

The labels “self-reporting” and “logophoric” (Clements 1973, Hagège 1974), assigned to some West African pronouns, went viral as *alibis* for European “anaphors... used logophorically with no antecedent in the sentence” (Reinhart & Reuland 1992, 191) and became models for a Tarskian “world variable with the feature *log*” (Stechow 2003, 401, cf. Schlenker 2003). However, the functional glosses are descriptively inadequate. In fact, Èvègbè *yè* “can be construed *dē rē*” (Pearson 2015, 107) and Yorùbá *òun*, although claimed to show “true *dē sē* anaphora, bound by an OP-LOG” that “must be *dē rē*-free” (Anand 2006, 52), occurs independently as a demonstrative without self-reference. Moreover, even in indirect discourse, *dē sē*/*dē rē* complementarity of Yorùbá *òun* versus bare *pro* is limited to sequence-of-tense dependencies. In GB theory, multi-clause nomino-temporal “anchoring” and “linking” (Enç 1987, 1991) can be represented as government “domain extension” across a “dynasty of dependent heads” (Koster 1986, 317, 340), as also argued for subjunctive obviation and long-distance anaphora (Costa 1972, Pica 1984, 1991). Minimalism has no equivalent (Zeijlstra 2012, Graf 2017, 63ff.) and thus no alternative to “outsourcing”... pushing things into other modules” (D’Alessandro 2019, 17, 20), distributing global diacritics across parallel architecture, buying formal elegance with stealth behaviorism.

**KEYWORDS** Yorùbá, anaphora, dependent tense, grammatical architecture

*Le etichette esistono in senso deteriore, e per la parte deteriore.*<sup>1</sup>

## Introduction

This essay reviews two literatures, each implicating the same morphological feature. For Minimalism (§1), global diacritics like [logo] allow procedural optimisation at the cost of externalising “undigested anomaly” (Lakatos 1969, 167 *fn* 55). For Yorùbá (§2), precoding discourse coreference in the meaning postulate of a particular pronoun clashes with indispensable descriptive generalizations of autonomous syntax. Dismissing [logo] solves both problems, but only on condition that formal grammar accommodate representations of phrasal government—a capacity precipitously abolished 30 years ago (§3).

## 1. Global trouble

Roman Jakobson’s review of “the century-old history of economics and linguistics... uniting both disciplines” (1967, 665) gains relevance as “the Generative Enterprise” (Chomsky & al. 1982) confronts supply chains which are *global* in two senses:

*Global*<sub>1</sub> = trans-derivational (e.g. Lakoff 1970). Non-Markovian computation—where “more than just the last output... must be known”—can be hedged by the “therapeutic” step to dismiss “departures from virtual conceptual necessity” as “imperfections” (Chomsky 1956, 123; 1995, 9, 233). This downsizing lightens the load on the two-stroke engine of *Merge*, *Agree* at the “epicenter of... normal human cognition” (Stabler 2013) at the cost of “outsourcing?... pushing things into other modules” (D’Alessandro 2019, 17, 20) namely to LF (DS), PF (DM) and cartography.<sup>2</sup> Switching the evaluation metric from descriptive adequacy to derivational simplicity ironically revives an old axiom of behaviorism: “to refine the ‘least effort’ conditions on movement... to actual principles of UG” (Chomsky 1995, 146, 233, cf. 1981, 227 *fn* 45, Zipf 1949).<sup>3</sup> The printing of empirical wildcards—e.g. in semantics by the ‘quantitative easing’ of quantification—invites what economists call “moral hazard... an expectation that there will be future bail-outs” (Summers 2007). In the “long run” (Keynes 1923, 80), if a vitiated “syntactico-centrism” (Jackendoff 2007) finally “withers away” (Engels 1878/1962, 224), it may not bequeath the grammarian’s equivalent of “a free community without government” (Kropotkin 1910, 915) so much as a shrunk régime that’s easy to “drown... in the bathtub” (G. Norquist) or “feed... into the wood-chipper” (E. Musk).<sup>4</sup>

*Global*<sub>2</sub> = typologically universal (e.g. Greenberg 1991). If logophora is an autonomous cognitive function that tracks “Protagonist parameters” (Stirling 1988, 232), a theory of meaning postulates can plausibly respect “Semantic Uniformity: Universal Grammar uses the same distinctions (features) and the same interpretive procedures for reference to individuals, times and possible worlds” (Schlenker 1999, 7). This prior, however, can’t hold without limit. If every main clause can be optionally read as “hypotaxe... un discours seulment implicite et non proféré”—so-called free indirect discourse—then it’s puzzling why this possibility would be “beaucoup plus fréquente” in Tùburi (Chadic, Afro-Asiatic) than in neighboring Mundang (Adamawa, Niger-Congo), not to mention Èvègbè (Benue-Kwa, Niger-Congo) where it’s impossible, according to the investigator himself (Hagège 1974, 300ff.). From the permissiveness of free function marking follows the fallacy of “disquotational incontinence”—confounding direct reference with “a meta-representation embedded in a validating context” (Sperber 1997, 72, 77). The problem is general: induction alone can’t sort “syntactic invariants” from “semantic invariants” or bijective local “automorphisms” (Keenan & Stabler 1993, 4, 33).<sup>5</sup> At best, functional optimisation can temporise the shortfall of means to ends by valuing efficiency over precision, but in the business world this expedient did not end well when Boeing managers optimised the assembly of unregulated components and the new-built airplanes crashed on takeoff or caught fire in mid air—vividly “nonconvergent derivations” (Chomsky 1995, 221).<sup>6</sup>

\* N. Ruwet, *paix à ton esprit*. Thanks ever to S. Kuno and A. Zribi-Hertz, now to O. Ajíbóyè and O. Adèşolá and to the reviewers and editors of this volume. Revision of Manfredi (1987). Antirobot certificate: this text is free from LLMs (cognitive autocomplete). Homophony alert: *logo* colloquially denotes a commodity tag disguising sweatshop labor (Klein 1999). Science too would be debased by abusive marketing, if not for committed scholar-editors like the honorand. *Abbracci di cuore, grande Johan!*

