him <sub>i</sub> '

Contemplating a world where operator-variable mapping is non-bijective, a single *n*-operator could serve to identify both *n*'s in each sentence in (37)-(38).<sup>34</sup> But to maintain bijection as a principle (Koopman and Sportiche 1983) means to accept that there are two *n*-operators in each of these sentences, and then we face a contradiction between (29), where  $\gamma \varepsilon$  must exclude an *n*-operator, and (37), where it cannot do so.

(37) shows that *n* has some property besides the status of a putative variable. That property, as Koopman and Sportiche recognize, is agreement. This is plausible: *n* in Abé is not just '3S', but always 'animate 3S', whereas *o* is allowed to be inanimate, *modulo* contextual factors.<sup>35</sup> However, once we appeal to an animacy feature to explain the pseudo-logophority of (37), we need to be sure that it isn't at the root of the logophoric effect in (30), and of the antilogophoricity in (29) and (33). And since animacy agreement is an

<sup>&</sup>lt;sup>32</sup>The Àkyé data in (35)-(36) were kindly provided by C. Adopo during the workshop.

<sup>&</sup>lt;sup>33</sup>On light verbs see Zribi-Hertz and Adopo (1992 fn. 12), Oyèlárăn (1994), Hale et al. (1994). On COMP see Déchaine (1994B).

<sup>&</sup>lt;sup>34</sup>Why not? Some phonologists are comfortable switching off the OCP whenever it gets in the way.

 $<sup>^{35}</sup>$ In this respect, Àbé *o* is no different from *o* in Ìgbo and Yorùbá, but Àkyé *o* is necessarily animate, cf. (39) immediately below.

independent fact in  $Ab\epsilon$ , the real question is whether operator-variable semantics at LF adds anything substantive to an analysis of logophoricity that is content to interpret inflectional features at s-structure.

Summarizing, 3S animacy agreement varies across Kwa, cf. (39). In Ìgbo, Yorubá and Àbé, *o* is always ambiguous between 's/he' and 'it' (modulo context); the same is true for the accusative 3S clitic in Yorubá which corresponds to nominative *o*. The non-*o* 3S items if Ìgbo and Yorubá (yá,  $\partial un$ ) are also unmarked for animacy, but the other 3S items in the other languages are inherently animate: Àbé *n*, Àkyé o and  $ké.^{36}$ Finally, Yorubá has 3S subject *pro*-drop with certain auxes, Àbé has general 3S subject *pro*-drop, and Àkyé drops agreement in all persons and numbers.<sup>37</sup> Crossing Kwa from west to east, there is an incrementally decreasing role for animacy agreement in 3S paradigms; and in this small sample, at least, animacy agreement implies *pro*-drop but not conversely.

	western k	Swa	eastern	Kwa	
(39)	Àkyế	Àbé	Yorùbá	Ìgbo	
animate 3S o	+	_	_	_	
animate 3S non-o	+ (kć)	+ ( <i>n</i> )	(oun)	(yá)	
φ−feature-drop	+ (optional agreement in all persons/numbers with zero tense)	+ ( <i>pro</i> -drop in 3S)	+ ( <i>pro</i> -drop in 3S with T <sup>o</sup> auxes)	-	

Considerations of agreement lead directly to a third potential problem for the LF-account, namely the existence of partial logophoric effects in the third person plural.

#### 3.4 Plural (anti)logophors

So far, discussion has been limited to the third singular. It happens that logophoric effects also occur in the third plural in at least three Kwa languages.<sup>38</sup> The occurrence of some effect in the plural may not be inconsistent with abstract Ā-binding, but it does make the LF-story less elegant, if the variable is singular.

