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Anti-logophoricity as Domain Extension in Ìgbo and Yorùbá*

Victor Manfredi
Harvard University

Robert G. Armstrong in memoriam

1. Logophoricity and binding

This paper examines logophoricity in the pronominal systems of Ìgbo and Yorùbá, eastern Kwa languages with significant syntactic differences but residual phonetic and morphological similarity. An analysis which captures both the differences and similarities would illuminate the syntactic typology of Kwa, both internally (e.g. vs. Àbɛ — representing western Kwa — cf. Koopman and Sportiche 1987) and in comparison with the rich agreement systems of Benue-Congo.

Logophoricity, along with other "perspectival" phenomena, has been brought to bear on binding theory by Kuno (1972, 1987), and on semantic theory by Sells 1986. I propose to explain the logophoric effects found in Ìgbo and Yorùbá in terms of binding theory, by combining two innovations: Roberge's (1986) recoverability-based account of the clitic licensing of small *pro*, and the notion of percolation projection/extended locality domain as developed by Kayne 1984, Koster 1987. My proposal is empirically superior to Pulleyblank's (1986) analysis of Yorùbá antilogophoric clitics as operator-bound variables, as described in section 3. And the same framework carries over directly to Ìgbo, enabling the difference in logophoricity phenomena between these languages to be captured in an independently needed parameter concerning Case assignment (cf. section 4).

In logophoric constructions, the subject (Source) argument of a matrix verb of speaking is the obligatory antecedent of a given embedded, nonreferential expression, which in most cases has the phonetic shape of a pronoun or a reflexive. Logophoricity resolves certain ambiguities in indirect discourse. For example, in the English sentence *Mary told Sue she was exploited*, the pronoun *she* is three-ways ambiguous: between *Mary*, *Sue* and some third female person identified in the preceding discourse. In other languages, the ambiguity is partially resolved by rendering this sentence in two constructions, logophoric and nonlogophoric. The logophoric construction, in the simplest case, would have the pattern of interpretation *Mary*$_i$ *told Sue*$_j$ *she*$_{i/*j,*k}$ *was exploited*, such that the element which translates *she* is obligatorily bound by the matrix subject. In the nonlogophoric construction, *she* takes the complementary range of reference, being interpreted as disjoint with *Mary* but otherwise free, i.e. potentially coreferent with the entities identified by the indices {j, k}[1]

There are different ways to characterise the complementarity of the logophoric vs. nonlogophoric sets of indices, in this example {i/*j,*k} vs. {j, k/*i}. One idea might be to exploit the complementarity of Conditions A and B (Chomsky 1981). Although this move is possible in languages where the logophor is morphologically reflexive (e,g, *zibun* the Japanese "long-distance reflexive"), it does not work in Ìgbo and Yorùbá, where both the logophoric and the nonlogophoric expressions are morphologically pronominal (respectively a lexical pronoun and a pronominal clitic). Alternatively, a covert distinction could be introduced between ordinary pronouns and a special entities, call them "logophoric pronouns". Still another possibility is to directly encode discourse function in lexical representations, for example a feature [± logo]. But it is prudent to suppose that

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[1]In some languages, matrix verbs of hearing select the nonsubject (Goal) argument as logophoric antecedent, e.g.: *Mary*$_i$ *heard from Sue*$_j$ *that she*$_{j/*i,*k}$ *was exploited.* Significantly, this is not the case in every language with logophoric constructions.

the language learner makes full use of the available morphological information, so that, even in logophoric constructions *a pronoun is a pronoun is a pronoun*. In the languages to be discussed, logophoric expressions are exclusively drawn from the class of so-called 'independent' pronouns, while the non-(or anti-)logophors are always pronominal clitics. If any binding properties are involved in logophoric constructions, and if logophors have the shape of pronouns, perhaps the learner will not treat this as an accident.

In fact, the anaphor/pronominal distinction need not enshrine a direct correspondence between morphology and binding domains. Bouchard (1984: 128) revises the Avoid Pronoun principle of Chomsky 1981 as an "elsewhere condition" between pronominal and anaphoric elements. It can be paraphrased: a pronoun which appears where an anaphor is possible (*n.b.* the Agr↔**pro** relation counts as anaphoric — Bouchard 1984: 38) is interpreted as [+ Bound] in that anaphoric domain.[2]

This condition explains two classes of data which show an asymmetrical distribution between morphological pronouns and reflexives — which Avoid Pronoun by itself says nothing about. In constructions where the domain complementarity of Conditions A and B breaks down, it is only in one direction. On pragmatic grounds (Zribi-Hertz 1980: 161), morphological pronouns may appear in certain contexts where binding structurally requires an anaphoric element: *Hugo*$_i$ *est content de lui*(*-même*)$_i$ 'Hugo is satisfied with himself'. But there are no corresponding examples of morphological reflexives appearing in [– Bound] contexts. Similarly, if the anaphoric WH-variable is lexicalized by Case spellout (an option permitted in popular varieties of French), a resumptive element appears which, though [+ Bound], nevertheless has the form of a pronoun: [$_{NP}$ *le gars*$_i$ [$_{CP}$ *t*$_i$ [$_{\bar{C}}$ *que* [$_{IP}$ *je pense à lui*$_i$]]]] 'the guy that I think about [him]', cf. the null variable bound by the Case-marked, WH-operator in SPEC/CP as required in literary French: [$_{NP}$ *le gars*$_i$ [$_{CP}$ *à qui*$_i$ [$_{\bar{C}}$ ∅ [$_{IP}$ *je pense* x$_i$]]]].

What prevents this result from applying directly to the appearance of [+ Bound] lexical pronouns in logophoric constructions, is the fact in the Kwa languages both the logophor and the antilogophor are morphological pronouns, i.e. [– anaphoric]. This means that logophoric constructions in these languages are not examples of a pronoun spellout occurring in the Condition A domain, rather the antilogophoric constructions are examples of Condition B applying in a wider domain than expected. Nevertheless, an elsewhere condition is involved, because the set of possible antecedents for the logophoric, lexical pronoun is, for a given domain, the complement of that for the antilogophoric pronominal clitic.

Put another way: if the logophoric pronoun and antilogophoric clitic are both morphologically pronominal, then Condition B is the relevant interpretive principle for both. On this assumption, the only way to account for the complementarity of interpretation just described is to assume that the local domain to which Condition B refers (i.e. "governing category") is *extended* just for the antilogophoric expression so as to include the logophoric antecedent, from which it then becomes referentially free. Schematically, extending the binding domain of the clitic in (1a) from α to β, induces an effect of "antilogophoricity" with respect to the next higher subject NP$_i$. The independent pronoun is then logophoric (i.e. [+ Bound]) in β by default, along the lines suggested by Bouchard.

1a. [$_\beta$ NP$_i$ said that [$_\alpha$ clitic$_j$ VP]] — Condition B domain of *clitic* = β (extended domain → antilogophoric effect)

b. [$_\beta$ NP$_i$ said that [$_\alpha$ pronoun$_i$ VP]] — Elsewhere condition: *pronoun* must be bound in β (default interpretation → logophoric effect)

Under this general approach, and contrary to most of the literature, there is nothing special about logophoric pronouns, rather it is the antilogophoric clitic — and its extended locality — which requires explanation. To elevate this idea to a hypothesis, it is necessary to predict independent consequences of the domain extension, which follow without additional stipulation, and determine if they in fact occur. My claim here is that domain extension alone accounts for logophoricity effects in these two related languages, while preserving independent, parametric differences in their binding systems.

That logophoric phenomena are byproducts of binding theory, given the appropriate formulation of domain, can be called the configurational hypothesis. Kuno 1987, on the other hand, denies that binding theory is primarily a matter of domain; rather, for him, domain effects arise indirectly from functional

[2]Cf. Kuno's 1972 proposal that "surface non-nominative pronouns are ambiguous between [- reflexive] and [+ reflexive]" (Kuno 1987: 280).

principles. Despite this difference, Kuno's view shares with the configurational hypothesis an appeal to economy: either functional phenomena receive a configurational explanation, or vice-versa, but the two are not independent. A third view is possible: Clements 1979 claims that Èvè logophors are morphologically (i.e. lexically) distinct from pronouns; accordingly, their referential values are computed independently of the binding conditions, presumably on the basis of direct functional marking in the lexical entry of coreference with the speaker θ-role. But this view is questionable to the extent that the logophors morphologically resemble extant pronouns. The possibility of underanalysis must be excluded, otherwise a feature [± logo] would be purely diacritic.

The Èvè logophors yè '3sg' and yèwó '3pl' differ minimally from the pronouns yé '3sg' and wó '3pl'. If "pronouns are pronouns" then either the apparent morphological relationships are illusory; or else the minimal assumption is that the Èvè learner computes logophoric effects from a baseline of binding theory. The logophor yè is not used in bound variable examples like *John*$_i$ *saw the person who criticized him*$_i$ (G. N. Clements, personal communication). As John Whitman has pointed out to me, this leaves the hypothesis that the core phenomenon is pronoun binding.

Before turning to Kwa, I will briefly review Kuno's account of logophoricity in English.

