

Ìgbo transitivity in a derivational framework*

Victor Manfredi

African Studies Center, Boston University
[working draft, last updated 18 January 2012]

1. Lexical transitivity

According to the theory of Universal Grammar (Chomsky 1965, 6), data which may appear typologically ‘exotic’ can in principle turn round to explain previously ‘familiar’ phenomena by demanding more abstract analysis than first imagined. The work of Ken Hale sprang from this anti-Eurocentric imperative, as when he proposed a universal “lexical syntax” underlying the traditional morphological category labels *noun*, *verb*, *adjective* and *preposition*. Hale observed that canonically agentive, one-word predicates like English *dance* and Italian *ballare*, called “unergative” by Perlmutter (1978, 186 *fn.* 4, citing G. Pullum *p.c.*), form a natural class with their translational counterparts in Ìgbo and Navajo, based on shared syntactic traits such as the failure to directly causativize: **dance the child* (Hale 1996b).¹ By UG’s rationalist logic, Hale analyzed *all* unergatives as lexical entities of phrasal size, namely as lexically *transitive* expressions notated [V* V NP], whose PF shape may be reduced at the point of morphosyntactic spellout by conflation: [V* [V Ø] *laugh*] → [V* [V *laugh*] _e_]. But even in English, conflation leaves untouched some superficially transitive unergatives like [V* *dance a jig*], [V* *have puppies*], which are to that extent more obviously parallel to Ìgbo [V* -*té egwu*], [V* -*chì áchì*]. Hale’s intuition is that, if the class of unergatives is inherently—albeit abstractly—transitive, more of its syntactic behavior is explained.

Most unergatives in most languages include a morphological V (an item directly combinable with finite inflection), despite the fact that more denotation resides in the nominal complement than in the V itself—hence the “light verb” label (Jespersen 1942).² Greater diversity exists for two other types, encoding duplex relations; both of these are spelled out in Ìgbo as V, whereas they are respectively P and A in English, and either P and V or P and N in most other languages.³ Finally, a lexical item may be an atom with no relational structure at all: in most languages this is morphological N. Table (1) is lightly adapted from Hale (1995).

	lexical-relational type	language-particular spellout						
		English	Ìgbo	Lardil	Navajo	Warlpiri	Salish	
(1)	simplex “unergative” relation head x plus complement y		V	V	V	V	X	
	duplex “P-type” relation subject z plus branching predicate x		P	V	V	P	P	X
	duplex “A-type” relation subject z plus nonbranching predicate x		A	V	N	V	N	X
	nonrelational		N	N	N	N	N	X

Because UG allows at least the freedom of spellout sampled in (1), lexical relational structure (LRS) is crosslinguistically more predictable than morphosyntactic category (*pace* Baker 2003). Thus, assuming that [V* -*té egwu*], [AP -*té anya*], [PP -*kpù okpù*] and [TP -*dí* [NP *egwù*]] represent the four LRS types in (1), distinct inflectional patterns arise in Ìgbo approximately as in (2).⁴

* *Kà anyí gòwá nnukwu mmụọ àtò: Ígoló Kèrnjìká Anòkà*, urbane intellectual and cultureworker; *Déé* Phil Nwáchukwu, militant syntactician and tradeunionist; *Dáá* Sístá Ūwalaáka, untiring philosopher-scholastic. Thanks to Dr. Chínèdú Úchèchúkwu for inviting this paper and allowing its presentation *in absentia*, to Ūzò Íhìònú for cherishing the spirit of our late Professor Ken Hale, and B. Levin for discussion. *Òba, má mmá ný, ó!*