- [Labels cheapen meaning to the shoddy side.] Leonardo Sciascia, *Critica Sociale* (Milano) **70**, January 1978, p. 17.
- DS = “the Deductive System... which calculates entailments among competing interpretations... by Scope Economy” assuming “[t]hat purely logical properties have the ability to trigger... silent movement (Heim & Kratzer 1998)” (Lechner 2015, 1245, cf. Fox 2000).
- The meta-theoretic move “beyond explanatory adequacy” (Chomsky 2004, 105) reaches beyond simplicity and esthetics to biology—a step resembling the neoliberal turn to bio-economics (Slobodian 2025). Genetic “correlations” (Dediu & Ladd 2007) are ever handy.
- [www.nytimes.com/imagepages/2012/11/20/us/ALT-jp-GROVER.html](http://www.nytimes.com/imagepages/2012/11/20/us/ALT-jp-GROVER.html), [www.nytimes.com/2025/02/03/us/politics/musk-federal-government.html](http://www.nytimes.com/2025/02/03/us/politics/musk-federal-government.html).
- Similar critiques were articulated by Heim (2004, cf. 2002) and Stalnaker (2004)—both cited here from memory—about the framework of Schlenker (1999) while ostensibly addressing presentations by Speas (2004) and Recanati (2004), respectively.
- [www.propublica.org/article/i-will-never-let-boeing-forget-her-737-max](http://www.propublica.org/article/i-will-never-let-boeing-forget-her-737-max). Product defects are not the only ‘negative externality’ of global supply chains. In economics, offshore manufacturing spreads forced labor and ecocide, while in linguistics, helicopter missionaries flout education policy and impose “ideological domination” under color of saving ‘endangered’ languages (Nolasco & al. 1979, cf. Calvet 1987, Hale 1992, Williamson 2006, Epps & Ladley 2009).

The two contradictions combine in what political economists call an “articulation of different modes of production” (Hall 1980, 322). Analytic products of taxonomic structuralism—global sense 2—persist in generative theory—global sense 1 as a “nonsynchronous residue” (Bloch 1962, 112). The descriptive opacity of uncritiqued inherited morphemes vitiates their projection to clausal templates in standard ‘item-and-arrangement’ theories, and equivalently renders vacuous their ‘realisational’ use as phonetic DM filler of terminal syntactic nodes i.e. as mere “débris” (Halle 2004, quoted from memory). The discrepancy is worse in data imported from the colonised world, where pioneer glosses of missionary translations and structuralist discovery procedures perpetuate lexical, derivational and inflectional inadequacies. Logophora (see directly below) is the special example here at hand, but similar muddles becloud the major categories noun and verb, tense and aspect, case and agreement etcetera (e.g. Bámgbóṣé 1972) for which no amount of notational repackaging can dissolve the enduring mystifications of “‘common sense’ (i.e. philosophical folklore)” (Gramsci 1935, 2311).

Instead of unpacking these *impedimenta*, Minimalism externalises them by trading structural *government* for derivational *economy* (Chomsky 1995, 173, 214 *fn* 19; 1998). The price of this quick fix is to foresake unification of the two sets of structural constraints that were the signature of generative syntax: phrasal displacement (Ross 1967) and pronoun reference (Langacker 1966, Lakoff 1968).<sup>7</sup> Whether the retreat is a classic case of ‘sour grapes’ (Perry 1965, 30*f.*) or the mid-course correction of a maturing theory, renouncing a grand synthesis did not enhance respective descriptive generality for either of the sub-theories. For displacement: strict feature-checking on its own is incapable to integrate necessary prosodic conditions (Richards 2016), all of which are syntax-friendly as framed in the directional branching *syntagmata* of Government Phonology (Kaye & al. 1990, Scheer 2012, *pāce* Bromberger & Halle 1989, cf. Kaye 1988). For pronouns: “the tendency to relegate... anaphora to the interfaces” (Koster 1997, 236) defers to the output filters of DM—a framework which equivocally insists that “in the phonology [sic], both phonetic *and* grammatical features are of interest” (Halle 2000, 127, italics added).

Any attempt to reduce the feature [anaphor] to “mechanisms and principles that are independently needed in the grammar” (Rooryck & Wyngaerd 2011, 1) should apply no less to [logo], a functional gloss for “self-reporting” items of Èvègbè and other West African languages (Clements 1973, Hagege 1974).<sup>8</sup> The logophoric label was also applied to speech-act Comps (Hyman & Comrie 1981, Koopman & Sportiche 1989) before going viral as an exotic *alibi* for European reflexives “with no antecedent in the sentence” (Reinhart & Reuland 1992, 191). Such popularity can’t outrun the founding failure of the “taxonomic model... of modern structural linguistics” to deliver “full description on the syntactic level” (Chomsky 1964, 11, 34). The inbuilt inadequacy of grammaticised logophora is verified, if unintentionally, by the belated attempt to establish [logo] as a true descriptor of the Èvègbè pronoun *yè*. To save the basic claim, a logician is compelled to enlist a “concept generator” of possible worlds and coin an *ad hoc*, unfalsifiable “hybrid” class of “logophoric pronouns that can be interpreted *dē rē*”—while still insisting, against all Popperian reason, that such bald expedients “certainly [sic] do not falsify the claim that there are obligatorily *dē sē* expressions in natural language” (Pearson 2015, 116). These results are diminishing returns on an unsecured investment held by “tenacity” (Feyerabend 1970, 203) or “loyalty” (Hirschman 1970).

Less cautiously, it’s declared outright that the Yorùbá pronoun *òun* denotes “true *dē sē* anaphora, bound by an OP-LOG” which “must be *dē rē*-free” (Anand 2006, 52), but Yorùbá begs to differ.<sup>9</sup> In fact, outside of indirect discourse, *òun* occurs freely without self-reference (§2 below). In reported speech moreover, *dē sē*/*dē rē* complementarity of *òun* versus bare *pro* is not exceptionless as would be expected by the morpho-semantic theory, but instead is confined to sequence-of-tense configurations (§3). This restriction entails the “linking” and “anchoring” (Enç 1987, 1991) of nomino-temporal referents in a multiclausal span, something beyond the reach of interpretable features marked on individual lexical items. The intuition of cross-category reference, e.g. “tense is a pronominalization of the time adverb” (Lakoff 1970, 839, cf. Kiparsky 1968, 35, McCawley 1971, 111, Partee 1984), is entailed by the central premise of GB theory—inexpressible under Minimalism—that the governing category of pronominal arguments is the “tensed clause... governed by INFL” (Chomsky 1981, 189).