1.1 English

Kuno (1972; 1987: 109, 147ff.) describes a functional restriction on English pronoun binding that supplements (and, ultimately, replaces) structurally-based binding conditions by ruling out certain cases of coindexing, as follows: full NPs in logophoric complements are prevented from coindexing with [+logo] pronouns in the main clause, even when this would be otherwise allowed. This accounts for (2):

2a. That he$_i$ was the best boxer in the world was repeatedly claimed by Ali$_i$.

b. ??That Ali$_i$ was the best boxer in the world was repeatedly claimed by him$_i$.

Under widely held assumptions, coreference of *him* with *Ali* in (2b) should normally not violate condition B. This is because the 'covert reflexive' seen in sentences like (3) is independently possible.

3. John$_i$ saw a snake near him$_{i,j}$.

And because *Ali* in (2b) is neither c-commanded nor preceded by *him*, the marginality of that sentence is not due to condition C. Kuno explains the contrast in (2) with reference to the corresponding "direct discourse representations" in (4).

4a. "I$_i$ am the best boxer in the world," Ali$_i$ repeatedly claimed.

b. *"Ali$_i$ is the best boxer in the world," he$_i$ repeatedly claimed.

Kuno's antilogophoric condition marks (2b) as marginal because (4b) is not a possible direct discourse.

In the same vein, consider the reversal of potential binders between (5a-b), in relation to the direct discourse versions in (6), where parallel — albeit stronger — judgements obtain:

5a. John$_i$ said to Bill$_j$ that there was a picture of himself$_i$/*$_j$ in the post office.[3]

b. John$_i$ heard from Bill$_j$ that there was a picture of himself$_j$/??$_i$ in the post office.

6a. John$_i$ said to Bill$_j$, "There is a picture of me$_i$/*$_j$ in the post office."

b. John$_i$ heard from Bill$_j$, "There is a picture of me$_j$/*$_i$ in the post office."

Despite the general preference for subjects as antecedents of reflexives, the preferred antecedent of *himself* in (5b) is *Bill*. This implies that what causes the binding domain to extend outside the picture NP is not a subject opacity condition, but a domain extension of Condition A from a logophoric complement to a speaker/Source antecedent (Kuno 1987: 96, 126).

2. Kwa binding domains

Even without logophoricity to contend with, Kwa pronominal systems would be challenging to standard binding theory because these languages have essentially no lexical anaphors comparable to English

[3]The special reading, under which the picture is a self-portrait taken by John or Bill respectively, is excluded here by the phrase *in the post office*.

herself/*himself* etc.[4] This puts the relevance of Condition A, as an autonomous principle of grammar, into question. Instead, anaphors (which, in Kwa, ambiguously translate both reciprocals and reflexives) are phrasal, of the form [X's N], where X is pronominal and N is a referentially defective lexical item which independently denotes some inalienable possession (typically, 'head' or 'body', cf. Awóyalé 1983). Similar facts in Haitian, a language with many resemblances to the Kwa family, suggest that condition A effects are derived — in this language type, and perhaps more generally — by what could be called 'domain contraction' of condition B by phrasal anaphors.[5]

The parametric absence of condition A in Kwa would have many consequences which can only be glimpsed at present. Although the matter lies outside the present discussion, it is interesting to note that, following Koster's 1987 account of long-distance reflexives, Kwa anaphors would be correctly ruled out from the class of potential logophors for the same reason that other 'phrasal' or morphologically complex anaphors (like Dutch *zichzelf*) do not extend their domains. For the present, I will leave anaphors out of the picture, although it should be kept in mind that domain extension and domain contraction are two sides of the same coin: syntactically induced transparency/opacity. Opacity (domain contraction) is induced by a nonreferential phrasal head. What about the mechanism of transparency (domain extension)?

It has long been observed that most complementizers in Kwa languages are diachronically derived from — if not synchronically homophonous with — verbs of speaking. Clements 1979, following Westermann, makes this point about be 'say', the Èvè indirect discourse complementizer. Further examples are found throughout sections 3-4 below. Informally, the latent thematic structure of a 'say' complementizer might be the 'escape hatch' through which domain extension occurs. This bridging of binding domains would actually be expected, if binding were computed directly from thematic structure à la Williams (1987a-b). A roughly equivalent idea about logophoric Comp is developed by Koopman and Sportiche 1987 in terms of the theory of control. But it happens that Comp is not present in all logophoric constructions: as will be seen below, pé (the 'say' Comp in Yorùbá) is always zero when the main 'say' verb is ní, and it is strictly optional after other 'say' verbs such as wí. In Ìgbo, the factive Comp nà is optional after all 'say' verbs. In both languages, if the matrix verb is one of metaphorical speech (e.g. 'think'), the Comp is obligatory. This suggests that the logophoric effect is not triggered by a particular Comp, but by any embedding category with the thematic content of *speech*.

Across Kwa, the morphemes involved in logophoricity contrasts, whether clitics or independent (N^0) pronouns, are virtually all cognate; the clitics are distantly related to Bantu AGR affixes. The '3sg' set includes ọ́ (Àbẹ), ó (Yorùbá), ó/ọ́ (Ìgbo) as clitics; ǹ (Àbẹ), yé (Èvè), (n)yá (Ìgbo) as independent pronouns. For '3pl': wó (Èvè), (à)wọn (Yorùbá), wẹ̀ (Ágbọ̀), nwó (Òníchа Ìgbo), wọ́/wọ́ (Ẹ́hugbò Ìgbo). The question then is whether related morphemes have parallel binding properties; and, if they differ, are these differences random?

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[4]An exception is the Ìgbo morpheme nwà/nwá. Although nwà is a bound form in the emphatic reflexive yá nwà '3sg. self', nwá appears as an unemphatic, independent form in the Ágbọ̀ dialect. As shown by the free form ènwé in Ụ́kụàlị, nwá is probably congnate to ònwé, the head morpheme of the phrasal anaphor of the standard language. Bound morphemes like nwà/ònwé — like their counterparts meaning 'head' and 'body' in many languages of the world — are noun classifiers (or specifiers, in the sense of Rinehart 1987) which induce opaque binding domains. In fact, nwá 'child' occurs nonreferentially, i.e. as a classifier, in expressions like nwá Bèkéè 'white person'.

i. Ò$_i$ mé nwá$_i$. 'S/he did her/himself [in]' (Ágbọ̀)
3sg do self

ii. Ìyá$_i$ mè-re enwé$_i$. 'S/he did her/himself [in]' (Ụ́kụàlị)
3sg do-rV self

iii. Ó$_i$ mè-re [ònwé yá]$_i$. 'S/he did her/himself [in]' (Standard Ìgbo)
3sg do-rV self 3sg

iv. Ó$_i$ mè-re *yá nwà*$_i$. 'S/he did *her/himself* [in]' (Standard Ìgbo, contrastive stress)
3sg do-rV 3sg self

[5]Haitian phrasal anaphors, like those of Yorùbá, are generally ambiguous between referential-literal and nonreferential-anaphoric readings ('his body' vs. 'himself'). A theta-driven binding theory might explain the correlation of domain contraction with the nonreferential reading.

In Ìgbo and Yorùbá, at least, the following picture obtains: logophoricity effects emerge from a contrast between clitics and N^0 pronouns, with the latter receiving logophoric readings in the relevant contexts. That is, clitics are antilogophoric wherever the contrast is relevant. What makes this interesting for the problem of relating configurationality to functional constraints is the fact that, in each language, the clitic/N^0 opposition is not restricted to logophoricity but has other syntactic determinants. The proverbial "best theory" would establish the distribution of the two sets of elements in each language apart from logophoricity, and derive the slightly different logophoric effects in each language by one mechanism — without ignoring that these elements possess specific binding properties. In terms of learnability, it seems plausible that the referential values of these elements in matrix clauses are cognitively prior to their values when embedded logophorically, so that the latter would be analytically based on the former. This, at any rate, is the structure of my argument.

The first problem is to account for the clitic/N^0 contrast, independent of logophoricity. There is every reason to assume that clitics are coindexed with small **pro**, subject to condition B, in matrix sentences. Turning to the functions of these elements in indirect discourse, the null hypothesis is that the clitics are 'antilogophoric' as a result of extending their Condition B domain to include an 'accessible' NP of a [+logo] matrix clause. (Accessibility is defined in section 3.) Independent pronouns would then receive logophoric readings, coindexed with these [+ logo] controllers, perhaps by default. Depending on the language, the motivation for this default might differ.

"Clitic = small **pro**" is not proposed in current studies of logophoricity in Kwa. Empty operator-null variable chains are appealed to, both by Pulleyblank 1986 for Yorùbá and by Koopman and Sportiche 1987 for Àbɛ, in their very similar accounts of antilogophoric clitics. Section 3 raises empirical problems with the variable analysis in Yorùbá; there are also theoretical objections.