Tone orthography. Throughout the Benue-Kwa (BK) branch of the Niger-Congo language family, [´] = high, [˘] = low, but BK divides into two prosodic types which are suited to two different principles of marking economy. In BK2 (comprising the Gbè, Yorùbá, Nupe and Ídòmà macro-clusters) with its ternary lexical pitch contrast H/M/L, the most efficient marking is *paradigmatic* i.e. syllable-by-syllable, thus no mark = tonelessness = M (Akinlabí 1985). In BK1 (Àkan, Èdó, Ìgbo, Tiv, Cross, “Bantu” and elsewhere in BK) with binary lexical tone, the best marking is *syntagmatic*, i.e. computed from one syllable to the next, thus no mark = same as preceding syllable and a sequence of two H marks = downstep starting on the second mark (Swift & al. 1962, 49f.; Welmers & Welmers 1968a, *in*; Nwáchukwu 1995, 2f.; approximations of this format were also invented by Christaller 1875, 15 and Nwáchukwu 1976, 20; , cf. Roberts 2011, 84), e.g. both Ìgbo *ágadi* ‘old person’ and Èdó *Ólokún* [‘tutelary supernatural’] are pronounced HH¹H. BK2 operates a limited form of downstep preceding M; this can be marked by a word-internal period, e.g. Yorùbá *Oló.kun* MH¹M ‘possessor/epitome of *òkun* LM [the ocean]’ vs. *olókun* MHM ‘possessor/epitome of *òkun* MM [energy]’ and the same notation generalizes across BK to mark a non-spreading word-internal juncture in any language with automatic spreading from H onto a following L, e.g. Yorùbá *oló.dù* MH¹L ‘possessor of an *òdù* LL [clay cauldron]’ vs. *olódù* MHL ‘possessor of an *òdù* ML [8-bit oracle sign]’, and Èdó *nó.dé* H¹L ‘yesterday’ which is not pronounceable as *[*nódéé*] HHL, cf. Bámgbósé (1966b, 1972), Ámayo (1976).

Grammaticality diacritic. An asterisk *... at the left of any string denotes ungrammaticality. String-internally, an asterisk immediately before an open parenthesis ...*(... indicates that the parenthesized item is grammatical but its omission is ungrammatical. Caveat: the notation V* (to be read, *V-star*) is unrelated; this was Hale’s original label for the unergative type of lexical relational structure, and I preserve it here.

1. In Germanic, unergatives are also defined by ability to form impersonal passives (Perlmutter & Postal 1984, 107-12, citing Curme 1952, 338).
2. Notable crosslinguistic literature about light verbs includes Laka (1993) on Basque and Butt (1994) on Hindi-Urdu.
3. Hale regarded the α in the adjectival LRS as a pure formal requirement (cf. Hale & Keyser 2002, 159f.), but on it could denote the inchoative nature of this predicate type, which attains nondynamic Aktionsart only derivatively (Guerssel 1986, 75f.; Hellwig 2010, 809f.).
4. Corrections invited. The picture in (2) becomes much more informative if dialect data are included, cf. Éménanjo (1981).

	V* (unergative)	A-based lexical subject	P-based lexical subject	N-based (copular)
(2)	-Ø *Ó tē égwu. [Énuàni: OK as past]	*Ó tē ànyà. [Énuàni: OK as nonpast]	Ó kpù okpù. [nonpast state]	Ó ðí égwù. [nonpast]
	-rV Ó tē-re égwu. [past]	Ó tē-re ànyà. [nonpast]	Ó kpù-ru okpù. [past event]	*Ó ðí-rí égwù.
	-V-rV Ó tē-e-re égwu. [applied/remote]	Ó tē-e-re ànyà. [past]	Ó kpù-u-ru okpù. [applied/remote]	Ó ðí-ì-rí égwù. [past]

Details of (2) aside, the essential point is that Ìgbo keeps distinct the inflectional paradigms of all four LRS types, even though three of them share the morphosyntactic category of V, as noted in (1). If so, why? So far, the most credible, concerted analyses couched in strictly morphological terms have failed to predict these forms on the basis of their lexical (open-class) and inflectional (closed-class) ingredients. Green & Ígwè (1963), Winston (1966), Nwáchukwu (1976a,b) and Clark (1989) were all forced to use diacritic homophony—a solution which is technically possible, but neither psychologically learnable nor implementable in computation (Stabler 2009) because it amounts to restating the data at hand with arbitrary, content-free affix labels $-rV_1$, $-rV_2$... The remaining possibility is to appeal to independently motivated generalizations which are not taxonomic but *derivational* i.e. stated as interactions across several autonomous components of grammar, each of which is learnable/computable in its own right.⁵