Whether Minimalism is a speculative bubble and logophora a counterfeit commodity, let Yorùbá at last decide.

## 2. Yorùbá anaphora

Paradigm (1), due to Bámgbóṣé (1966, 107), got its first generative analysis from his erstwhile student Pulleyblank (1986).<sup>10</sup>

7. Misgivings about the formalist austerity linger, e.g. “the status of the ECP is, in *the current framework* that denies primitive status to the notion of ‘government’, questionable” (Kayne & Pollock 2025, 7, italics added, cf. Kayne 1981).
8. Èvègbè (“Ewe”) and Fǎngbè (§3 below) are respectively the western- and eastern-most zones of Gbè (Capo 1991, 15), a major cluster in the Benue-Kwa/East Volta-Congo “dialect continuum”—a continent-wide area comprising the majority of descendants of Niger-Congo, “the largest phylum in the world” (Williamson & Blench 2000, 11, 17*f.*). For structural diagnostics, see footnote 10 below.
9. The Yorùbá cluster—also called Defoid or Yoruboid—is adjacent to Gbè in Benue-Kwa (cf. preceding footnote). Lexicostatistics notwithstanding (Bennett & Sterk 1977, Schadeberg 1986, Williamson 1989), Yorùbá is Gbè’s closest cladistic relative with respect to phonology as well as syntax (Capo 1985, 1989, Stewart 1994, 176, Manfredi 2009).
10. For the reader’s convenience, embedded clause boundaries are annotated in the data below, and subscripts *i/j/k* replaced by *w/y/z*. Audibilia of Yorùbá inflection, taken as “direct interface and one-channel translation” (Scheer 2012) of “prosodic events... under syntactic control” (Yu & Stabler 2017, 36) include the following:

*pro*.NOM → *ó* comprising a cyclic pitch accent (nonlexical H-tone) plus a PF-epenthetic vowel of 3s *signe-zéro* (Benveniste 1946).

*pro*.ACC → unaccented (M-tone/ toneless) timing unit translating a cyclic phrase-boundary as a last resort.

*pro*.GEN → unaccented (M-tone/ toneless) timing unit translating a cyclic phrase-boundary as a last resort, plus (*r*)è.

3s.NOM → *òún*, comprising pronominal *òun* ‘3s’ plus a cyclic pitch accent (nonlexical H-tone).

Null subjects distributed as follows:

irrealis finite subject → *pro*-drop (Oyèlá.ràn 1970, 157, Déchaine 1993, 486, Manfredi 2010, 2018).

nonfinite subject → cyclic pitch accent (nonlexical H-tone) plus timing unit (Bámgbóṣé 1966, 76*f.*, Awóyalé 1983, 2018).

As to tense, a finite dynamic predicate of Yorùbá is “vague” in the \*precise\* sense of Verkuyl (2008, 157), spanning simple past and completive/extended-now (Awóyalé 1991, 195), as in old Neapolitan *passato remoto* with present relevance, also reported in Spanish and Sicilian (Ledgeway 2009, 439-41). The temporal vagueness of Yorùbá past versus its Germanic counterparts is neither polysemy (Kiparsky 2002b) nor coercion by context (Mittwoch 2008) but the result of regular Yorùbá syntax that pronounces and interprets Tense and VP in separate derivational phases—a timing of phased derivation characteristic of the compact, innovative BK2 clade of Niger-Congo, including also Gbè, to the exclusion of the dispersed, remnant population BK1, where Tense and VP necessarily spell out together (Manfredi 2009). The systematic ambiguity in BK2 is difficult to derive under strict Minimalism, so its existence may therefore provide an independent reason to admit extended representations such as are possible in Graf-style graphs (cf. Graf 2017).

- (1)a. Ó<sub>w</sub> ri [CP pé ó<sub>z</sub> l'ówó].  
*pro*.NOM see.*pro*ACC COMP *pro*.NOM have.money  
 'S/he (has) verified/ensured that s/he had money'  
 INTERPRETATION: **w** and **z** are preferentially distinct.
- b. Ó<sub>w</sub> ri [CP pé òún<sub>z</sub> l'ówó].  
*pro*.NOM see.*pro*ACC COMP 3S.NOM have.money  
 'S/he (has) verified/ensured that s/he had money'  
 INTERPRETATION: **w** and **z** are preferentially identical.

In (1a), Bámgbósé's English translation has the two *ó* clitics referentially distinct ("he other than himself"). Pulleyblank's analysis treats embedded *ó* as a logical variable bound by a null operator with widest scope, thus excluding an antecedent in the main clause by GB-binding condition C (1986, 55, cf. Chomsky 1981, 188). It follows that embedded *ó* is not nominative *pro* but instead the resumptive that appears exceptionlessly (in Standard Yorùbá) with *ex-situ* focus (7b), relativisation (Bámgbósé 1966, 117*f.*) and *wh* interrogation (Stahlke 1973, 198; Carstens 1986, 25; Pulleyblank 1986, 54).<sup>11</sup> The conjecture is attractive but faces an empirical problem: in all these A-bar dependencies, *ó* is optionally neutral to the person/number of its antecedent, plausibly diagnosing PF epenthesis of a non-properly governed trace (Chomsky 1981, 250) just as would be expected if phonology is innocent of grammatical number (*contra* DM, please note). In indirect discourse by contrast, number-neutrality fails: in neither (1a), (8a) nor (9a) is the embedded *ó* construable as plural. Without some independent reason to impose inherent number just in these examples, appealing to an abstract operator and bound variable anaphora amounts to conjuring a speculative, global "constraint in terms of 'features' or other *ad hoc* markings" (Postal 1972, 50).<sup>12</sup>