In Yorubá à la Pulleyblank, the 3S clitic homophonously spells a pronominal and a logical variable, while the 3S non-clitic (*oun*) is a lexical pronominal. As evidence for homophony, he cites the optionality of  $\varphi$ -feature agreement in resumptive WH-contexts, assuming that a logical variable is expected there:

(40)a.	àwọn tí ó lọ 3P WH 3S go 'those who went'	(41)a.	Àwa ni a lọ. 1P COMP 1P go 'It's us who went'
b.	àwọn tí wón lọ 3P WH 3P+H go 'those who went'	b.	Àwa ni ó lọ. 1P COMP 3S go 'It's us who went'
c.	àwọn ti o ra aṣọ wọn/rẹ 3P WH 2S buy cloth 3P/3S 'those whose cloth you bought'	c.	Àwa ni o ra aṣọ wa/rẹ̀. 1P COMP 2S buy cloth 1P/3S 'It's us whose cloth you bought'

For Pulleyblank, the antilogophoric property of the 3s clitic as in (5b, 6b) is caused by condition C as applied to a variable, while the logophoric property of *oun* in (5a, 6a) has a different source: an economy

 $<sup>^{36}</sup>$ Even if the complex Mbàisén 3S items in (22) – *áyà, óhòn, àyá* – are [+animate], they are restricted to embedded contexts.

<sup>&</sup>lt;sup>37</sup>In Àkyé, pronominal agreement is zero or "optional" with a lexical subject, if tense is zero (what francophone West-Africanists call "perfective aspect" and many anglophones, following Welmers 1973, call the "factative construction"), cf. Zribi-Hertz and Adopo (1992: 71). All Àkyé examples in this paper are cited in the spoken (nonliterary) form, with zero tense. By Roberge's (1986) definition, e.g. as applied to Ìgbo by Ézè (1994), all four languages in (39) are *pro*-drop. In Àkyé and Yorùbá, the phenomenon is relative to Tense. In Yorùbá, only some auxes license 3S *pro*-drop (§2.1.1).

<sup>&</sup>lt;sup>38</sup>There are no published 3P data for Àbέ; on Àkyé, see Zribi Hertz and Adopo (1992: 79*f.*). Here I will stick to eastern Kwa.

strategy of Avoid Pronoun. However, the 3s clitic is unambiguously singular in indirect discourse, e.g. (42a) is out. This is a problem for the claim that indirect discourse o is a variable, if a diagnostic for the variable is lack of person or number agreement, because (42) is an indirect discourse context, and hence the indirect discourse operator should be fine there, giving the false expectation that a representation like (42b) is well-formed. Conversely, if the fact that (42a) is bad implies that the 3P clitic *won* as in (43a) is no variable, it is predicted to have no antilogophoric reading, and this is true: embedded *won* in (43a) is as ambiguous as its counterpart *they* in the English gloss (Bámgbósé 1986: 82; Láníran 1986: 6; Pulleyblank 1986: 51).<sup>39</sup> Nonetheless, a logophoric effect does occur with the 3P nonclitic *awon*, cf. (43b).

(42)a. *Wộn <i>i</i> wí pế ó <i>i</i> fệ ệ lọ.	(43)a.	Wộn $_i$ wí pé wộn $_i/j$ fệ ệ lọ.
3P.AGR say COMP 3S want AGR go		3P.AGR say COMP 3P.AGR want AGR go
		'They <i>i</i> said that they $i/j$ want to go'
b. $\emptyset_j[S_I W \circ n_i w i p \in [S_2 \circ j f \in i ]].$	b.	Wộn $i$ wí pé àwộn $i$ fệ ệ lọ.3P.AGR say COMP 3P.AGR want AGR go
		'They <i>i</i> said that they <i>i</i> want to go

The logophoric property of awon in (43b) is also expected by Pulleyblank (1986: 61*f*.), who derives the logophoric effect in the singular, as in (5a), from Avoid Pronoun. However, if the singular oun is not pronominal, as argued in §2.1.1, then the logophoricity of awon (43b) would be the only logophoric Avoid Pronoun effect in the language. Furthermore, it is not clear say why Avoid Pronoun induces logophoricity, i.e. why violation of this 'soft' constraint has this particular effect on interpretation.