Apparently indispensable in any such attempt is LRS, depending in turn on Hale's idea that both lexicon and morphosyntax include phrasal-syntactic representations.⁶ Accordingly, the generalization in (2) could be that one token of $-rV$ occurs for every predicate—lexical or postlexical—which doesn't c-command its subject.⁷ On this view, $-rV$ is not inherently a marker of tense, though it may accidentally translate English tense manifestations in particular examples. Instead, $-rV$ is a resumptive argument-type clitic licensing secondary predication (Manfredi 2005b). Applicatives, inchoative (static→dynamic) aspectual operators and remote past interpretations all plausibly count as secondary predicates, each demanding its 'own' $-rV$ by hypothesis and as observed. The availability of past or nonpast reference for a given predicate is assumed to be determined apart from morphology, by pragmatic principles of temporally-interpreted event structure quantifying over aspect.⁸ In sum, tense is not denoted by any inflectional morpheme *per se*, but is interpreted across the entire derivation, including both lexical and postlexical strata.⁹

A good test of the above hypothesis, and therefore of the LRS theory overall, is the derived stativity effect described in Ìgbo by Welmers & Welmers (1968b) and Íhiònú (1988). In a multi-event ("consecutive") serial construction like (3a), lexically dynamic, unergative [V^* -gbà qsq] 'run, escape' shows the same inflectional pattern as it does in nonserial (3b). But in a single-event (subject depictive) serial like (4a), the surface inflection of [V^* -gbà qsq] shifts to match that of lexically nondynamic [pp -khwù qsq] 'stand up' in simplex (4b), correlated with an interpretive shift from 'run [somewhere]' (3a) to 'be a refugee' (4a).¹⁰

(3)a. Há gbà*(-ra) ósq bíá. 3P move-AFF escape come.AFF ¹¹ 'They ran [somewhere or other] and [then] came [here]'	(4)a. Há gbà(-a-ra) ósq bíá. 3P move-AFF-AFF escape come.AFF 'They came [here] on the run/as refugees'
b. Há gbà*(-ra) ósq. 3P move-AFF-AFF escape 'They ran [somewhere or other]'	b. Há khwù(-u-ru) óto. 3P hang-AFF-AFF straightness 'They are (were) in an upright posture'

The contrast of (3a) and (4a) shows that the basis of inflection in LRS, arguably responsible for the four $-rV$ paradigms in (2), is recalculated relative to the aspectual composition of the entire sentence, at least as late as the point of spellout, and does not rely on lexical structure alone, otherwise (4a) should be ungrammatical. But the converse implication also holds: morphology alone is inadequate to parse Ìgbo inflection, as sampled in the four columns of (2), without access to LRS representations. Monostratal (nonderivational) analysis fails absolutely to handle this.

The interim moral of the story is that transitivity has an inescapably lexical dimension, which happens to be reflected more transparently overall in Ìgbo than in English. Ìgbo's unergatives like [V^* -té égwu] are transitive both lexically *and* superficially, whereas many or most English unergatives shed their nominal complement by conflation at PF spellout. Thus the above data show, less that transitivity is "redundant" in Ìgbo (Éménánjò 1984) than that English surface intransitives are not a privileged window onto LRS. The English situation is nevertheless learnable, thanks to bootstrapping cues like the sporadic presence of quasi-cognate objects (*dance* {*a jig*, *the boogaloo*...}, cf. Massam 1985) and the absolute failure of unergatives to causativise (**dance the child*). Perlmutter was clever enough to isolate the unergative LRS class based on Dutch and Italian data alone, but the road from there to Hale's theory of unergatives as LRS transitives would have been longer, and less convincing, without the help of Ìgbo and Navajo.