Despite preferred coreference in (1b), *òun* is not intrinsically an anaphor, as Pulleyblank rightly notes (1986, 60), because it occurs independently as a condition B pronoun: nonlocally free in matrix A-position (2) - (6) and also in a subordinate clause iff lacking overt Case, either hosting a right-adjoined modifier (7a) or itself left-dislocated (7b).<sup>13</sup> A reflexive interpretation fails for the accusative 3s clitic *pro* (3) equally as for *òun* itself (4). In all these environments, the only interpretive difference between *ó* and *òun* is the latter's *specificity*, i.e. "some recoverable relation to a familiar object" but which is not total "identity of reference" (Enç 1991, 24). Diverse attested examples are consistent with this idea:

- (i) evoking a presupposed entity  
 Ó *di* òún 'It became **a reality**' (Abraham 1958, 494)  
 Òún *ni ní pé nwon tí gbà lá.ti kúrò* 'The **fact of the matter** was that they had agreed to leave' (Awóyalé 2008).
- (ii) conjoining paired entities  
 Àjàyí òún Òjó 'Àjàyí **along with** Òjó' (Dé.lànò 1958, 155), òrun òún *ayé* 'heaven-**and**-earth', *òbè [ata òún eran]* 'pepper-**and**-meat broth', *òòsà òún aṣọọ rẹ* 'the *òòsà* **together with** its funeral shroud' (Abraham 1958, 150, 494).<sup>14</sup>
- (iii) euphemistic avoidance of direct address  
*Şé ara òún kò dá?* 'Is **the relevant individual's** body not strong?' i.e. 'Are you quite OK?'<sup>15</sup>

The listeme of Yorùbá best approximating an inherent anaphor is not *òun* but a periphrastic idiom: [*ara* [X]] 'X-self formed with inalienably possessed *ara* 'body' (5).<sup>16</sup> The reflexive parse of [*ara* [X]], obtained if X = *pro*, never blocks the literal construal 'body of X' (Awóyalé 1986, 11, Ajíbóyè 2004), which is the only possibility in case X = *òun* (6).

- (2)a. Ó sùn.  
*pro*.NOM sleep  
 'S/he fell asleep/was asleep'
- b. Òún sùn.  
 3S.NOM sleep  
 'The relevant individual fell asleep/was asleep'
- (3)a. Ó<sub>w</sub> rí i<sub>z</sub>. *allegro* → Ó *ri*.  
*pro*.NOM see *pro*.ACC  
 'S/he saw/has seen 3s'  
 INTERPRETATION: **w** and **z** are distinct.
- b. Òún<sub>w</sub> rí i<sub>z</sub>. *allegro* → Òún *ri*.  
 3S.NOM see *pro*.ACC  
 'The relevant individual saw/has seen 3s'  
 INTERPRETATION: **w** and **z** are distinct.

11. Notational similarity aside, Pulleyblank's antilogophoric operator is the functional opposite of Chierchia's  $\lambda$ -abstractor of self-reference (1989, 10).

12. Pulleyblank's hunch that the disjoint reference of subject *ó* in reported speech is caused by a logical operator won't be settled without a journey through the *igbó Oló.dúmarè* of Yorùbá's natural dialects. To my knowledge most detailed findings on this point are reported for Vata (Kru, presumptively BK), where the homophony between nominative *pro* and the A-bar resumptive is notably incomplete as would be expected if antilogophora does not reduce to bound variable anaphora. In Vata, clitic *ɔ* '3S ANIM' (along with inanimate *í*) differs prosodically according to interpretation: it bears MH (upper-mid 'tone') when pronominal, but L (low) when it "behaves as a variable" (Koopman & Sportiche 1982, 142*f.*; 1986, 360, 371; Koopman 1983, 367; 1984, 37, 145, 170) including as a parasitic gap (Koopman 1984, 77*f.*, ex. 92 vs. 90a). A further difference is that when *ɔ* has L, the vowel is "optional" and thus plausibly analysed as epenthetic in *lento* speech, rather than as "deleted" in fast *tempo* (*pāce* Koopman 1983, 388 *fn.* 4). It seems safe to assume that the same optionality does not occur with pronominal clitics, else they'd have been described as *pro* drop.

13. Of 250 tokens of *òun* in one text of ~150k 'words' (Adéoyè 1979), less than half occur in indirect discourse. The position of *òun* in (7b), conventionally labeled Spec, CP/FocP in the left-periphery, is alternatively analysed *in situ* as an inverse specificational pseudocleft (Obiládé 1977, Awóbúluyí 1978b, Adéşólá 2006).

14. Here *òòsà* (*òrìsà*) denotes *èégún* (*egún-gún*), a body-masked dancer simulating a departed ancestor (Verger 1957, 507-10, plates 153-58).

15. Published example, source temporarily misplaced. Functionally similar to Èdó *òghian* (Melzian 1937, 139). This usage is not honorification, which—mainly in old territories of imperial Oyó—takes *plurali di maesta*: *e/yin/èyin* 2P and (*à*)*won* 3P.

16. This periphrasis is famous in Haitian (Carden & Stewart 1988, Déchaine & Manfredi 1994, Rooryck & Wyngaerd 2011, 40*f.*).

- (4)a. Ó<sub>w</sub> rí òun<sub>z</sub>.  
*pro.NOM see 3S*  
 ‘S/he saw/has seen the relevant individual’  
 INTERPRETATION: **w** and **z** are distinct.
- b. Òún<sub>w</sub> rí òun<sub>z</sub>.  
 3S.NOM see 3S  
 ‘The relevant individual saw/has seen a second relevant individual’  
 INTERPRETATION: **w** and **z** are distinct.
- (5)a. Ó<sub>w</sub> rí ara arè<sub>z</sub>. *allegro* → ...*ara è*  
*pro.NOM see body pro.GEN*  
 ‘S/he saw/has seen himself/herself’  
 OR ‘S/he saw/has seen the body of 3S’  
 INTERPRETATION: if *ara* ‘body’ is referential, **w** and **z** are unrestricted, else identical.
- b. Òún<sub>w</sub> rí ara arè<sub>z</sub>. *allegro* → ...*ara è*  
 3S.NOM see body *pro.GEN*  
 ‘The relevant individual saw/has seen himself/herself’  
 OR ‘The relevant individual saw/has seen the body of 3S’  
 INTERPRETATION: if *ara* ‘body’ is referential, **w** and **z** are unrestricted, else identical.
- (6)a. Ó<sub>w</sub> rí ara òun<sub>z</sub>.  
*pro.NOM see body 3S*  
 ‘S/he saw/has seen the body of the relevant individual’  
 INTERPRETATION: **w** and **z** are unrestricted.
- b. Òún<sub>w</sub> rí ara òun<sub>z</sub>.  
 3S.NOM see body 3S  
 ‘The relevant individual saw/has seen the body of a relevant individual’  
 INTERPRETATION: **w** and **z** are unrestricted.
- (7)a. Ó<sub>w</sub> rí [CP pé òun<sub>z</sub> náà-á l’ówó].  
*pro.NOM see.proACC COMP 3S even-NOM have.money*  
 ‘S/he verified/ensured that even the relevant individual had money’  
 INTERPRETATION: **w** and **z** are unrestricted.
- b. Ó<sub>w</sub> rí [CP pé òun<sub>z</sub> ní ó<sub>z</sub> l’ówó].  
*pro.NOM see.proACC COMP 3S be pro.NOM have.money*  
 ‘S/he verified/ensured that the relevant individual was the one with money’  
 INTERPRETATION: **w** and **z** are unrestricted.