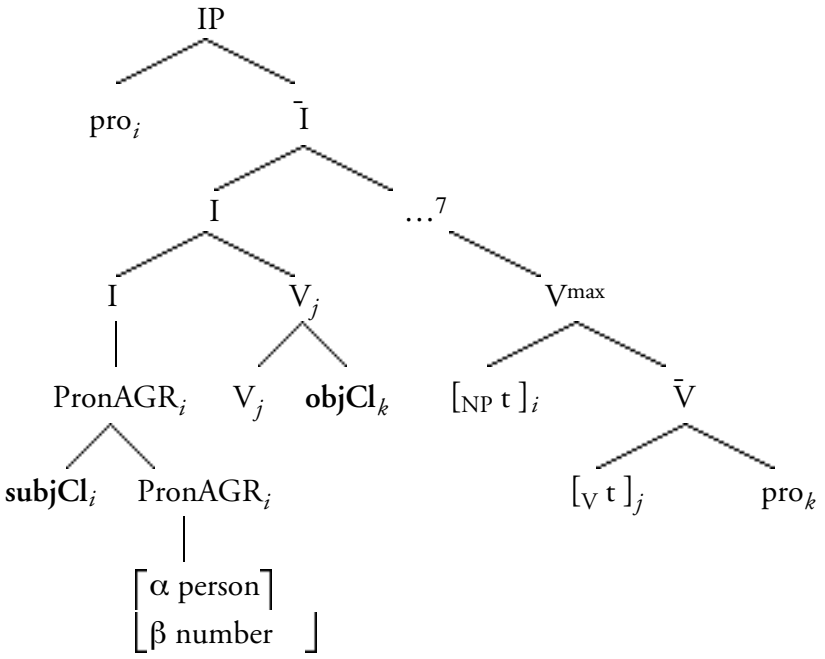
In reviewing current studies of clitics, both Roberge 1986 and Whitman 1987 argue that empty operator-null variable chains should be restricted to so-called null argument languages like Mandarin, which entirely lack φ-feature agreement and yet license empty argument positions, so that these arguments are recoverable *only* from discourse. Null argumenthood is exemplified in a sentence like *You saw* x, where x is null and topic-bound, and there are no AGR features. An example of a true antilogophoric variable, in their terms, would be *Mary said that you saw* x, where x has no AGR spellout and is disjoint in reference from *Mary*. The Romance languages, by contrast, do not have unrecoverable null-arguments: agreement features always appear, either directly on the verb or as a clitic (apart from null complement phemonena which create intransitives, like *John ate*). As Roberge shows, syntactic properties of **pro**-drop vary within Romance according to the richness of AGR.[6]

Topic-bound null arguments of the Mandarin type are unattested in Benue-Kwa languages. In general, Kwa clitics and pronouns agree with their antecedents in person and number (gender and animacy are not indicated in the morphology). Object agreement on the verb is completely absent in Kwa, and subject agreement in Infl is quite abstract, lacking person and number features. Compared with the obligatory noun class concord in (distantly related) Benue-Congo, Kwa noun class and concord morphology is only vestigial (cf. Welmers 1973). The AGR portion of Kwa INFL is maximally unspecified — which is interesting in light of the fact that Kwa languages by-and-large lack tense morphemes (i.e. with unambiguous temporal reference).

If, parametrically in Kwa, Tense = Ø and AGR is restricted to pronominal antecedents, Roberge's (1986: 198) representation of subject and object clitics in Romance can be modified for Kwa as follows:

[6]Cf. also Guerssel's 1987 discussion of Berber.

5.



In (5), V-to-I movement has taken place. The subject clitic (subjCl), governed by its antecedent, is indirectly licensed by the featural content of pronominal agreement (PronAGR); the object clitic is directly licensed by the empty category it governs (before head movement of the verb).

3. Yorùbá

Pulleyblank 1986 convincingly identifies the Yorùbá independent or 'strong' pronouns (e.g. òun '3sg', àwọn '3pl') as N^0 pronouns, and the 'weak' pronouns (ó '3sg', wọn '3pl') as clitics. The respective genitive clitics are rẹ̀ '3sg', wọn '3pl', and the object clitics -V '3sg', wọn '3pl'.

He further proposes that all the clitics except 3sg govern **pro**, while 3sg governs a null variable (cf. Huang 1984). Because variables are not licensed by agreement, this would account for the failure of the 3sg clitic to show obligatory number agreement in subject or possessor positions with overt A-bar antecedents. But the fact that all clitics including 3sg show number agreement in all other contexts, including direct object A-bar chains, remains puzzling for this view. This proposal introduces an unfortunate nonparallelism between the 3sg and 3pl clitics, which is falsified by even very elementary facts; and there is no way to fix this problem by claiming that the 3pl clitic also governs a variable, since then two null variables, bound by empty operators, would paradoxically have to be distinguished in terms of φ-feature agreement — a purely diacritic use of radical underspecification.

Finally, even restricting attention to the 3sg clitic, the attempt to represent its antilogophoricity as variable binding at LF incorrectly excludes certain possible nonlogophoric antecedents which intervene between the empty operator and the variable. Thus, Pulleyblank's proposal is both unmotivated and empirically unsuccessful. The alternative, which follows from the concept of domain extension, treats both 3sg and 3pl clitics as pronominal, and makes correct predictions for intervening, nonlogophoric antecedents. The isolated failure of number agreement, from which Pulleyblank's proposal takes comfort, is shown to have an independent explanation in terms of Case assignment.

Consider, first, matrix A-positions: only clitics can appear there:

[7]To simplify, the phrasal projection of Aspect is omitted. In the Kwa languages, Aspect functions as the specifier of the verb projection, in the sense developed by Fukui 1986.

6a. Ó rí Tọ́lá.[8] '(S)he saw Tọla'
3sg see

b. Wọ́n rí Tọ́lá. 'They saw Tọla'
3pl see

c. *Òun/Àwọ́n rí Tọ́lá.
3sg 3pl see

d. Tọ́lá rí (i). 'Tọla saw her/him/it'
see 3sg

e. Tọ́lá rí wọn. 'Tọla saw them'
see 3pl

f. *Tọ́lá rí òun/àwọn.
see 3sg 3pl

As in (6d), the 3sg object clitic — a copy of the nontonal features of the final vowel of the verb — is optional after a monosyllabic H tone verb. Since this "object deletion" is phonologically conditioned, it has no bearing on null argumenthood, although it is relevant to Accusative Case spellout.

If ó identifies a variable and not small **pro** then, just as in Mandarin, ó constructions involve null arguments, not empty categories; but this contradicts the fact in (6a,d) that they are licensed by person/number features. It might be argued that ó is unambiguously '3sg' even though not licensed by a φ-feature bundle, since this content can always be recovered by default from the absence of the other clitics with their specific feature contents. This would amount to a kind of underspecification in the pronominal system, reminiscent of "signe zéro" in structuralist analyses. If, on the other hand, ó governs **pro**, its φ-feature licensing in (6) is no surprise. Either way, a version of the Avoid Pronoun principle (possibly in the more general form proposed by Bouchard) must be posited, so as to rule out (6c,f).

Lexical (or 'strong') pronouns are required in A-bar positions, as in the focus construction:

7a. $[_{CP}$ Òun$_i$ ni $[_{IP}$ ó$_i$ wá]]. 'It is (s)he that came'
3sg FOC 3sg come

b. $[_{CP}$ Òun$_i$ ni $[_{IP}$ Tọ́lá rí [t]$_i$]]. 'It is her/him/it that Tọla saw'
3sg FOC see

c. $[_{CP}$ Òun$_i$ ni $[_{IP}$ Tọ́lá rí ìyá rẹ̀$_i$]]. 'It is (s)he whose mother Tọla saw…'
3sg FOC see mother 3sg

This requirement may be explained by Sopé Oyèláràn's observation (p. c.) that the strong pronouns are inherently deictic, since deixis and focus probably share a semantic property.

The obligatory Nominative and Genitive clitics in (7a,c) are resumptive; this ECP effect is paralleled in the Kru languages, cf. Koopman 1984. Interestingly, as Pulleyblank observes, while these resumptives may show agreement with a plural antecedent, agreement is not necessary:

8a. $[_{NP}$ àwọn$_i$ $[_{CP}$ t$_i$ tí $[_{IP}$ wọ́n$_i$ / ó$_i$ wá]]] … 'those who came…'
3pl REL 3pl 3sg come

b. $[_{NP}$ àwọn$_i$ $[_{CP}$ t$_i$ tí $[_{IP}$ Tọ́lá rí ìyá wọn$_i$ / rẹ̀$_i$]]] … 'those whose mother Tọla saw…'
3pl REL see mother 3pl 3sg

Pulleyblank appeals to the lack of obligatory agreement on resumptive clitics in A-bar chains, to support the broader claim that the 3sg clitic *always* governs a variable, and not **pro**. But resumptive agreement is not always optional. WH-type dependencies like (7-8) are not the only contexts where resumptives are found, and, as Sopé Oyèláràn has pointed out to me, the resumptive clitics which must follow subject relatives show obligatory number agreement:

[8]Data are cited orthographically, with the addition of referential indexes where necessary. Yorùbá examples, including those cited from Pulleyblank 1986, are drawn from the standard language.

9a. [NP Àwọn$_i$ [CP t$_i$ tí [IP Tọ́lá rí [t]$_i$]]], wọ́n$_i$ já'de. 'Those who Tọla saw, left'
3pl REL see 3pl exit

b. *[NP Àwọn$_i$ [CP t$_i$ tí [IP Tọ́lá rí [t]$_i$]]], ó$_i$ já'de.
3pl REL see 3sg exit

To cover all the facts so far, it might be suggested that the 3sg clitic is actually homophonous between two distinct categories, variable and **pro**. That is, in terms of Sportiche's (1986) approach to lexicalization, these two categories, while structurally distinct, could conceivably be lexicalized together in some languages. But even then, the question would remain how to predict when number agreement actually occurs. The purported variable shows obligatory agreement in (9) but not in (8), so there is no bijective correspondence between the values [α variable] and [–α AGR]. To save the story, the type of derivation of the variable would have to be taken into account: a resumptive variable being [– AGR] only when its operator is local — i.e. in (7-8) but not in (9). But this condition would completely divorce agreement from clitic licensing such that, if some 3sg clitics are instances of a variable, variable and **pro** are essentially merged, leading back to the original problem posed by matrix clitics which are clearly licensed by AGR, cf. (6).