As a fallback, one might suppose that there are two logical variables in Yorubá, singular o and plural *won*. The failure of the antilogophoric effect in (43a) could then be attributed to the interference of H-tone agreement, which is audible on *won* before a finite verb.<sup>40</sup> The strong 3P awon in (43b) would nevertheless remain distinct from the variable, so as in the singular the logophoric effect might still be due to the Avoid Pronoun strategy. But the existence of two morphologically distinct logical variables seems untenable. If the binding of variables is regulated by condition C-versus the binding of pronominals (including the clitic spellout of *pro*) comes under condition B-then presence of any agreement feature (eg. PLURAI) should vacates condition C, if agreement is part of the identification of *pro*. It is obvious, in other words, that only one member of a paradigm can be completely unspecified for agreement.

In this connection, (43a) provides a bit of independent evidence: the clitic *won* gets default H tone as an indicative subject, even though it is a clitic. This pattern is consistent with the general conditions for the appearance of default H, as studied by Oyelárán, Déchaine and others, cf. (44) - (45) from Abraham (1958):

(44)a.	Ó sọ pế kí wọn lọ. 3S say say COMP 3P go 'S/he told them to go'	(45)a.	Ó sọ pé kí {òun/òun ó/ó} lọ. 3S say say COMP 3S go 'S/he told 3S to go'
b.	Wọn (k)ò lọ. 3P NEG go 'They didn't go'	b.	(*Ó) Kò lọ. 3S NEG go 'S/he didn't go'
c.	Wộn n lọ. 3P PROG go 'They are going'	с.	Ó n lọ. 3S PROG go 'S/he is going'

3P won, unlike 3S  $\acute{o}$ , is not inherently specified with H tone. Won gets H only next to ungoverned null T, which are effectively the same contexts for obligatory  $\acute{o}$ : the contexts of default inflection. <sup>41</sup>

<sup>39</sup>I missed this empirical point, and assumed contrary-to-fact, in my 1987 paper.

<sup>&</sup>lt;sup>40</sup>Although the accusative 3P clitic *won* bears H after a non-H verb, just like the 1S, 2S, 3S and 1P accusative clitics, it differs in this respect from the 2P clitic *yin* which bears H invariantly (Abraham 1958: xxviii; Bám̃gbóșé 1965: 11). The contrast is even clearer for the genitive clitics, of which only 2P ever bears H, and this H is also invariant. All these observations are consistent with the view that *won* and all the other clitics other than 2P *yin* are underlyingly toneless (M) unless some prosodic circumstance forces a marked tone upon them, in a strong metrical position (see my other article in this volume).

 $<sup>^{41}</sup>$ The embedded null T in (45a) is presumably governed by the imperative COMP ki, which creates opacity to the matrix verb.

If the lack of an antilogophoric reading in (43a) is due to the presence of an agreement feature — in this case [number] — then this example can be compared to the Àbé sentence in (37a)., where again agreement has blocked an antilogophoric effect which could be expected on the basis of (33a). Such a comparison, however, suggests that the antilogophoric effect is based directly on the surface interpretation of overt pronominal features, rather than on a covert logical operator. The task is accordingly to ask if an s-structure analysis can account for all the patterns presented so far.

### 4 S-structure reduction

### 4.1 From C to B

Noting some of the above issues for eastern Kwa, in 1987 I sketched an analysis which can be characterized as *pronominal-only* or *s-structure only*. As the first label suggests, the idea was to treat both items of the {clitic, nonclitic} set as pronominal, as opposed to Pulleyblank's treatment of the clitic as a variable. True to the second label, there was no appeal to LF. This alternative was not neutral to the LGB binding theory, however: it required trading in the LF operator/variable pair for a pair of s-structure stipulations:

- (46)a. Indirect discourse contexts alter the governing category for Condition B computation by means of the s-structural, head-government mechanism of domain extension (cf. Kayne 1984, Koster 1987).
  - b. Domain extension (46a) doesn't affect the interpretation of a 'lexical pronoun'.

At the time, I did not defend either stipulation. The preceding discussion has already cast doubt on the idea of lexical pronoun in (46b), and the next subsection shows that the move from binding condition C to B as in (46a) cannot be isolated from other reductionist developments.