5. By definition, a derivational grammar reduces neither to a single representational stratum (a context-free phrase structure) nor to output constraints filtering random inputs (a nonstratal optimization procedure). Evidently the generative capacity of natural language falls somewhere between these extremes (Chomsky 1956, Schieber 1985), nor does this problem disappear from mere handwaving at an architecture of modular interfaces (OT etc). Given a derivation, a minimum of intermodular interaction is inescapable (Scheer 2010).

6. Other studies in similar vein include Verkuyl (1993), Erteschik-Shir & Rapoport eds. (2005) and Zubizarreta & Oh (2007).

7. The first $-V-$ in $-V-rV$ is descriptively 'reduced' but could inversely reflect partial *epenthesis* e.g. if $-rV$ is a resumptive pronoun. Here I assume that the copula $-dí$ of pure N predication is not part of the lexical entry, but merges in postlexical (i.e. functional, closed-class) syntax.

8. E.g. Welmers & Welmers (1968b, 76, 161-63, 180f.), Carrell (1970), Ûwálààka (1981), Williamson (1982), Déchaine (1991) among many others.

9. For a purely morphosyntactic analysis, it's pure coincidence that all finite tokens of the $-rV$ suffix coincide with a so-called tone rule: Welmers' "low tone replacive" (1970, 51) process morpheme or its restatement in "autosegmental" notation (Goldsmith 1976, 121-23). This fact opens a fresh analytical possibility, that Ìgbo finite inflection is fundamentally prosodic, and only secondarily affixal, in PF spellout. In other words, the primary cue to inflectional morphosyntax in Ìgbo is the effect of phrasal constituency on categorial pitch ("surface tone").

10. The inchoative version of [pp -khwù qsq], with a derived dynamic meaning, inflects with obligatory single $-rV$ like a basic unergative, cf. (i). Double $-rV$ is then presumably also possible, yielding either an applicative or remote past interpretation as in (ii), cf. Nwáchukwu (1984).

(i) Há khwù*(-ru) óto. 3P hang-AFF straightness 'They stood up/came into a standing posture'	(ii) Há khwù-u-ru óto. 3P hang-AFF-AFF straightness 'They stood themselves up/had previously stood up'
--	--

11. This root takes covert OVS, cf. Swift & al. (1962, 76, fn.1), Déchaine (1993b, 520).

2. Morphosyntactic transitivity

Lexical Relational Structure is not just a shiny new gadget bolted on to previously existing (and slightly rusty) morphosyntactic machinery. To adopt LRS is to explicitly dismiss thematic (“theta-”) roles—a list or ordered set (“grid”) of lexical diacritics adopted by generative semanticists from the Aristotle/Frege tradition of treating argument structure as function application (Gruber 1965; Fillmore 1968, 1969; Jackendoff 1972; Higginbotham 1985). Because theta-theory has been central to most frameworks of grammar in the past half century, its rejection has radical consequences both for the shape of UG and for analyses of particular languages.