This negative result leaves two logical possibilities: either the 3sg clitic always governs a variable, leaving (6) unexplained; or else it always governs **pro**. On the latter assumption, something must be said about the failure of number agreement in (8). This phenomenon, diachronically related to the loss of Benue-Kwa concord morphology, is widespread in Kwa.[9] As to its synchronic status, my best guess is that default singular agreement is restricted to nominative/genitive A-bar chains because the singular clitic is really the spellout of NomAGR/GenCase in these island contexts. It seems reasonable to think that the φ-features of an antecedent would be inaccessible to an AGR/Case morpheme in an island. This hypothesis would still predict the obligatory number agreement in (9), because although the plural clitic is in subject position, the antecedent is directly adjacent.

Now consider the logophoricity effect of the clitic/pronoun contrast in embedded subject position:

10a. Olú$_i$ wí (pé) [ó$_{j/*i}$ wá]. 'Olu said that (s)he [someone else] came'
say Comp 3sg come

b. Olú$_i$ wí (pé) [òun$_{i/*j}$ wá]. 'Olu said that he [himself] came'

11a. Àwọ́n$_i$ ní [wọ́n$_{j/*i}$ wá]. 'They said they [others] came'
3pl say 3pl come

b. Àwọ́n$_i$ ní [àwọ́n$_{i/*j}$ wá]. 'They said they [themselves] came'

(*N.b.* ni 'FOC' ≠ ní 'say'. Unlike the synonymous wí, ní does not take the indirect discourse complementizer pé. The logophoric effects are independent of which 'say' verb occurs.)

The 3sg referential patterns in (10) follow either if the 3sg clitic governs **pro**, or if it identifies a logical variable. If it is **pro**, and **pro**'s locality domain as defined by binding Condition B is extended to include the Source (accessible Subject) argument of a logophoric matrix clause, then by Bouchard's elsewhere condition the lexical pronoun òun will be [+ Bound] by the matrix subject. If, on the other hand, the 3sg clitic represents a logical variable, it must be free in its maximal scopal domain (Condition C), which includes the logophoric subject; but the lexical pronoun remains.

The Condition B account of 3pl logophoricity in (11) works in exactly the same way as for the 3sg. But it is not clear how Condition C account can say anything about (11), since Pulleyblank explicitly states that "[i]n all but the third singular case, the interpretation of the empty category is purely pronominal" (1986: 51). This means that the 3pl clitic wọn is pronominal for Pulleyblank, leaving him no way to account for the logophoric effect in the plural (he accordingly does not mention these data).

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[9]Émènanjọ 1978 observes a failure of subject clitics to show number agreement with a left dislocated, topic binder, in some Ìgbo dialects (cf. i), versus obligatory agreement in the standard language (cf. ii):

i. Ńne gị́ nà ńnà gị́, ọ dị ńmá? 'Your mother and father, they're fine?'
mother 2sg and father 2sg 3sg+Q BE goodness

ii. Ńne gị́ nà ńnà gị́, hà dị ńmá? 'Your mother and father, they're fine?' (Standard)
3pl+Q

The two hypotheses can be compared over a fuller range of facts. We can ask whether the domain of logophoric antecedents is based purely on c-command, as the variable hypothesis would predict, or a more specific structural relation such as government, in accordance with pronominal domain extension.

(12a) shows that, to be included in the condition B domain of the clitic, an NP must meet two conditions, which for descriptive purposes can be treated as separate: locality and accessibility. These two conditions receive a unified treatment in the domain extension framework: an accessible NP is one directly connected to the extended domain, namely the "dynasty" of governors which includes the governor of the pronoun (cf. Kayne 1984, Koster 1987). While the clitic's extended condition B domain is equal to β, not every NP within this domain is accessible, i.e. is "part" of the extended domain. *Olu*, which is lexically governed by *mother*, is inaccessible to domain extension, insofar as extension respects thematic connectedness. Therefore, in (12a) *Olu* is a possible antecedent of ó, while *mother* is not. Condition C will not get the same result: if ó stands for a variable, controlled by an empty operator at the beginning of the sentence, this variable should be *Olu*-free, because *Olu* occurs in the Condition C domain between the operator and its variable — yet the fact is that ó is not *Olu*-free.

12a. [β [Ìyá$_i$ Olú$_j$]$_j$ ní [α ó$_{j,k/*i}$ wá]]. 'Olu's mother said (s)he [not Olu's mother] came'
mother say 3sg come

b. [β [Ìyá$_i$ Olú$_j$]$_j$ ní [α òún$_{i/*j,*k}$ wá]]. 'Olu's mother said she [herself] came'

For (12b), the elsewhere condition correctly predicts that the referential range of the pronoun is the strict complement of the clitic's range: òun must be bound within the same domain where ó must be free.

Another issue concerns the maximum size of the domain which can contain a logophoric antecedent. The data in (13) and (14), which are repeated here from Pulleyblank (1986: 62) but which I believe to be slightly but crucially inaccurate, would require that the domain in which ó is free includes all arguments which intervene between ó and the purported sentence-initial empty operator:

13a. ∅$_m$ [Dúpẹ́$_i$ rò pé Ṣẹ́gun$_j$ sọ pé Tolú$_k$ rò pé ó$_{m/*i,*j,*k}$ wá].
think Comp say Comp think Comp 3sg come
'Dupẹ thought that Ṣẹgun said that Tolu thought that (s)he [someone else] came'

b. ∅$_m$ [Dúpẹ́$_i$ rò pé Ṣẹ́gun$_j$ sọ pé Tolú$_k$ rò pé òun$_{i,j,k/*m}$ wá].
'Dupẹ thought that Tolu said that Ṣẹgun thought that (s)he [any of them] came'

14a. ∅$_m$ [Dúpẹ́$_i$ rò pé Ṣẹ́gun$_j$ sọ fún Tolú$_k$ pé ó$_{m/*i,*j,*k}$ wá].
think Comp say to Comp 3sg come
'Dupẹ thought that Ṣẹgun told Tolu that (s)he [someone else] came'

b. ∅$_m$ [Dúpẹ́$_i$ rò pé Ṣẹ́gun$_j$ sọ fún Tolú$_k$ pé òun$_{i,j/*k,*m}$ wá].
'Dupẹ thought that Ṣẹgun told Tolu that (s)he [Dupẹ or Ṣẹgun] came'

Actually, the potential reference of the clitic ó is wider than what Puleyblank reports in (13a) and (14a). First, take an example with just two potential logophoric antecedents:

15a. Olú$_i$ sọ (pé) Merí$_j$ wí (pé) ó$_{i,k/*j}$ wá.
say Comp say Comp 3sg come
'Olu said that Mary said that (s)he [not Mary] came'

b. Olú$_i$ sọ (pé) Merí$_j$ wí (pé) òun$_{i,j/*k}$ wá.
'Olu said that Mary said that (s)he [Mary or Olu] came'

(15a) goes along with (12) to show that thematic accessibility is required for an argument to be contained in the extended Condition B domain of the clitic ó. If this domain were based on the logical relation of c-command (i.e. operator scope) — as Pulleyblank claims — it is inconceivable that it would be restricted to the subject of the immediately higher indirect discourse verb (i.e. *Mary*). Yet this restriction, which follows from domain extension, through a thematic relation, actually obtains: *Olu*, which is the subject of a still higher verb, is a possible antecedent of ó, precisely because it is outside the thematic domain of the lowest indirect discourse verb. When there are more than two such verbs, as in (13), the domain extension of ó is still limited to the lowest one, thus ó = {i, j, m/*k}, not {m/*i,*j,*k} as he has it. If binding domains are defined at S-structure and not at LF (cf. Reinhart 1987), this kind of local restriction is to be expected.

As to (15b), notice that either *Olu* or *Mary* is a potential antecedent of òun. This means that the complementarity of the pronoun and the clitic breaks down just in case there is multiple indirect discourse embedding. In such a pragmatically marked configuration, the pronoun has wider-than-expected coreference possibilities. While Bouchard's elsewhere principle does not predict this wider range (any more than it predicts the Zribi-Hertz's examples of non-complementarity already cited: *Hugo*$_i$ *est content de lui*(*-même*)$_i$), it is consistent with it.

Now consider Pulleyblank's data in (14). As in (12-13), the inaccuracy concerns the possible antecedents of the clitic ó. Pulleyblank reports that *Tolu* is also not a possible antecedent of ó, but in fact it is: the correct referential set for ó in (14a) is {k, m/*i,*j}, not {m/*i,*j,*k} as Pulleyblank has it. This is significant, because it bears directly on the question of whether the set of possible antecedents for the clitic is determined by Condition C, as Pulleyblank claims, or by Condition B in a thematically extended domain. Since *Tolu* is governed by *fun*, a quasi-prepositional lexical element, it is not within the clitic's thematically extended domain, hence it is a potential antecedent for ó.