### 4.2 From B to A

Because the possible antecedents of the clitic and the nonclitic are near-complementary, logophoric effects recall the redundancy between LGB binding conditions A and B. As Bouchard (1984) argued, if the possible readings of one morpheme class are the near-complement set of the readings of another class, the two kinds of readings are not independent. Burzio (1989) went further to claim that items whose interpretation respects condition B in a descriptive sense are *defaults:* they allow a local antecedent whenever no morphological competitor (*sc.* a reflexive with suitable agreement features) is available. This relationship implies that binding condition B is epiphenomenal. Can (46a) accommodate this innovation?

First off, default pronominal inflection is old news: Benveniste (1946) observed that 3S is consistently the unmarked item in Indo-European paradigms. Agreement underspecification of a pronominal category is, to be sure, distinct from the referential underspecification of reflexives (à la Pica 1987), but the two types of economy don't conflict, and conceivably work together. If "a bound NP must be maximally underspecified" (Burzio 1989: 3), then an (inherent or argumental) reflexive is preferred in an example of local coreference; but if none is available, a pronominal *deus ex machina* arrives. Theological investment in this *deus* is least if it is a syntactic zero—say a null D—that gets spelled out for a prosodic reason like the ECP. Assuming that the pronominal clitic is blocked by a version of (46a), the appearance of 'default of the default' is perhaps inevitable in the Kwa languages, most of which lack morphological reflexives and reciprocals (cf. Awóyalé 1986). The domains of conditions A and B being identical, it is not hard to rewrite B as A. Indeed, many European and Asian languages encourage us to rewrite (46a) in this way, with their logophoric use of so-called 'indirect reflexives' (e.g. as compiled by Kuno 1977 and summarized by Clements 1979: 142-47). In this way, all available morphological evidence of logophoricity is strikingly consistent with a basic link to referential economy (binding condition A).

The LF-operator account, for its part, also needs modernizing, but how is less obvious. Despite their differences, the abstract  $\bar{A}$ -binding analyses reviewed above all claim that the non-variable item in the logophoric contrast set is a well-behaved LGB-pronominal. So if pronominals are 1990's defaults, rather than items regulated by a 1980's disjoint-reference principle (condition B), the logical variable cannot itself be a default (not, at least, if LF and PF are autonomous). Therefore the so-called variable should always be the item in the contrast set with the richer featural content, or the nonclitic item.<sup>42</sup> If, however, this implication fails for some language, then there must exist two default mechanisms for a similar-featured

<sup>&</sup>lt;sup>42</sup>Or both, the choice between featural content and clitic status depends on the set of agreement features which must be pronounced in each language. However, it is hard to imagine a case in which the two criteria could conflict.

argument (say a third singular).<sup>43</sup> Unless these two mechanisms are motivated independently, the LF analysis is just a way to have two independent defaults. The task of a theory of defaults is to maximise the congruence of s-structure and PF, but this aim is not shared by an LF-based approach. In defending an "s-structure only" (or LF-less) analysis, the goal is to remove the stipulatory character of each half of (46).

### 4.3 On (46b): blocking features

By hypothesis, domain extension increases the disjoint-reference domain of a pronominal item—in LGB terms its "governing category"—to include a matrix indirect discourse predicate and its subject. Within the extended domain, only a non-pronominal item is able to co-refer with the matrix subject, which thereby becomes the nonclitic's logophoric antecedent. The non-pronominal is not strictly anaphoric relative to this antecedent, however it is the most prominent member of an open discourse-based set.