The fullblown *òratiò obliqua* in (8) - (9) presents a sharper referential contrast between *ó* and *òun* than obtains in the psych-verb complements in (1) where no literal predicate of speaking is involved.<sup>17</sup>

- (8)a. Ó<sub>w</sub> sọ [CP pé ó<sub>z</sub> tí jí tẹ’lẹ].  
*pro.NOM say COMP pro.NOM from awaken previously*  
 ‘S/he (has) said that s/he was awake already by the time of speaking’  
 INTERPRETATION: **w** and **z** are necessarily distinct.
- b. Ó<sub>w</sub> sọ [CP pé òún<sub>z</sub> tí jí tẹ’lẹ].  
*pro.NOM say COMP 3S.NOM from awaken previously*  
 ‘S/he (has) said that s/he was awake already by the time of speaking’  
 INTERPRETATION: **w** and **z** are preferentially identical.
- (9)a. Ó<sub>w</sub> ké.de [CP pé ó<sub>z</sub> tí jí tẹ’lẹ].  
*pro.NOM shout.out COMP pro.NOM from awaken previously*  
 ‘S/he (has) proclaimed that s/he was awake already by the time of speaking’  
 INTERPRETATION: **w** and **z** are necessarily distinct.
- b. Ó<sub>w</sub> ké.de [CP pé òún<sub>z</sub> tí jí tẹ’lẹ].  
*pro.NOM shout.out COMP 3S.NOM from awaken previously*  
 ‘S/he (has) proclaimed that s/he was awake already by the time of speaking’  
 INTERPRETATION: **w** and **z** are preferentially identical.

(8) and (9) are devised here as admittedly clumsy past-tense controls of the nonpast versions quoted in (12) below. The *plume-de-ma-tante* exercise is motivated by Yorùbá’s lack of inflectional past tense (Awóyalé 1991, 195, cf. Déchaine 1991). The adverb *tẹ’lẹ* ‘previously’ (an idiomatic serial VP, lit. *tẹ ilẹ* ‘put down’) is employed to temporally disambiguate the embedded clause. The required low construal of *tẹ’lẹ* is reportedly favored by the presence of *tí*, preverbal particle of completive viewpoint aspect (O. Ajíbóyè p.c., cf. Awóyalé 1991, 200; Oyèláràn 1992).<sup>18</sup> Without *tí* in the embedded clause, *tẹ’lẹ* could as well take root scope (by ‘high attachment’) and thereby lend the speech act an air of “prophecy” (Abraham 1958, 594), as if the utterance mystically preceded the reported event—a proper deictic “monster” à la Schlenker (2003)!

17. Coreference, excluded from canonical reported speech in (8a) and (9a), is marginal in (1a) with the psych-verb *rí* ‘verify/ensure’ (O. Ajíbóyè p.c.). The common denominator of both types is the Comp *pé* which, though not verifiably “a former verb ‘say’” (*páve* Lord 1976, 183), does reliably entail speech as “an overlaid function... whenever a verb of utterance is missing” e.g. *Bí a bá ñpé* ‘If we’re [saying] that S’ (Awóyalé 2008 citing Adéoyè 1979, 56 cf. Abraham 1958, 547). The lexical semantics of unaccented (M-tone/ toneless) *rí* with a *pé* complement arise by *allegro* contraction of the accented (H-tone bearing) root *-rí* ‘see’ plus the unaccented (M-tone bearing) mora of *pro.ACC* (Abraham 1958, 566 §2a, Bámgbósé 1966, 161) such that the derived string *rí pé* MH—‘saw it that’—has a sense of ‘noticed, understood, verified’ similar to French *remarquer*. The gradient coreference possibilities between (8/9) and (1), despite structural homology, reflect the different “*soi-à-soi*” selfconsciousness (Ruwet 1984, 83) of the respective types, as expected if *dē.vē* interpretations stem from real-world behavioral inference, not by satisfaction of a [logo] feature of a pronominal morpheme.

18. Toneless *tí* (M-tone bearing) also heads adjunct PPs of possession or source (Abraham 1958, 640) recalling French *de*. It is arguably a subconstituent of *tí*, the relative Comp that bears a cyclic accent alias grammatical H tone (Ajíbóyè 2005, 101f., 2007, 2016). Prosodic factorizations of closed-class elements (Manfredi 1994, 2018) are beyond the reach of translation-based taxonomy.

Pulleyblank proposes that *òun* is “allowed and required” if “the relevant NP position is to be interpreted as coreferential to an appropriate antecedent” (1986, 62)—possibly but not necessarily one within the matrix sentence. He ties this preference to the LGB Avoid Pronoun rule, but the analogy is inexact: Chomsky’s version (1981, 65, 222 *fn.* 1) regulates morphological not semantic economy, preferring *pro* to an overt pronoun just in case both options allow *the same* antecedent, as in (10), and this setup doesn’t apply to the contrast in (1) because the respective interpretations don’t overlap.<sup>19</sup>

(10) John prefers {*pro*/his} going to the movies.

Another difference from (10) is that by Pulleyblank’s hypothesis, the pronoun in (1b) is not in formal competition with *pro*, because the embedded subject in (1a) is treated as a logical variable that’s only (mysteriously) homophonous with *pro*.