This concludes my comparison of the global-logical (Condition C) and local-thematic (Condition B) accounts of Yorùbá logophoric effects. Now consider some facts which bear on the parametric difference between Yorùbá and Ìgbo. In Yorùbá, the morphological contrasts found in embedded subject and object positions are parallel; the logophoricity effects in (16-17) are like those in (10-11):

16a. Olú$_i$ wí (pé) Merí$_j$ rí-(i)$_{k/*i,*j}$. 'Olu said that Mary saw 3sg [not Olu]'
say Comp see 3sg

b. Olú$_i$ wí (pé) Merí$_j$ rí òun$_{i/*j,*k}$. 'Olu said that Mary saw him [Olu]'

17a. Àwọ́n$_i$ wí (pé) Merí rí-wọn$_{j/*i}$. 'They said that Mary saw them [themselves]'
3pl say Comp see 3sg

b. Àwọ́n$_i$ wí (pé) Merí rí àwọn$_{i/*j}$. 'They said that Mary saw them [others]'

This symmetry of the embedded subject and object positions is not replicated in Ìgbo.

But, while the positions are symmetrical in terms of the binding properties of the elements which occupy them, the morphemes themselves are not freely distributed with respect to each other. (18a-c) show that an embedded clitic treats any pronominal in its binding domain like a name, from which it is disjoint. But when two lexical pronouns share the same condition B domain, the result (18d) is simply ungrammatical. This follows because, by the elsewhere condition, both instances of òun must find an antecedent in the extended domain of the corresponding clitic, which means that they are coreferent, but this contradicts condition B.

18a. Olú$_i$ wí (pé) ó$_j$ rí-(i)$_{k/*i,*j}$. 'Olu says that 3sg [not Olu] saw 3sg [someone/thing else]'
say Comp 3sg see 3sg

b. Olú$_i$ wí (pé) òún$_i$ rí-(i)$_j$. 'Olu says that he [Olu] saw 3sg [someone/thing else]'

c. Olú$_i$ wí (pé) ó$_j$ rí òun$_i$. 'Olu says that 3sg [someone else] saw him [Olu]'

d. *Olú wí (pé) òún rí òun.

This suggests a way to derive the symmetry of **pro** drop in subject and object positions: given the elsewhere condition, pronouns are barred in all matrix A-positions (apart from contexts of contrastive stress) just because domain extension cannot occur in matrix clauses:

19a. Ó$_i$ rí-(i)$_{j/*i}$. '3sg saw 3sg [someone/thing else]'

b. *Òún rí-(i).

c. *Ó rí òun.

d. *Òún rí òun.

To summarize: the Yorùbá 3sg clitic is pronominal, licensed in A-positions by obligatory person and number agreement with its antecedent (regardless of whether the dependency is syntactic or located in discourse). The clitic also shows obligatory number agreement in subject relatives (9), but not in subject/possessor A-bar chains (8); this split is consistent with the pronominal hypothesis, since the subject and possessor positions are ECP islands, from which syntactic agreement features are not accessible. The full set of referential possibilities for both singular and plural clitics, in subject and object positions of logophoric

complements (10-18) can be explained, if the [+ pronominal] binding domain of a clitic in a logphoric complement is *extended* to include the thematically connected (accessible) argument of the matrix clause containing the indirect discourse verb. Given domain extension for the clitic, the referential potential of the lexical pronoun in logophoric complements is set by the elsewhere condition: the complement of the clitic's impossible antecedents in the extended domain. (12), (15) and the corrected version of (14a) show that logophoric domain extension does not include lexically governed arguments (Genitive or Accusative), and is constrained by subjacency. Numerous examples show that a complementizer of 'speaking', connecting the matrix clause and the embedded discourse, is not required in order for domain extension to occur; in fact, with certain verbs of speaking (e.g. ní) the indirect discourse Comp is actually prohibited. What triggers domain extension, therefore, is thematic in nature: the embedding of an IP under a verb of speaking.

While Ìgbo logophoricity effects closely parallel those found in Yorùbá, there is a parametric difference: Ìgbo shows a subject/object asymmetry with regard to the clitic/pronoun distinction, which is ultimately related to a difference in Case assignment. As would be expected if it is Case-related, this asymmetry holds uniformly in Ìgbo, in both embedded and matrix clauses, suggesting that the binding mechanism of matrix clauses operates as well in logophoric complements. This would make the domain extension account the null hypothesis for that language.[10]

4. Ì g b o

Ìgbo grammarians like Émènanjọ 1978 recognize the following categories of pronominals:

		'independent'		'dependent'
		'strong'	'weak'	
20a.	3sg.	àyá	yá	ó/ọ́
b.	3pl.	àhá	há	é/á…há

The strong forms can be considered inherently focused, i.e. contracted from the focus construction Ọ́ wụ́ ya/Ọ́ wụ́ ha 'It is 3sg/It is 3pl'. As phonological clitics, the dependent forms each have two vowel harmony variants; I take them to be syntactic clitics as well, leaving the weak, independent forms to answer the label of N^0 pronouns. This establishes the following parallels with Yorùbá: 3sg clitics = ó/ọ́ (Ìgbo), ó (Yorùbá); 3sg lexical pronouns = yá (Ìgbo), òun (Yorùbá). Because of subject inversion in the 3pl forms, I will restrict discussion in this section to 3sg.

As in Yorùbá, Ìgbo lexical pronouns are required in A-bar positions, e.g. in the focus/relative construction. Note that the relative subject in (21a) lacks a complementizer and is antecedent-governed, thus it is not an island like its Yorùbá counterpart in (7). The expletive and copula are optional in the pronominal object relative, cf. (21b):[11]

21a. Ọ́ wụ́ ya$_i$ [$_{IP}$ [t$_i$] bịa-ra]. 'It is (s)he that came'
3sg-EXPL BE 3sg come.REL-Asp

b. (Ọ́ wụ́) ya$_i$ [kà ḿ hụ́-rụ [t$_i$]]. '(It is) her/him/it that I saw'
3sg-EXPL BE 3sg Comp 1sg see.REL-Asp

[10]As a further test for domain extension, consider the Dogrib "disjoint anaphor" ye- (Saxon 1983). This morpheme seems to be an anaphor only as this is convenient for Huang's 1983 definition of governing category. On the basis of Saxon's data, Dogrib ye- could be equated to the Yorùbá pronominal clitic, except that the domain extension of Condition B is specifically in logophoric contexts in Yorùbá, while in Dogrib the domain is apparently extended unconditionally for ye-. Thus, the Yorùbá version of *John hunts with his father* is ambiguous just as in English, if the Genitive clitic rẹ̀ translates *his*. If, on the other hand, the lexical pronoun is used (in the emphatic reflexive phrase ti òun 'his own'), òun is obligatorily coreferent with *John*. In Dogrib, the same sentence is ambiguous when *his* is translated by the pronoun we-; with the clitic ye-, *his* is unambiguously disjoint from *John*.

[11]Ìgbo tone is marked as in Welmers and Welmers 1968 and Nwáchukwu 1985: an unmarked syllable has the same pitch level as the preceding marked syllable. All data are from Nwáchukwu's Óbòámá dialect of western Èzínàíhìte Ḿbàisén. Èzínàíhìte, the basis for Swift et al. 1962, differs from the standard language in allowing antilogophoric ó/ọ́ '3sg' and ụ́mụ '3pl' in nonsubject positions. In other dialects, logophoric contrasts are possible only for embedded subjects, cf. below.

[=7]a. [$_{CP}$ Òun$_i$ ni [$_{IP}$ ó$_i$ wá]]. 'It is (s)he that came'
3sg FOC 3sg come

b. [$_{CP}$ Òun$_i$ ni [$_{IP}$ Tọ́lá rí [t]$_i$]]. 'It is her/him/it that Tọla saw'
3sg FOC see

It will be noticed that the 'focused' pronoun occurs to the right of the Ìgbo copula wụ́, with the expletive ọ́ clitic in subject position. But in the Yorùbá focus construction, cf. (7a-b) reproduced here, the opposite situation obtains: there is no expletive, and the focused pronoun is on the left of the focus morpheme (a related morpheme in Kĩkũyũ is described as a copula by Bergvall, this volume). This difference suggests that the clitic/pronoun contrast in Ìgbo is reducible to a difference in Case assignment, where the pronoun must receive structural Case.

Unlike the situation in Yorùbá, the clitic vs. lexical pronoun distribution in Ìgbo is affected by Accusative and Genitive Case assignment.[12] In a matrix clause, only the clitic is possible as the subject (an Avoid Pronoun effect) and only the pronoun is possible as direct object, or as possessor:

22a. Ọ́$_i$ hụ̀-rụ ya$_j$. '(S)he saw 3sg [someone/thing else]'
3sg see-Asp 3sg-ACC

b. *Yá hụ̀-rụ yá.

*Ọ́ hụ̀-rụ ọ́.

*Yá hụ̀-rụ ọ́.

23a. Ákwụkwọ yá. 'Her/his book'
book-NOM 3sg-GEN

b. *Ákwụkwọ ọ́.

(22-23) show that the Ìgbo clitic cannot, and the pronoun must, bear either Accusative or Genitive. That is, Ìgbo **pro**-drop (in Roberge's sense) is limited to subjects; **pro**-drop in Yorùbá, by contrast, is general for both subjects and objects, as shown in the previous section.