If morphological economy is involved in the antilogophoric reading of a pronoun, any nonperson feature should suffice to block the effect, producing a seeming logophor. One blocking element is described above: the feature [animate] in Àbé n.<sup>44</sup> Blocking works differently in the other languages. In Ìgbo and Yorùbá neither the logophor nor the antilogophor is inherently animate, whereas in Àkyé both items are. By hypothesis, Yorùbá *oun* contains a predicate, entailing nonpronominal agreement. My proposal for Ìgbo is that the logophoricity of  $\gamma a$  comes from its status as the spellout of ergative case:  $\gamma a$  resists domain extension because its domain is fixed with respect to its "Case competitor" (*à la* Bittner and Hale 1994), which is the nominative governed by the local T<sup>o</sup>. Embedded nominative or (where possible) accusative remain antilogophoric, as expected. Akyé poses a different problem: unlike Yorùbá and Àbé, the Àkyé antilogophor is not the default agreement item, which is presumably the item spelled o. Referring back to (39), we see that both o and  $k\varepsilon$  have an animacy feature hence there is no default with zero feature content. Holding to the prediction that the animacy feature blocks domain extension for o, it is not surprising that o is not an antilogophor, and then we can adopt the intuition of Zribi Hert and Adopo that  $k\varepsilon$  is parasitic on o, i.e.  $k\varepsilon$  must be distinct from o in some way. The simplest option is that it is marked [non-o], and since "non-o" is essentially a default (or 'elsewhere') condition, we expect  $k\varepsilon$  to be the antilogophor, which it is.

Blocking is going to work differently in languages which don't exploit default inflection. The indirect reflexives of European and Asian languages exploit a different economy, pronominals vs. morphological reflexives, as discussed by Bouchard and Burzio. An interesting European exception is the antilogophoric clitics *en* and  $\gamma$  of French, studied by Ruwet (1990). The phenomenon is exemplified in (47) with *en*.

- (47)a. Émile<sub>*i*</sub> pense que Sophie est amoureuse de lui<sub>*i*</sub>. thinks that is infatuated.f of 3S 'Émile thinks that Sophie is in love with him'
  - b. \*Émile<sub>*i*</sub> pense que Sophie en<sub>*i*</sub> est amoureuse. thinks that of *pro* be infatuated.f.

Lack of c-command suffices to permit a 'logophoric' reading, as in (48) from Lamiroy (1990) and in (49).

- (48) Le précepteur<sub>j</sub> d' Émile<sub>i</sub> pense que Sophie en<sub>i</sub>/\*<sub>j</sub> est amoureuse.
   the teacher of thinks that of pro is infatuated.f
   'Émile's teacher thinks that Sophie is in love with him (=Émile, ≠teacher)'
- (49)a. Anne<sub>i</sub> dit à Marie<sub>j</sub> que Paul en\*<sub>i/?j</sub> est amoureux. said to that of pro is infatuated.m
  'Anne told Marie that Paul is in love with her (=Marie, ≠Anne)'
  - b. Anne<sub>i</sub> dit de Marie<sub>j</sub> que Paul en\*<sub>i/j</sub> est amoureux. said of that of.pro is infatuated.m
    'Anne said about Marie that Paul is in love with her (=Marie, ≠Anne)'

<sup>&</sup>lt;sup>43</sup>The implication is not valid in English: there is no (syntactic) clitic pronoun, and the independent pronoun (*she, he, it...*) is ambiguously also a logical variable (Evans 1980). Crucially, however, English argument pronouns are not condition A defaults (as opposed to Haitian, cf. Déchaine and Manfredi 1994), nor is there any overt logophoric contrast set in this language.

<sup>&</sup>lt;sup>44</sup>Koopman and Sportiche call the feature [human]. Historically one is tempted to link  $Ab\epsilon n$  to the nasal of Yorùbá *dun* and the Qnicha-Ìgbo (*n*)yá, but the last two are not inherently animate. I assume (with Koopman and Sportiche) that domain extension fails with  $\gamma\epsilon$ ; the weak antilogophoric effect in (33) may have an independent cause such as the D-linking of *n*.

Pica (1991) observes that the concessive adverb bien in the matrix VP weakens domain extension (51b).45

- (50)a. Chacun<sub>i</sub> veut qu'on parle de soi<sub>i</sub>. each want that one speak of self 'Everyone wants to be talked about'
- (51)a. \*Marie<sub>*i*</sub> veut qu'on  $en_i$  parle. want that of *pro* speak
  - b. <sup>?</sup>Marie<sub>i</sub> veut bien qu'on en<sub>i</sub> parle.
    want well that of *pro* speak
    'Marie doesn't mind being talked about'

The point of these examples for the notion of blocking proposed here is that domain extension and consequent antilogophoricity is not absent in French, but it is limited to precisely those pronominal clitics, *en* and *y*, which happen to lack a counterpart morphological anaphor (i.e. genitive or locative counterpart of *se*). This typological fact goes along with the Kwa patterns already mentioned to support the view that the blocking of antilogophoric domain extension is not an inherent (and hence accidental) property of certain morphemes, which could then be called "logophors" *à la* Hagège. Instead, blocking depends on the morphological paradigm as a whole, in accordance with economy considerations.