The null operator analysis encounters a third problem in (11), the plural counterpart of (1).

- (11)a. Wón<sub>w</sub> ri [CP pé wón<sub>z</sub> Pówó].  
*pro*.NOM.PL see.*pro*ACC COMP *pro*.NOM.PL have.money  
 ‘They (have) verified/ensured that they had money’  
 INTERPRETATION: **w** and **z** are unrestricted.
- b. Wón<sub>w</sub> ri [CP pé àwón<sub>z</sub> Pówó].  
*pro*.NOM see.*pro*ACC COMP 3S.NOM have.money  
 ‘They (have) verified/ensured that the relevant individuals had money’  
 INTERPRETATION: **w** and **z** are preferentially, but not necessarily, identical.

In (11a), the embedded clitic *wón* has two equally accessible parses (“they themselves or they other than themselves”) but the embedded nonclitic *àwón* in (11b) means only “they themselves” (Bámgbóšé 1966, 107). The admitted free reference of clitic *wón* in (11a) follows if it is “purely pronominal” (Pulleyblank 1986, 51) thanks to possessing an inherent, interpretable plural feature, but this helpful fact then unhelpfully undermines an economy explanation of the preferred coreference of nonclitic *àwón* in (11b), because the plural contrast is not formally parallel to the singular situation in (1b). For the singular, Pulleyblank deduces from economy that “a pronoun appears only when a clitic cannot, when coreference is required with an antecedent within the domain of possible *mb*-extraction” (1986, 62), but this condition is not met in the plural pairing in (11), because coreference is already possible with the clitic *wón*. In short, the observed preference in (11b) violates economy.

Pulleyblank hints at an alternative approach, remarking with reference to examples like (2)

...that a pronoun [like *òun*] is possible in the same structure as a clitic [like *ó*] with the result that the interpretation is more emphatic [sic]. It is not clear whether this possibility is restricted to matrix clauses or whether it is also possible in embedded clauses... where its reference is not determined sentence-internally. This point bears on how strong the Avoid Pronoun Principle is. (1986, 62 *fn.* 13)

This hunch is promising, but hard to maintain while treating *òun* and its plural counterpart *àwón* as ordinary pronouns instead of how the class is consistently described: as “emphatic when used as subject or object of a verb” (Abraham 1958, 494), “pronoun substitute” (Bámgbóšé 1966, 107), “human noun” (Awóbúlúyí 1978a, 23) and “strong pronoun” (Pulleyblank 1986, 44, original italics). These intuitions of markedness, consistent with the demonstrative usages in (i) - (iii) above as well as with the obligatory selection in focus contexts like (7b) to the total exclusion of clitic *pro*, suggest that *òun* and *àwón* possess some additional interpretable property in addition to bare pronominal person and number.

The remaining ingredient of an analysis is binding domain. By definition, a syntactic account of anaphora operates “on the basis of a specific type of *structural relation* with the antecedent *in addition to* the morphological basis” (Bouchard 1982, 71, italics added). Pulleyblank himself floats—before scuttling—just such a relational boat, venturing that the referential contrast of embedded subjects in (1a-b) would follow immediately, if the respective items somehow obeyed LGB binding conditions A and B while also assuming that in reported speech, the binding domain “is modified in such a way as the matrix clause... would count as the governing category” (1986, 61). This conjecture, notably allowing a pronominal analysis of clitic *ó* so as to escape the aforementioned, untenable bound variable hypothesis, would be entirely *ad hoc*, unless the requisite extended domain turned out to have an independent empirical basis—which, remarkably enough, seems to be true. Then, if a neo-Pulleyblank theory of Yorùbá is ultimately confirmed, we can ask what type of grammar could accommodate it.

### 3. Domain extension alias CFC

The foregoing suggests that the referential contrast between *ó* and *òun* in (1), (8) and (9) combines two autonomous factors, each one potentially more tractable in itself than when both are lumped together into a single *ad hoc* LF/DS diacritic of *dē sē*.

- (i) *òun*, a specific, nonreflexive form in a main clause, acts in a subordinate clause like a non-local (‘long-distance’) anaphor.
- (ii) *ó* shows disjoint reference in a subordinate clause of “contenu de conscience” (Ruwet 1990, 55).

As to (i), *òun* differs intrinsically from *ó* in prosodic “heaviness” (Ross 1967, 56) consistent with specificity in roughly the same way that weight correlates with topicalization, scrambling and D-linking crosslinguistically (Williams 1997, Delfitto & Corver 1998). An audible factor is less arbitrary than a semantic diacritic for two empirical reasons: the acoustic fact exists apart from the semantic phenomenon to be explained, and the inverse markedness, with the ‘lighter’ item interpreted as more specific than its weightier counterpart, is unattested. A third consideration is theory-internal: a *dē sē* or [logo] feature tailored to embedded clauses is vacuous outside reported speech, violating Full Interpretation (FI) in examples like (2) - (6) above unless exempted by a ‘use only if needed’ escape clause. The FI problem is still worse: an inherent *dē sē* feature ought to allow *òun* to occur in the only listed reflexive expression in Yorùbá—the idiom headed by the inalienably possessed noun *ara* ‘body’ construed nonreferentially as in the topline parses in (5) above—whereas the opposite is true: in case *òun* does appear as possessor in such a ‘body’ phrase, only the literal interpretation is available and the antecedent of *òun* is accordingly free in a monoclausal context (6). Stronger counterevidence to the functionalist account is hard to imagine.

19. Pulleyblank’s idea of Avoid Pronoun is more like Pāṇini’s Elsewhere Principle: an anaphor ( $\pm$ null) ousts a pronoun ( $\pm$ null) if the interpretations differ (Bouchard 1982, 320), i.e. a grammatical dependency prefers the most ‘marked’ or specialized exponent available (Koster 1997, 244, cf. Kiparsky 1973). DM has a similar rule: competitive vocabulary insertion is won by “the item matching the greatest number of features specified in the terminal morpheme” (Halle 2000, 128, cf. Rooryck & Wyngaerd 2011, 15-28), \*except\* that feature bundles of individual lexical items, evaluated in phonology, can’t access a *phrasal* antecedent without look-back to the syntax.