There are, however, two classes of exceptions to the subject **pro**-drop hypothesis. First, observe that apparent matrix pronominal subjects occur in conditionals:

24a. Yá$_i$ hụ yá$_{j/*i}$… 'If (s)he sees 3sg [someone/thing else]…'
3sg see 3sg-ACC

b. *Ọ́ hụ ọ́…

*Ọ́ hụ yá…

*Yá hụ ọ́…

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[12]Although I have flagged Case morphology in the glosses, it can be read directly off the tonal phonology. Genitive is realized tonally on a H-initial noun only after H. It causes a monosyllabic noun like yá to be downstepped, as in (22a). Accusative, by contrast, is purely structural, and has has no special tonal effect: the Accusative form of yá in (21a) is not downstepped. This is not obvious, however, because the final low tone of the verb causes yá to be downdrifted, and the tone-marking system gives a downstepped H the same mark as a downdrifted H (both have the same pitch level). A phonetic difference appears in those dialects, including Èzínàíhìte, with a class of verbs (including rí 'eat') which retain their H tone in the Accusative-assigning verb form:

i. Ọ́ rí-ri ya. [‾ – – –] '(S)he ate it'
3sg see-Asp 3sg-ACC

ii. ériri yá [‾ ‾ ‾ –] 'her/his rope'
rope 3sg-GEN

The pronoun is downstepped in (ii) but not in (i). This analysis implies that perfective verbs, which have the tone pattern in (iii), assign Genitive, not Accusative:

iii. Ó rí-ele yá. [‾ – – – _] 'her/his rope'
3sg eat-PERF 3sg-GEN

The correlation of perfective morphology with intransitivity is widespread, cf. English *-en*.

To maintain the overall generalization, it seems reasonable to say that the conditional subject in (24a) receives structural Case. This speculation is supported by the existence of (25), the fuller paraphrase of (24a) in which the conditional subject is embedded by the factive Comp under a matrix copula with expletive clitic subject:

25. Ọ́ wụ [$_{\bar{C}}$ nà [$_{IP}$ yá$_i$ hụ yá$_j$]]… 'If it is [the case] that (s)he sees
3sg-EXPL BE Comp 3sg see 3sg-ACC 3sg [someone/thing else]…'

(25) suggests that the embedded subject of a conditional receives Exceptional Case Marking from nà (a Comp which is homophonous with a lexical category: the locative Preposition).

The other class of exceptions to the Case generalization for Ìgbo **pro**-drop is indirect discourse. In logophoric complements, unlike matrix clauses, object **pro**-drop is possible (in Èzínàíhìte Ḿbàisén, but not in the standard form of the language). This possibility introduces a difference between Ìgbo and Yorùbá indirect discourse complements.

For the interpretation of the clitic/N^0 pronoun contrast in logophorically embedded subject position, the Ìgbo examples in (26) are identical to their Yorùbá counterparts, described above in (10). But this identity breaks down in embedded object posiiton, in two respects. For the 3sg clitic, there is a difference in agreement features, compare the glosses of (27a) and (16a). In Yorùbá, the clitic is always unmarked for animacy, e.g. the embedded object of (16a) may be either animate or inanimate. In all dialects of Ìgbo, subject ó/ọ́ is always unmarked for animacy (this is often disambiguated by the selectional properties of the subject). In Èzínàíhìte, object ó/ọ́ is possible just in logophoric complements, and is always [+ animate], cf. (27a). (In standard Ìgbo, object ó/ọ́ is not possible in any context, so the question does not arise.)

For the lexical pronoun, there is a structural difference, compare the sets of indices in (27b) with those in (16b). The Yorùbá embedded object pronoun òun in (16b) is *strictly* logophoric: it can refer only to the matrix subject, cf. 16b). In Ìgbo, however, the embedded object pronoun yá is *ambiguous* between the main clause subject and some other discourse antecedent, cf. (27b):

26a. Ógù$_i$ sị (na) ọ́$_{j/*i}$ bịa-ra. 'Ogu said that (s)he [not Ogu] came'
say Comp 3sg come-Asp

b. Ógù$_i$ sị (na) yá$_{i/*j}$ bịa-ra.[13] 'Ogu says that he [Ogu] came'
say Comp 3sg come-Asp

27a. Ógù$_i$ sị (na) Merí$_j$ hù-rụ ọ́$_{k/*i,*j}$. 'Ogu said that Mary saw her/him [not Mary, not Ogu]'

b. Ógù$_i$ sị (na) Merí$_j$ hù-rụ yá$_{i,k/*j}$. 'Ogu said that Mary saw 3sg [not Mary]'

[=16]a. Olú$_i$ wí (pé) Merí$_j$ rí-(i)$_{k/*i,*j}$. 'Olu said that Mary saw 3sg [not Olu]'
say Comp see 3sg

b. Olú$_i$ wí (pé) Merí$_j$ rí òun$_{i/*j,*k}$. 'Olu said that Mary saw him [Olu]'

The embedded clitic ọ́, whether in subject or object position, strictly obeys condition B in its extended binding domain, just as with the Yorùbá clitic (11a ≅ 26a, 16a ≅ 27a). The restriction that the Ìgbo object clitic is [+ animate] seems related to the fact that object clitics are excluded from matrix clauses, so that there is no Avoid Pronoun effect for objects. In effect, what is operative in embedded object position, as pointed out to me by Jack Martin, is a kind of "Avoid clitic" effect, and since clitics are never required to be antiligohoric with respect to an inanimate antecedent, the object clitic is always animate.

The Ìgbo lexical pronoun yá in downstairs subject position has two readings: [+ Bound] with respect to the logophoric antecedent in the extended domain, and [– Bound] outside this domain. The [+ Bound] reading follows, just in the corresponding Yorùbá example, from the elsewhere condition: the logophoric subject is the only antecedent in the condition B domain of the corresponding clitic (11b ≅ 26b). The [– Bound] reading shows that the Ìgbo object pronoun is more than just an elsewhere form.[14] The presence of the [– Bound] reading measn that, apart from the lack of gender agreement in Ìgbo, (27b) is synonymous, in its range of ambiguity, with the English sentence *John said that Mary saw him*. Nevertheless, only the

[13]The Comp can be deleted from …sị́ nà yá… 'say that 3sg' (or from its counterpart …sị́ nà há… 'say that 3pl'), yielding …sị́ ayà… (or …sị́ ahà…). Nwáchukwu (1982: 48, 60 fn. 2) describes the forms áyà and áhà as "emphatic…anaphora in reported speech"; in terms of the analysis developed here, they are inherent-ECM pronouns (i.e. inherent Accusative, subject pronouns).

[14]The importance of embedded object yá's ambiguity was pointed out to me by Dominique Sportiche.

elsewhere condition, and not Condition B, applies to yá in subject position, where it is just [+ Bound], cf. (27a). The puzzle therefore is: why yá should be interpreted like a regular, non-logophoric pronoun, just in embedded object position. Intuitively, this cannot be unrelated to the fact that, in matrix object position, yá and not ó/ọ́ is required for Case reasons. In other words, although object **pro**-drop is apparently not obligatory in logophoric complements, the absence of object **pro**-drop in matrix clauses is still relevant for the interpretation of embedded object yá.

I will take these two cross-linguistic differences as reflecting the same subject-object asymmetry which has already been observed, in matrix clauses, in Ìgbo but not in Yorùbá, cf. (22) vs. (19). If the presence/absence of this asymmetry can be captured in a Case parameter, a further empirical test for the domain extension hypothesis becomes possible: whether the two differences in the interpretation of (16) and (27) can be predicted. The parameter would somehow preserve the Case restriction on Ìgbo pronouns in a uniform way in both embedded and matrix clauses, while allowing object clitics only in embedded clauses. To do this requires a hypothesis on the relationship between Case and agreement, since clitics are locally licensed by agreement features, whereas pronouns, while sharing the agreement features of their antecedents, are locally licensed by Case (just like other lexical nouns).

Fukui (1986: 54) unifies Case and agreement features under the label Kase. For him, Case is assigned by lexical categories, while agreement is a property of the Specifier-head relationship which arises only within the projection of a functional category, since only functional categories have Specifiers. Thus, by Fukui's Functional Projection Theorem (1986: 79), a Specifier position is licensed by Kase: either by Spec-head agreement, as for a matrix subject, or by lexical Case (for ECM). If subject clitics are the spellout of agreement features which license **pro**, this means that they fall together with lexical Nominative Case as instances of F(unctional)-Kase.

ECM contexts, such as the subject position of Ìgbo conditionals, will therefore never have clitic subjects, since what is assigned by ECM is S(tructural)-Kase; these will be just the contexts in which pronoun subjects are possible despite subject **pro**-drop. The cross-linguistic difference already observed in focus/relative constructions is therefore predictable. In Ìgbo, these constructions fall together with the other ECM cases, because Comp and the copula are morphologically separate, and focused/relative arguments receive S-Kase from the copula, whose own subject is expletive, cf. (21a). In Yorùbá, where the focus/relative Comp are lexicalized together with the copula, in a kind of "Compula" morpheme (e.g. ni or tí, cf. 7-9), any focused/relative argument can only occur external to the Compula, and there can be no expletive subject.