#### 4.4 On (46a): antilogophoric subjacency<sup>46</sup>

There is no room in this analysis for a logophoric mechanism *per se*, i.e. for direct coreferent-binding, whether this is achieved by discourse-role diacritics (as proposed by the functionalists) or by LF operators (as posited by Koopman and Sportiche, Zribi-Hertz and Adopo). Rather, the claim that the cause is extension of the government domain of a pronominal element entails that the binding is *anti*-logophoric, involving morphologically triggered *disjoint* reference. In this way, the blocking effect of nonperson features such as [animate] and [ergative], as argued in the preceding subsection, is indirect evidence for domain extension. This follows because blocking as in (46b) is actually formulated in terms of (46a).

A more direct argument can also be given: domain extension as a phenomenon of s-structure ought to respect subjacency, but this expectation does not hold in the LF-accounts—assuming QR is not constrained by subjacency, i.e. if we follow Nishigauchi (1986), Pesetsky (1987) and Longobardi (1991) instead of Huang (1982), Chomsky (1986) and Watanabe (1992). Of course, an LF at which subjacency holds is less distinctive from surface syntax than otherwise, so the facts in this section could alternatively be used to argue that subjacency holds at LF, rather than that logophoricity is not licensed there.

A preliminary observation, due to Stahlke (1974) among others, is simply that *wh*-subjacency holds. This is shown by the relative islands in (53) which contrast with the simplex relatives in (52):

(52)a.	ọmọ tí [ó rí mi]	b.	ọmọ tí [mo se işu fún (un)]
	child COMP 3S see 1S		child COMP 1S boil yam give 3S
	'the child who saw me'		'the child who I boiled some yam for'

- (53)a. \*omo ti [mo mò pé [ó se isu fún Adé]] child COMP IS know COMP 3S boil yam give ['the child who I know that he boiled some yam for Adé']
  - b. \* omo tí [mo mò eni tí [ó se işu fún (un)]]
     child COMP IS know person COMP 3S boil yam give 3S
     ['the child who I know the person who boiled some yam for (her/him)']

Alongside the strong islands in (53), there are weak coordinate islands as in (54). Notice that *oun* is able to escape from a weak island if it is initial in the coordinate structure, as in the well-formed (55).

(54)a. ??ọmọ tí [[Adé àti òun] rí mi]	(55)a. ọmọ tí [[òun àti Adé] rí mi]
child COMP and 3S see 1S	child COMP 3S and see 1S
'the child who Adé and s/he saw me'	'the child who s/he and Adé saw me'
b. ??iṣu tí [mo se [ẹ̀fó àti òun]]	b. iṣu tí [mo se [òun àti ệfọ́]]
yam COMP 1S boil spinach and 3S	yam COMP 1S boil 3S and spinach
'the yam that I boiled spinach and it'	'the yam that I cooked it and spinach'

<sup>45</sup>Pollock (1986) notes an antilogophoric effect with French ce, which can't refer to Pierre in *Pierre croit que c'est un linguiste*, but coreference is fine if *ce* is in an adjunct: *Pierre aimait les langues quand c'etait un linguiste*.

<sup>46</sup>The argument presented in this section was suggested by Ken Hale with reference to Ìgbo in Spring, 1994.

Now if we embed an (anti)logophor in a strong island, domain extension predicts that the effect won't occur. For one speaker, this is true, as reflected in (56) and (57). A second speaker has the judgements in (56') and (57'), which go against domain extension insofar as the strong island makes no difference.