Factor (ii) is clarified by data discovered by Adéşólá (2005, 190*f*). If the embedded clause is tenseless/irrealis, whether negative subjunctive (12a) or affirmative durative construed as future (12b), the reference of embedded *ó* is unrestricted. This outcome contrasts with (8) and (9) above, where the reported speech is “anchored” in a sequence-of-tense (SOT) configuration of past-under-past and embedded *ó* is preferentially disjoint from the matrix antecedent.

- (12)a. Olú<sub>w</sub> ti gbà [CP kí ó<sub>z</sub> má jẹ ìrẹ̀sì mọ́].  
 O.NOM from receive COMP *pro*.NOM NEG.IMV eat rice clean  
 ‘Olú has agreed that s/he should not eat rice again/further/at all thereafter’  
 INTERPRETATION: **w** and **z** are **unrestricted**.
- b. Olú<sub>w</sub> ti kẹ̀.de [CP pé ó<sub>z</sub> ñ bọ̀ l’ọ̀.la].  
 O.NOM from shout.out COMP *pro*.NOM DUR return LOC.tomorrow  
 ‘Olú has proclaimed that s/he is coming tomorrow’  
 INTERPRETATION: **w** and **z** are **unrestricted**.

The observed contrast can’t but bewilder a functional taxonomy precommitted to computing anaphora from precompiled meaning postulates of individual pronouns. Both datasets contain the same array of pronouns and differ only on two correlated points: tense value and pronominal reference possibilities. Working from (12) alone, Anand infers that “Yorùbá does not show antilogophoricity effects” (2006, 57) only by ignoring canonical examples like (1a) where *ó* prefers or requires disjoint reference. Anand does notice \*one\* instance of antilogophora (13a = Adéşólá 2005, 199 ex. 59a) but may have misread Adéşólá’s shorthand that assigns an asterisk to this sentence even though what’s excluded is only \*one array\* of referential indexes, implicitly leaving other possible interpretations as grammatical. To avoid that misunderstanding, it would have been clearer to affix the asterisk narrowly to the offending index of coreferentiality on the embedded subject—exactly as was done for virtually the same example 33 pages earlier (Adéşólá 2005, 163 ex. 1a = 13b below).<sup>20</sup>

- (13)a. Olú<sub>w</sub> sọ [CP pé ó<sub>z</sub> rí bàbá òun<sub>y</sub>].  
 O.NOM talk COMP *pro*.NOM see father 3S  
 ‘Olú (has) said that s/he saw the father of the relevant individual’  
 INTERPRETATION: **w** is distinct from **z**; **w** and **y** are preferentially, but not necessarily, identical.  
 [LITERALLY NOTATED IN SOURCE: **w**, **y** and **z** are not all coreferential.]
- b. Olú<sub>w</sub> ti kẹ̀.de [CP pé ó<sub>z</sub> rí bàbá òun<sub>y</sub>].  
 O.NOM from shout.out COMP *pro*.NOM see father 3S  
 ‘Olú proclaimed that s/he saw the father of the relevant individual’  
 INTERPRETATION: **w** is distinct from **z**; **w** and **y** are preferentially, but not necessarily, identical.  
 [LITERALLY NOTATED IN SOURCE: if **w** and **y** are coreferential, **z** is distinct.]

Notwithstanding inconsistent notation in the unpublished source, both versions of (13) are grammatical and allow exactly the same coreference. In both data, the excluded possibility, just as observed in (1a), (8a), (9a) above, is for embedded *ó* to anaphorise the matrix subject. Call this constraint antilogophora or any other name, but it’s an undeniable phenomenon.<sup>21</sup>

Anand’s apparent misreading of notation is not just collateral damage of casual copyediting; the pitfall would have been less tempting without the urge to treat ontologically distinguishable *interpretations* as distinct \*utterances\* distinguishable by “semantic parameters” (Chierchia 1998). That methodology, hegemonic in mainstream LF literature, has been diagnosed as

‘reading-itis’: the wish to assign as many readings as possible to a sentence without taking into account that a sentence might simply be used to underinform and that it is better to provide for means to describe underinformation precisely and formally. (Verkuyl 1993, *xiii*f., cf. 2008, 157)<sup>22</sup>

Granting \*formal\* autonomy to each possible LF/DS ‘reading’ in a parallel semantic architecture detached from syntax guarantees *à priori* that “binding strategies are freely available and not subject to syntactic constraints” and that “[t]here is now [sic] no longer a need for a syntactic ‘binding theory’” (Kratzer 2009, 187, 232). But this is not news, indeed it scarcely differs from the behaviorist doctrine that “anaphora is deixis in a semantical game” (Hintikka & Kulas 1985, 147). On the contrary, Adéşólá observation supplies the missing ingredient of a general \*syntax\* of antilogophoricity, as follows.

On anybody’s analysis, (12) differs minimally from (1a), (8a), (9a) and (13) in two respects: the content of the downstairs tense and the correlated interpretation of the embedded subject pronoun. In (12) the subordinate clause is nonpast and *ó* has unrestricted reference while in the others, the clauses stand in a past-under-past (SOT) configuration of reported speech and *ó* is at least preferably disjoint from the matrix subject. The task, to explain the patterns of possible and impossible reference, would be easier if a general solution to SOT already existed. For comparable logophora in Fòngbè, Kinyalolo (1993, 233) appeals to the “complete functional complex” (CFC) wherein “all grammatical functions compatible with its head are realised” (Chomsky 1986, 169).<sup>23</sup> Given that tense undeniably forms part of the CFC, dependent tenses under SOT should also equally belong—i.e. those in (1), (8), (9) and (13), but arguably not the embedded tense in (12) which, *quā* irrealis, can’t be referentially “anchored” (Enç 1987) in any plausible way.

Perhaps the CFC concept is not reconstructible in Minimalism, but rating a theory-internal impediment as more important than empirical adequacy is a high-risk strategy (§1 above). In GB theory, a sufficient generalization of the CFC to multiclausal structures was already proposed: “domain extension” across a “dynasty of dependent heads” (Koster 1986, 317, 340). This representational concept was already applied to two European phenomena—subjunctive obviation, long-distance anaphora—which at first sight are quasi-homologous to logophora. Strict Minimalism will struggle to emulate, reformulate or replace this crosslinguistic generalization of phrase structure by any conceivable array of diacritic features marked on

20. For ease of comparison, the subscripts written by Adéşólá (2005, 163, 199) are rephrased as the bracketed last lines in (13a-b).