The object clitic has a problematic status in Fukui's system. As a clitic, it is licensed by φ-feature agreement (F-Kase); but as the antecedent for **pro** in argument position, it is licensed by lexical government, therefore it receives S-Kase. The only possibility in Fukui's tightly constrained system is that, following Kayne's idea of Case absorption (cited in Borer 1984: 36), object clitics represent the intersection of the two different kinds of Kase. Both may "overlap" in the clitic, giving the French/Yorùbá-type object **pro**-drop, with a clitic. Or else, the two kinds may "split", giving object doubling as in Spanish (*Lo$_i$ vimos a Juan$_i$*, literally 'Him$_i$-we saw John$_i$'). The substruction of Kase features is given in (28):

		F-Kase (φ-features)	S-Kase (lexical government)	
28.	{Nominative arguments, subject clitics}	+	−	
	{object clitics}	+	+ ⇒ ∅	(S-Kase absorption)
	{object doubling}	+	+	(no absorption)
	{Accusative arguments}	−	+	

(28) predicts that clitic doubling as double (or "dummy") Kase marking is restricted to objects. This prediction is correct: Roberge (1986: 191) shows that subject doubling never involves double Kase marking. Clitic doubling in a possessive construction stands formally in-between subject and object doubling. Extrapolating from (28), the prediction is that possessive clitics double only in those languages where Genitive Kase is assigned lexically. This seems to be true.

For example, observe that there is a parametric difference between English and French Genitives. Possessives in both languages are Specifiers; the φ-feature licensing of French possessives is particularly clear,

since they show gender agreement (*son livre*, *sa lettre*). In English, where Fukui shows that both possessive and Genitive are licensed by the functional head with the form ['s] (*John's book*, *his book*), possessive doubling is impossible (**John's his book*). But in French, where the Genitive is licensed by the quasi-prepositions à and *de* (*le livre* à/*de Jean*) — lexical categories which can be thought of as transmitting the government relation from the lexical N — doubling of the possessive clitic by an overt argument is possible (*son$_i$ livre* à *Jean$_i$*), cf. Tremblay 1988.

		F-Kase (φ-features)	S-Kase (lexical government)	
29.	{English Genitive arguments, English possessive clitics}	+	−	
	{French possessive clitics}	+	+ ⇒ ∅	(S-Kase absorption)
	{French possessive doubling}	+	+	(no absorption)
	{French Genitive arguments}	−	+	

In the asymmetrical partitioning of licensing properties among subject and object clitic forms in (28), as in the possessive/Genitive split in (29), a logical possibility is missing: absorption of F-Kase by S-Kase. And it is precisely F-Kase absorption that seems to occur in Ìgbo, or any other language with subject **pro**-drop but not object **pro**-drop. The complete version of (28) is as follows:

		F-Kase (φ-features)	S-Kase (lexical government)	
30.	{Nominative arguments, subject clitics}	+	−	
	{object clitics}	+	+ ⇒ ∅	(S-Kase absorption)
	{object doubling}	+	+	(no absorption)
	{object pronoun}	+ ⇒ ∅	+	(F-Kase absorption)
	{Accusative arguments}	−	+	

Based on (30), the parametric difference between Ìgbo and Yorùbá is the type of Kase absorption:

		absorption of:
32.	Yorùbá	S-Kase
	Ìgbo	F-Kase

(31) excludes matrix object clitics in Ìgbo, because F-Kase cannot be assigned there. Given (31), it becomes interesting that ECM from Comp (or from the matrix 'say' verb, cf. footnote 14 above) to logophorically embedded subjects is apparently optional, since either a clitic or a pronoun can occur there, cf. (26). It is difficult to understand how Case assignment could be optional, so something else must be going on. The logophoric effect in embedded subject position suggests that what prevents ECM from applying is a failure of locality: F-Kase absorption evidently requires that the suppressed φ-features are recoverable. If the antecedent is in the same extended domain as the φ-features, recoverability is ensured by binding: the Accusative pronoun in (26a) is bound by the matrix subject, so F-Kase absorption is not blocked. A non-local antecedent for the embedded subject (i.e. in the preceding discourse) will not suffice to ensure φ-feature recoverability, therefore the clitic is not absorbable.

In an ECM context, the φ-features in question are on the embedded Infl, whereas the S-Kase is assigned by the matrix Comp. In embedded object position, by contrast, both kinds of Kase are assigned by the verb. Now consider the data. In Èzínàíhìte Ìgbo, the dialect reported on in this paper, embedded object clitics are found just when their agreement features are unrecoverable, i.e. not found in the extended domain. In Standard Ìgbo, embedded object clitics are never possible, in other words the parametrically available type of absorption (of F-Kase by S-Kase) is never blocked. This suggests that domain extension in fact never occurs for embedded objects in the Standard form of the language, just for ECM contexts (i.e. for embedded subject position). In other words, the parameter which distinguishes Standard from Èzínàíhìte Ìgbo is domain extension which includes two object positions. If ECM is viewed as an automatic instance of domain extension, from a lexical category (the matrix verb) to a functional category (the embedded IP), then what is parametrized is the ability of domain extension to include embedded objects, which entails the merger of two lexical government domains. In other words, the antilogophoricity of an embedded subject clitic is guaranteed by ECM (lexical-to-functional domain extension), plus the principle of φ-feature recoverability. The

antilogophoricity of an embedded object clitic requires that domain extension cross a "lexical barrier" between the lower and upper predicate. This means that logophoric effects in general are the product of two interacting parameters, one thematic and one Kase-based, as in (32):

		absorption of:	θ-subjacency
32.	Yorùbá	S-Kase	lexical domain extension
	Èzínàíhìte Ìgbo	F-Kase	lexical domain extension
	Standard Ìgbo	F-Kase	

The consequence of (32) for Èzínàíhìte is that a 3rd person Accusative clitic can escape absorption only if its agreement features are unrecoverable in its binding domain. For matrix object position, only the absorption parameter will be relevant (33a), while for embedded object position, the two parameters will interact (33b):

33a. In matrix object position, the φ-features of the Èzínàíhìte clitic are always recoverable, since it can't have a local antecedent (Condition B); therefore it is always absorbed by the pronoun.

b. In embedded object position, the φ-features of the Èzínàíhìte clitic are unrecoverable
iff (i) the clitic is free from the matrix subject, *and*
(ii) it contains some additional feature, apart from the person and number.

To satisfy (33b-ii), the embedded object clitic must be [+ animate]. This additional feature is forced by the fact that the antecedent excluded by domain extension is a speaker, and therefore [+ animate].

As shown in (34), the Kase licensing requirements of embedded subjects and objects are independent:

34a. Ógù$_i$ sị (na) ọ́$_j$ hụ̀-rụ yá$_{i,k/*j}$. 'Ogu said that (s)he [not Ogu] saw 3sg [not Mary]'

b. Ógù$_i$ sị (na) yá$_i$ hụ̀-rụ yá$_{j/*i}$. 'Ogu said that he [Ogu] saw 3sg [not Ogu]'

c. Ógù$_i$ sị (na) ọ́$_j$ hụ̀-rụ ọ́$_k$. 'Ogu said that (s)he [not Ogu] saw her/him [someone else]'

d. Ógù$_i$ sị (na) yá$_i$ hụ̀-rụ ọ́$_j$. 'Ogu said that he [Ogu] saw him/her [not Ogu]'

This independence remains even if the matrix clause contains a potential antecedent for the embedded subject clitic, i.e. a lexically governed argument such as *Mary* in (35). As seen in (35a,c), he embedded object clitic must remain distinct from the antecedent of the embdded subject.

35a. Ógù$_i$ gwa-ra Mèrí$_j$ (sị) nà ọ́$_j$ hụ̀-rụ yá$_{i,k/*j}$. 'Ogu told Mary that (s)he [not Ogu]
ọ́$_k$ yá$_{i,j,m/*k}$. saw 3sg [not Mary]'

b. Ógù$_i$ gwa-ra Mèrí$_j$ (sị) nà yá$_i$ hụ̀-rụ yá$_{j,k/*i}$. 'Ogu told Mary that he [Ogu] saw 3sg [not Ogu]'

c. Ógù$_i$ gwa-ra Mèrí$_j$ (sị) nà ọ́$_j$ hụ̀-rụ ọ́$_{k/*i,*j}$. 'Ogu told Mary that (s)he [not Ogu] '
ọ́$_k$ ọ$_{m/*i,*j,*k}$. saw her/him [someone else]'

d. Ógù$_i$ gwa-ra Mèrí$_j$ (sị) nà yá$_i$ hụ̀-rụ ọ́$_{k/*i,*j}$. 'Ogu told Mary that he [Ogu]
saw her/him [not Ogu, not Mary]'

Finally, consider an example in which the clitic appears to be locally bound:

36a. Ógù$_i$ á-nọ́-ghị nà ńsògbú, dị́ kà ó$_{i,j}$ chè-re. 'Ogu was not in trouble, as (s)he thought'
È-BE-NEG in problem BE Comp 3sg believe-Asp

b. */??Ógù á-nọ́-ghị nà ńsògbú, dị́ kà yá chè-re.

Kuno has pointed out to me that (36) is paratactic, like the similarly ambiguous English example cited by Reinhart 1983: *John will be late, he said.* The only relevant binding condition is therefore condition B. The slim acceptability of (36b) relies on a stressed interpretation of yá forcing it to cross over Ógù to a prior discourse topic (thus supporting the idea of topic-linkage for the pronoun rather than for the clitic as Pulleyblank proposed for Yorùbá).