(56)a.	Adé mọ ẹni tí [ ó wí pé [ó jó]]. know person REL 3S say that 3S dance 'Adé knows the person that said that 3S (±Adé) danced'	(56′)a. (≠Adé)
b.	Adé mọ ẹni tí [ó wí pé [òuń jó]]. know person REL 3S say that 3S dance 'Adé knows the person that said that 3S (≠Adé) danced'	b. (±Adé)
(57)a.	Adé mọ ẹni tí [ó wí pé [mo se iṣu fún un]]. know person REL 3S say that IS cook yam give 3S 'Adé knows the person that said that I cooked yam for 3S (±Adé)'	(57′)a. (≠Adé)
b.	Adé mọ ẹni tí [ó wí pé [mo se işu fún òun]]. know person REL 3S say that IS cook yam give 3S	b. (=Adé)

'Adé knows the person that said that I cooked yam for 3S (≠Adé)'

On the empirical point I defer to speaker-linguists. Provisionally, however, the non-prime judgements are significant on the grounds of *difficilior lectio potior*: while consistent with subjacency, they differ from the pattern in ordinary examples, whereas the prime judgements exactly reproduce the non-island pattern.

In Ìgbo, the corresponding judgements are sharp: antilogophoricity is blocked by a relative island:

(58)a.	Úchè i hụ-rụ [ónye ọ i/j mà-a-ra]. see-ASP person 3S know-Asp-Asp 'Úchè saw someone s/he knows'	(59)a.	*Úchè hụ-rụ [ónye ya mà-a-ra].
b.	Úchè <i>i</i> ma-a-ra [ébe ọ <i>i/j</i> nà a-gá]. know-ASP-ASP place 3S PROG NOM-go 'Úchè knows where s/he is going'	b.	*Úchè ma-a-ra [ébe ya nà a-gá].
c.	Úchè <i>i</i> ma-a-ra [mgbe ó <i>i/j</i> gà a-gá]. know-ASP-ASP time 3S FUT NOM-go 'Úchè knows when s/he is going to go'	c.	*Úchè ma-a-ra [mgbe yá gà a-gá]
d.	Úchè <i>i</i> hụ-rụ [ónye <i>j</i> [Ezé <i>k</i> sị na ó <i>j</i> má-ra mmá] ]. see-ASP person say COMP 3S V-ASP beauty 'Úchè saw the person Ézè says is handsome'	d.	*[ónyej [Ezék sì na yáj
e.	Úchè <i>i</i> hụ-rụ [ónye <i>j</i> [t <i>j</i> sị nà ó * <i>i/j/k</i> má-ra mmá]]. see-ASP person say COMP 3S V-ASP beauty 'Úchè saw the person who says s/he is handsome'	e.	[ónyej [tj sị nà yái/*j/*k

### 5. Limiting cases

As mentioned at the outset, not all Kwa languages operate logophoric systems, and not all Kwa logophors are drawn from conventionally accepted pronominal paradigms. Two cases in point are Àkán and Ève.

## 5.1 Àkán

The total absence of (anti)logophoric effects in Àkán is reported by K. K. Sáah (p.c.), cf. (59)-(60).

(59)a.	Kofi $_i$ se [ $o_{i/j}$ hu-u Ama].	(60)a.	Kofi $_i$ se [ ono $_j$ na o $_{i/j}$ hu-u no $_j$ ].
	say 3S see-ASP 'Kofi said that 3S (±Kofi) saw Ama'		say 3S COMP 3S see-ASP the 'Kofi said it's 3S (≠Kofi) that 3S (±Kofi) saw'
b.	Kofi <i>i</i> se [ Ama hu-u no <i>i/j</i> ]. say see-ASP the 'Kofi said that Ama saw 3S (±Kofi)'	b.	Kofi <i>i</i> se [ Amaj na o <i>i/j</i> hu-u no <i>i/j</i> ]. say COMP 3S see-ASP the 'Kofi said it's Ama that 3S saw/saw 3S (±Kofi)'

In terms of the above discussion, the crucial point is that animacy is marked obligatorily in Àkán: the examples with animate resumptive pronouns in the left-hand column are uniformly disinct from those in the right-hand column with inanimates. These examples also show that number agreement is restricted to animates. (All data are from Saah 1994, except for (67b) which is conjectural).