21. Apparently mistaking (13a) as an ungrammatical \*string\* (utterance) of Yorùbá, Anand recruits it as evidence of a “*Dē Rē* Blocking Effect” (2006, 52, 57), but this has no bearing on the grammatical *antilogophoric* (i.e. *dē rē*) parse of embedded *ó* in (13) and in (1a).

22. In other words, “the QR application problem would seem to be an artefact” (Johnson & Lappin 1997, 309).

23. Fòngbè is a close relative of Èvègbè (footnote 8 above) and Kinyalolo (1993, 233) considers them isomorphic in relevant respects. Apart from invoking the CFC, Kinyalolo also posits an intensional operator of indirect discourse by which the Fòng-Gbè logophor *émi* would be “strongly bound” (Chomsky 1986, 85) similar to Chierchia’s (1989) representation of *dē sē*. This hybrid account gives *émi* the dual status of a subject-oriented anaphor and at the same time an LF variable—a redundancy that points to incomplete analysis.

individual pronouns so as to \*jointly\* check tense and coreference in a higher clause—not, at least, without the required apparatus amounting to a pointless equivalent of an extended government domain: “the derivational focus on features renders simple generalizations verbose by compiling them into the feature make-up of lexical items” (Graf 2017, 63).

In Romance languages, obviation of an overt or null subject of a subjunctive complement as in (14a) is attributed by Rizzi (1990, 35) following Ruwet (1984) and Pica (1984, 272*f.*) to the “anaphoric” status of a formally “dependent” tense, versus the unrestricted reference of the subject (null or non) of an indicative, whose tense is respectively “referential” (14b).<sup>24</sup>

- (14)a. Gianni<sub>w</sub> vuole [<sub>CP</sub> che {*pro*/lui}<sub>z</sub> scriv-a un libro].  
 want.3S COMP 3S write-IRR.3S a book  
 lit ‘G. wants that 3S write a book’  
 INTERPRETATION: **w** and **z** are necessarily distinct.
- b. Gianni<sub>w</sub> dice [<sub>CP</sub> che {*pro*/lui}<sub>z</sub> scriv-erà un libro].  
 say.3S COMP 3S write-FUT.3S a book  
 ‘G. says that 3S will write a book’  
 INTERPRETATION: **w** and **z** are unrestricted.

A similar point has been expressed in terms of pragmatic eventualities: “there cannot be any tense information in embedded constructions... the subjunctive is somehow responsible for the tense deletion... No direct reference in strong intensional contexts” (Stechow 1995, 367, 381) but a greater hurdle awaits, to replace the “somehow” with a rule of Tarskian logic that’s not *ad hoc*. In historical sciences from classical philology to molecular evolution, statistical reasoning (Greenberg 1991) can separate universals from similarities due to coincidence, to borrowing (horizontal transmission) or to inheritance (vertical transmission). The homology between antilogophora in Benue-Kwa (1a) and subjunctive obviation in Romance (14a), and the absence of the same referential restrictions when subordinate tense is independent (12 ≡ 14b), can’t reasonably be attributed to chance or to transmission events, hence the need for framework in which a necessary relation holds between tense and anaphora *in general*. Minimalism is not such a framework, for reasons reviewed in §1 above, specifically the dismissal of phrase structure representations in favor of Markovian efficiency. Pure functionalism won’t do either, with its unrestrictedness. The required concept was formulated in GB theory (Koster 1986, 149*f.*, italics added).

- (15)a. ...[β’...γ’...[β... (ω)...γ...δ...]]...]

δ stands for ‘dependent category’ (for instance, an anaphor or *wh*-trace); γ is the minimal governor of δ, and β is the minimal maximal projection containing γ and δ. ...β’ stands for the minimal category (*with the same values as* β) containing β and γ’ (the governor of β).

- b. Dynasty =<sub>df</sub> a chain of successive governors ⟨Y<sub>1</sub>, ..., Y<sub>i</sub>, ..., Y<sub>i+1</sub>, ..., Y<sub>n</sub>⟩, (n > 1) such that for each *i* (1 ≤ *i* < *n*), γ governs the minimal domain β containing Y<sub>i+1</sub>

The reader can verify that if β = S, γ = tense, δ = *pro* and γ = 2, then “the matrix clause... would count as the governing category” (Pulleyblank 1986, 61) predicting the failure of coreference in Yorùbá (1a) equally as in Italian (14a).<sup>25</sup>

The question is whether this result demands a particular format of grammar or has notational equivalents in alternative architectures. Accepting for argument’s sake that strict Minimalism can successfully emulate *wh*-displacement—waiving prosodic factors whose integration in feature-checking algorithms is still an architectural stretch (Richards 2016)—nevertheless it’s strictly impossible for any morpheme diacritic like [logo], or corresponding meaning postulate like *dē sē*, by itself to link a tense value (as in SOT) to a domain of impossible pronominal coreference (as in obviation and antilogophora). Such a correlation can at best be declared in a parallel morphology component investing each listed individual tense or pronoun with its own bespoke domain—a “sub[ordinate] clause parameter” (Kiparsky 2002a, 210, 2002b, 10)—but this device amounts to a *homonculus* or “preformationist fallacy” (Koster 2009) injecting an anatomically complete embryo of phrasal syntax into each lexical item.

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<sup>24</sup> Costa anticipated this idea, connecting the expression of speaker uncertainty by polarity items to “Italian... subjunctives... for which SOT and the past are... a partial substitute” (1972, 50).

<sup>25</sup> Arity of γ > 2 is widely observed for antilogophora, exactly parallel to successive cyclic A-bar movement (e.g. Pulleyblank 1986, 56). For Dutch and Icelandic reflexives, δ = *self*: “dynasties for anaphors are formed if the chain of governors is somehow dependent on the first element. ...long distance anaphors are possible... to the extent that a dynasty of dependent heads can be formed” (Koster 1986, 151, 340, cf. Pica 1987, 1991).

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