Theta-theory has several incorrigible defects. (i) The set of thematic labels is unconstrained: Ostler (1979, 89*f.*) names at least 48 distinct “participant roles” in Sanskrit with no upper bound in sight, whereas LRS posits a small and complete set of lexical entities conforming to standard syntactic laws. (ii) The choice of which thematic labels to apply in a given sentence is arbitrary, thus there’s no explicit and general way to distinguish an animate *Theme* from a *Patient* or *Causee*; an animate *Goal* from a *Recipient* or *Experiencer*; or an animate *Instrument* from an *Agent*. LRS avoids multiple labels by pushing the lion’s share of thematic interpretation out of the lexical input and into semantic-pragmatic *output* alias LF, which is closer to linguistic *performance* as opposed to *competence*, at the interface with general cognitive or conceptual systems and not specific to grammar. (iii) Linking of thematic roles to argument positions relies on a templatic prominence hierarchy, all of whose versions (Fillmore 1968; Perlmutter & Postal 1984; Grimshaw 1990; Jackendoff 1990 among many others) mysteriously ape surface syntactic prominence, e.g. thematic *Agent* is consistently linked ‘higher’ or ‘later’ than *Patient*, just as a grammatical subject is necessarily merged ‘higher’ or ‘later’ than any of its objects. Given this systemic coincidence, Ockham’s Razor should eliminate one or the other of the two redundant formats: either by reducing a large part of syntax to a “shell” or “cascade” of participant-role diacritics (Baker 1988; Larson 1988; Pesetsky 1994) or by treating some thematic interpretation as predictable from syntactic relationships at some level (Hale & Keyser 1993). (iv) Thematic structure is sensitive to morphosyntactic processes like aspect shift (Zucchi 1998), e.g. in Germanic and Romance the various lexical verbs meaning ‘jump’ (*springen, saltar...*) systematically alternate between an atelic, unergative manner of motion (*John jumped in the ditch for hours*) and a telic, ergative change of location (*John jumped in the ditch in a split second*), and in only the latter frame is the subject classed as a *Theme* (Hoekstra & Mulder 1990, 8, cf. Carter 1977; Perlmutter & Postal 1984, 101*f.*). The same shift correlates with a change of finite auxiliary *have*→*be*, in languages which allow both possibilities; but in English where *have* is the only option, the only audible cue for these matched aspectual and thematic differences is the *for*→*in* alternation of the optional adjunct phrase diagnosing telicity (Vendler 1967). In sum, theta-roles don’t even provide a generally reliable encoding for the lexical semantic information of a given predicate, far less do they predict the interpretive effect on a given argument of its superficial morphosyntactic environment.

In defending a Fregean linkage of transitivity and theta-roles in Ìgbo, Nwáchukwu (1987) faced the dilemma of whether to treat the so-called “inherent complement” (IC)—the nominal that accompanies a semantically light verb root as in the unergative class—as a thematic argument or as a morpholexical adjunct. In effect, he chose *both*, analysing *-gbá egbè* ‘shoot [with a gun]’ as lexically monotransitive and syntactically ditransitive: *égbè*, the IC in this expression, is a “non-argument” (1987, 77), making ‘shoot’ thematically parallel in Ìgbo and English and so preserving translational (notional-semantic) equivalence, but at the same time on compelling syntactic grounds it is assigned the interpretation of a thematic “patient” or “direct argument” (1987, 73), which is decidedly un-English. So, which analysis of *égbè* is correct, or how can both be true? This dilemma recalls the general problems of theta-roles reviewed above, but also fails elementary descriptive adequacy in Ìgbo-specific terms: Nwáchukwu’s claim that inherent complements are morphosyntactic arguments but not lexical ones, predicts that the presence of an inherent complement should have no consequences for lexical transitivity, but Íhiònú (1989) observes that this prediction is false. In fact Ìgbo has no verb taking an IC in addition to a double object (IO plus DO), plus or minus the applied object (APPL) or the BVC (see below), i.e. Ìgbo has no sentence with any of the linearizations in (5). Why not? Nwáchukwu’s analysis can’t avoid generating these unattested strings.¹²

- (5)a. *...*verbroot-rV* IO DO IC (BVC)
 b. *...*verbroot-V-rV* APPL IO DO IC (BVC)