- (61)a. Hena*i* [ na o*i* hu-u Kofi (no)]? who COMP 3S see-ASP the 'Who (S) saw Kofi?'
  - b. He-fo<sub>*i*</sub> [na won<sub>*i*</sub> hu-u Kofi (no)]? who-P COMP 3P see-ASP the 'Who (P) saw Kofi?'
- (62)a. Hena*i* [ na me hu-u no*i* (no)]? who COMP Is see-ASP the the 'Who (s) did I see?'
  - b. He-fo<sub>i</sub> [na me hu-u won<sub>i</sub> (no)]? who-P COMP Is see-ASP 3P the 'Who (P) did I see?'
- (63)a. Dbaa<sub>i</sub> (no) [ na o<sub>i</sub> hu-u Kofi ]. woman the COMP 3s see-ASP '(It is) the woman who saw Kofi'
  - b. Mbaa<sub>i</sub> (no) [ na won<sub>i</sub> hu-u Kofi ].
    women the COMP 3P see-ASP '(It is) the women who saw Kofi'
- (64)a.  $Dbaa_i$  (no) [ na me hu-u noi ]. woman the COMP Is see-ASP the '(It is) the woman I saw'
  - b. Mbaa*i* (no) [ na me hu-u won*i* ].
    woman the COMP Is see-ASP 3P
    '(It is) the women I saw'

- (65) Dεn<sub>i</sub> [ na ε<sub>i</sub> yerae (no) ]?
   what COMP K be.lost the
   'What (S/P) is/are lost?'
- (66) Den*i* [ na me hu-u i*i* (no) ]?
  what COMP IS see-ASP K the
  'What (S/P) did I see?'
- (67)a. Adaka $_i$  (no) [ na  $\varepsilon_i$  yerae ]. box the COMP K belost '(It is) the box that is lost'
  - b. Ndaka<sub>i</sub> (no) [ na  $\varepsilon_i$  yerae ]. boxes the COMP K be.lost '(It is) the boxes that are lost'
- (68)a. Adaka $_i$  (no) [ na me hu-u  $i_i$ ]. box the COMP IS see-ASP K '(It is) the box I saw'
  - b. Ndaka*i* (no) [ na me hu-u i*i*]. boxes the COMP IS see-ASP K '(It is) the boxes I saw'

In other words, default agreement is never available for animates in this language, so domain extension (46) is always blocked, hence no logophoric effect is ever available.

## 5.2 Èvè

Clements (1979) amplified Westermann's (1907) description of the Èvè 'logophor' yè, illustrated in (69b).

(69)a.	Kofi $_i$ be $e_j$ dzo.	b.	Kofi <sub>i</sub> be yè <sub>i</sub> dzo.
	say 3S leave		say 3S leave
	'Kofi <sub>i</sub> said s/he <sub>i</sub> left'		'Kofi <sub>i</sub> said he <sub>i</sub> left'

The question is whether ye has any relation to the rest of Eve's pronominal system. Clements (1979 and p.c.) answers negatively; however, as he notes, there is a "strong (independent)" 3S form ye or yi (with H tone), found in nonclitic positions. Thus the whole problem turns on the L tone of the 'logophor'. Now if we suppose that the H tone of the default 3S item—the antilogophor e—is syntactic rather than inherent, then the L tone of ye is simply the absence of default H, and Eve reduces to Yorubá.

### 6. Summary

I have sought to update the domain-extension analysis of antilogophoric effects across Kwa first presented in Manfredi (1987) in terms of default inflection as SPELLOUT, and of relativized minimality. A secondary aim has been to sharpen the contrast between this account—based in s-structure considerations—and several recent analyses which tie logophoricity to LF. However these issues are ultimately resolved, the result will be welcome to the author, so long as Kwa facts help decide a general UG proposition: the architecture of grammatical representation and the interplay of fonosyntax, morphology and semantics.

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<sup>&</sup>lt;sup>47</sup>This article and two others printed in the same issue of the journal—an issue which is copyrighted "1979", but with the cover date "1975"—refer to items with 1977 publication dates.

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