4.1 Against lexical features

If the behavior of the object clitic in Èzínàíhìte was an isolated phenomenon, and the "core" of logophoricity was restricted to embedded subject position, as in Standard Ìgbo, it might be proposed that the clitic ó/ọ́ bears a diacritic feature [– logo] marking it disjoint from an NP 'speaker'. In support of this idea are some Èvè data from Clements 1979, showing that if the matrix verb is one of hearing, the object and not the subject is the antecedent of the logophor yè. In no dialect of Ìgbo, however, does a predicate of hearing undo coreference of yá with the matrix subject:

37a. Ógù$_i$ nụ-rụ n'ólu Chiké$_j$ nà ọ́$_{j,k}$ gà-awụ́ ezè. 'Ogu heard from Chike that 3sg [not Ogu] would be king'
hear-PAST in-voice Comp 3sg FUT-BE king

b. Ógù$_i$ nụ-rụ n'ólu Chiké$_j$ nà ya$_{i/*j}$ gà-awụ́ ezè. 'Ogu heard from Chike that he [Ogu] would be king'

And in Èzínàíhìte, the facts in object position are the same for a matrix 'hearing' verb, cf. (35):

38a. Ógù$_i$ nụ-rụ n'ólu Chiké$_j$ nà ọ$_j$ gà-emé yá$_{i,k/*j}$ ezè.
ọ́$_k$ yá$_{i,j,m/*k}$
'Ogu heard from Chike that 3sg [not Ogu] would make 3sg [someone/thing else] king'

b. Ógù$_i$ nụ-rụ n'ólu Chiké$_j$ nà yá$_i$ gà-emé yá$_{j,k/*i}$ ezè.
'Ogu heard from Chike that he [Ogu] would make 3sg [not Ogu] king'

c. Ógù$_i$ nụ-rụ n'ólu Chiké$_j$ nà ọ$_j$ gà-emé ọ$_{k/*i,*j}$ ezè.
ọ́$_k$ ọ́$_{m/*i,*j,*k}$
'Ogu heard from Chike that 3sg [notOgu] would make her/him [someone else] king'

d. Ógù$_i$ nụ-rụ n'ólu Chiké$_j$ nà ya$_{i/*j}$ gà-emé ọ́$_{k/*i,*j}$ ezè.
'Ogu heard from Chike that he [Ogu] would make her/him [someone else] king'

An analysis with non-diacritic lexical features is suggested by Sportiche 1986. Sportiche distinguishes overt pronominal and anaphoric elements by two features specifying relationship to an antecedent: c-command [± bound], and locality/antilocality within the governing category [± local]. This yields four possibilities, which might be lexicalized in different languages as follows:

		English	Japanese	Yorùbá	Ìgbo
39a.	[+ bound, + local]	reflexives, reciprocals	zibun	ara rẹ̀	ònwé yá, yá nwà
b.	[+ bound, - local]	pronouns used as variables	zibun	òun	yá
c.	[- bound, - local]	pronouns used referentially	kare	ó	ó/ọ́
d.	[- bound, + local]	---[15]			

English morphologically conflates lines two and three, which together constitute a category with the properties of condition B. Sportiche observes, however, that Japanese *zibun* , as a 'long-distance reflexive', conflates lines one and two, leaving line three to *kare*. He further speculates that Fulfulde has a distinct class of morphemes for each line; Ìgbo and Yorùbá might be so viewed as well. But we have seen in that yá in embedded object position is ambiguous between the speaker and a distinct discourse antecedent, hence it is not [+ bound].

4.2 Subject inversion

Although logophoricity contrasts do not extend to the 1st and 2nd persons, the clitic/pronoun contrast is consistent throughout the singular. Of the four clitic subjects in (40), only 1sg and 3pl invert.

[15]The gap is explained by the fact that "natural languages do not seem to impose locality requirements not involving c-command" (Sportiche 1986: 370).

		pronoun	clitic	noninverted Nom	inverted Nom	
40.	1sg.	mụ́		mụ́ egbúole		'I have killed'
			ḿ	ḿ gbúole	égbúole ḿ	
	2sg.	gị́		gị́ egbúole		'you sg. have killed'
			í/ị́	í gbúole		
	3sg.	yá		yá egbúole		'3sg. has killed'
			ó/ọ́	ó gbúole		
	1pl.	ányị		ányị egbúole		'we have killed'
	2pl.	ụ́nụ		ụ́nụ egbúole		'you pl. have killed'
	3pl.	{há, ụ́mụ[16]}		{há, ụ́mụ} egbúole		'they have killed'
			hà		égbúole hà	

The 'discontinuous' pronominals é/á…ḿ '1sg' and é/á…hà '3pl' have been analyzed by Goldsmith 1981b and Íhìọ́nụ́ 1985 as resulting from syntactic movement. The inverted 1sg form is ambiguous between 'PRO [arb] have killed me' and 'I have killed', cf. (42).

With an Aux, the "inverted" order is possible only for 1sg, which loses its inherent H tone.

41a. Ágà m e-gbú. 'I'll kill'
Á-go 1sg È-kill

b. Há gà e-gbú. 'They'll kill'
3pl-go È-kill

Suppose that what happens with Aux is really no inversion at all, but failure to raise to subject position. Then (41a) falls together with the ECM facts already discussed, with one condition: a clitic can receive ECM from an AUX iff it cannot desyllabify. This condition is related to the syllabic morphology of Case. The difference between 1sg and 3pl in this respect reduces to the difference between the segments /m/ and /h/. Because /m/ is a potential syllable, the 1sg morpheme doesn't desyllabify as a clitic; this is not true for /h/ or for /y/ in the 3sg. In support of this idea, obseve that the Subject-Aux paradigm in (41) is paralleled by the Accusative paradigm:

		pronoun	clitic	Acc	
42.	1sg.		ḿ	égbúole ḿ	'PRO$_{arb}$ have killed me'
	2sg.	gị́		égbúole gị́	'PRO$_{arb}$ have killed you sg.'
	3sg.	yá		égbúole yá	'PRO$_{arb}$ have killed him/her/it'
	1pl.	ànyị́		égbúole ányị	'PRO$_{arb}$ have killed us'
	2pl.	ụ́nụ		égbúole ụnụ	'PRO$_{arb}$ have killed you pl.'
	3pl.	há		égbúole há	'PRO$_{arb}$ have killed them'

4.3 Logophoricity and control together

Koopman and Sportiche 1987 propose that logophoricity is licensed by control relations. The following facts (from Nwáchukwu 1978) seem consistent with this hypothesis:

43a. Ógù$_i$ chọ-rọ (sị́) kà yá$_{i/*j}$ ga-a ahyá. 'Ogu wants to go to market'
want-Asp Comp 3sg go-SJV market

b. Ógù$_i$ chọ-rọ (sị́) kà ó$_{j/*i}$ ga-a ahyá. 'Ogu wants her/him [not Ogu] to go to market'

These examples also fall into line with earlier logophoric cases in which an embedded subject pronoun is [+ Bound] in the extended Condition B domain of the clitic.

In this light, consider some additional facts, pointed out to me by Akụjụọobi Nwáchukwu:

44a. Ógù$_i$ má-nye-re Chiké$_j$ (sị́) kà ọ$_{j/*i,??k}$ bịa. 'Ogu tried to persuade
push-give-Asp Comp come-SJV Chike that he [Chike] come'

[16]The lexical 3pl pronoun ụ́mụ, unlike its 3sg counterpart yá, is limited to logophoric complements.

b. Ógù$_i$ má-nye-re Chiké$_j$ (sí) kà ya$_{i/*j}$ bịa. 'Ogu tried to persuade Chike that he [Ogu] should come'

c. Ógù$_i$ má-nye-re Chiké$_j$ ya$_j$ bịa. 'Ogu forced Chike to come'

d. *Ógù má-nye-re Chiké ọ bịa.

-nyé is a derivational suffix cognate to the verb 'give', which creates an abstract ditransitive verb from a concrete transitive verb 'push'.[17] Compositionally, -má-nye has two readings as an optional control verb 'try to persuade' taking a subjunctive (nonfactive) complement (44a,b), and as an obligatory control verb 'force' taking a cause and a factive complement (44c).[18] The difference between the two readings, and, in particular, between the two binding patterns, apparently depends on the presence or absence of the subjunctive complementizer kà.

The embedded pronoun subject in (44b) is unambiguously coindexed with the matrix subject, a predictable logophoric effect. But in (44a), in contrast with (35a), the embedded subject clitic is not ambiguous, rather it is preferably coindexed with the matrix object. This suggests that -má-nye 'try to persuade' does indeed control its complement. That is, (44a) requires control in **addition** to binding, again suggesting that logophoric effects are distinct from (and not reducible to) control.

[17]Applicative nyé in these examples can be compared to fún (Yorùbá), which functions either as the main verb 'give' or, in serial constructions, as a dative/benefactive quasi-preposition. The difference is that, in its dependent role, nyé does not serialize like fún but incorporates as a 'verb extension' (as also in many Bantu languages).

[18]Changes of factivity with different complementizers are observed by Nwáchukwu (1982: 52):

i. À-má-ghí m (sí) nà ó zú-ru ohi. 'I don't know that (s)he stole [something]'
È-know-NEG 1sg Comp Comp 3sg V-Asp theft

ii. À-má-ghí m (sí) mà ó zú-ru ohi. 'I don't know whether (s)he stole [something]'
Comp

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