A second problem with treating Ìgbo transitivity as function application was observed by Émènanjò (1984). The “bound verb complement” (BVC) is not lexically listed and not even a word in its own right. Instead, it’s generated productively at PF spellout in absolute-final position, as a sentential affix with prosodic properties reminiscent of nuclear stress (Íhiònú 1989; Manfredi 2005b). The BVC’s interpretation is not invariant but depends on surface structure, thus in (6a-b) and (7a-b), it triggers a polarity focus (“emphasis”) reading similar to English affirmative *do*-support, giving the lexical predicate a topical or presupposed status, but in (6c) the BVC is obligatory and adds no “emphasis”—i.e. the example doesn’t mean that the containers were *expected* to be full—and is interpreted as mere “complement” or “meaning specifier... like all other complements” (Émènanjò 1984, 18). “Emphasis” is also lacking in (7c), where the internal argument is reported to be merely anaphoric in context (Hale & *al.* 1995, 94). The fact that the BVC remains adverbial (i.e. “emphatic”) in (6b), despite the lack of an overt lexical complement to the verb, is not a problem, since—as noted by Ùwaláàka (1981) following Fillmore (1966)—the internal argument of *-bía* and similar deictic expressions is always recoverable directly from context, whereas the same is not true for *-jú* and *-tá*, items which lack the special property of intrinsic deixis. In sum, the BVC’s interpretation is a matter of *both* lexical *and* surface transitivity.

- | | |
|---|---|
| <p>(6)a. Há bja-ra órú (à-bja).
 3P come-AFF work NOM-come
 ‘They came here to work on the farm¹³ (as expected)’</p> <p>b. Há bja-ra (a-bja).
 3P chew-AFF NOM-chew
 ‘They came here (as expected)’</p> <p>c. Há jù-ru *(e-jú).
 3P full-AFF NOM-full
 ‘They [i.e. the containers] are full’</p> | <p>(7)a. Há tà-ra ójì (à-tá).
 3P chew-AFF <i>cola acuminata</i> NOM-chew
 ‘They chewed <i>cola acuminata</i> (as expected)’</p> <p>b. Há tà-ra íhe (à-tá).
 3P chew-AFF thing NOM-chew
 ‘They chewed chewable things (as expected)’</p> <p>c. Há tà-ra *(a-tá).
 3P chew-AFF NOM-chew
 ‘They chewed pragmatically identifiable, chewable things’</p> |
|---|---|

12. It would be interesting to know whether Ìgbo-acquiring infants ever produce examples of the strings in (5), and if so, when they cease doing so parallel to the abrupt and spontaneous disappearance of causatives of unergative structures from infant production (Bowermann 1982).

13. In Ìgbo, farmwork is work *par excellence* (Ígwè 1999, 695).

A third failure of Fregean (lexically diacritic) transitivity occurs in Ìgbo’s “V-V compounds” (Lord 1975; Émènanjò 1984, 29; Nwáchukwu 1987, 98-100; Hale *et al.* 1995; Williams 2007). The root *-wá* is not productively causative when used by itself (8a), although it does occur transitively in a range of unergative creation-type idioms of conventionalized division as in (8b), cf. Ígwè (1999, 828).¹⁴ However, *-wá* does freely and regularly occur in a causative sense (9a) in a secondary (resultative) predication with a lexically transitive expression such as *-zò ùkwú* ‘tread’ (cf. 9b).

- | | |
|---|--|
| (8)a. *Há wà-ra óbà.
3P split-AFF gourd
[n.b. intended reading ‘They split [the] gourd’ is unavailable] | (9)a. Há zò-wa-ra óbà.
3P tread-split-AFF gourd
‘They stomped [the] gourd open’ |
| b. Há wà-ra {anj, óji...}.
3P split-AFF earth <i>cola acuminata</i>
‘They {shared out farmland, performed a kolanut ritual...}’ | b. Há zò-rò ùkwú n’ála.
3P tread-AFF leg LOC-ground
‘They stamped on [the] ground’ |

As generally recognized since Lord (1974), resultative constructions like (9a), where causative transitivity is acquired positionally through secondary predication, are closely paralleled by Yorùbá and Èdó serial constructions, so much so that the respective phrase structures are presumably identical up to PF spellout, at which language-particular restrictions affect the linearization of phrase markers as PF strings (Chomsky 2001; Biberauer *et Roberts in press*). In the GB-era, consensual opinion attributed Ìgbo’s compound form of resultative linearization to a morphological rule of head movement alias “incorporation” (Baker 1989, 521 *fn* 4; Manfredi 1991, 149; Stewart 1998; Collins 2002, 5, cf. Baker 1988), but if that were strictly true, the two roots should spell out in reverse order yielding *Há wà-zò-rò óbà, contrary to fact (K. Hale *p.c.*) This embarrassment demands an alternative analysis, such as “conflation” which is “not a movement operation” but rather an inter-modular effect of mapping a multiply-branching LRS to a simplex morphosyntactic node as “a concomitant of Merge” (Hale *et Keyser* 2000, 8, 44; cf. Surányi 2008).¹⁵

Beside the characteristic linearization in (9a), Lord (1975) and Émènanjò (1984) identify a second general rule in the spellout of Ìgbo “V-V compounds” namely obligatory suppression of the LRS complement of V1. In whatever way it would be formulated, this deletion rule evidently doesn’t care whether the target is a unique IC (10a), an unergative nominal complement ranging across a closed set of items (10b) or an unspecified, Émènanjò-style “general complement” (10c). Such a rule can’t be limited to the lexicon unless the entire productive morphosyntax of resultative secondary predication also would be prefigured there as a *homunculus*, in effect stating the whole syntax of the language twice over and falling into the infinite regression of merely listing or precompiling all possible outputs for every lexical item—a mathematically impossible and cognitively unrealistic task.¹⁶

- | | |
|---|---|
| (10)a. Ńdì MOPOL gbà-gbu-ru Yúsúfù.
3P kill.and.go move-grip-AFF Y.
‘The MOPOL shot Yúsúfù dead (= killed Y. by shooting)’ | missing: LRS object of <i>-gbá</i> , namely the IC <i>égbè</i> |
| b. Há kwù-gidhe-re Joná.
3P speak-grip-AFF J.
‘They criticized Jóná (= spoke against J.)’ | missing: LRS object of <i>-kwù</i> , e.g. <i>ókuru</i> , <i>ùkà</i> or <i>ibe</i> |
| c. Ńdì ogò na e-rí-dhá mmádhù.
3P inlaw AUX NOM-eat-down human.being
‘Inlaws tend to impoverish one (= lower one by consuming one’s wealth)’ | missing: LRS object of <i>-rí</i> , any consumable thing |

The overall conclusion is that, despite the theoretically pertinent and empirically founded criticisms voiced by Émènanjò (1984), transitivity is no more “redundant” in Ìgbo than it is in any other language. To defend transitivity in Ìgbo, however, the standard GB-era framework of argument structure assumed by Nwáchukwu (1987) must be reconstructed in derivational (non-templatic) terms, such that transitivity is not split into two accidentally related notions, one for the lexicon and one for morphosyntax. Such a split only adds a further, “redundant” difficulty of its own: the need for *ad hoc* relinking rules such as the aforementioned promotion of the IC *égbè* from a lexical “nonargument” to a syntactic “patient” (Nwáchukwu 1987, 73, 77). To avoid merely restating the problem as a diacritic rule, the two notions of transitivity—lexical and morphosyntactic, respectively—must be intrinsically connected somehow. Hale elegantly accomplished this by replacing atomic theta-roles with phrasal lexical relational structure (LRS), at the same time preserving the distinction between the two grammatical components—i.e. not as in Lexical Functional Grammar or other monostratal systems which lack a generative syntax as the engine of phrasal combination.

As briefly reviewed in this note, the slightly more abstract, and significantly more universal, LRS analysis of thematic structure covers a wide range of Ìgbo data whose complexity prompted lively but inconclusive debate between the two greatest Ìgbo grammarians of the post-Biafra generation—or indeed of any generation before or since. Conversely, the Ìgbo case study provides a compelling example of how allegedly ‘exotic’ languages feed back dialectically to reshape the basic format of UG.¹⁷ Across a remarkable range of such examples discussed throughout his career, Ken Hale always insisted that both dialectical steps are essential, in order to fulfil linguistic theory’s rationalist program.

14. The idiom *-wá jí* ‘perform yam harvest ritual’ may belong to a distinct lemma of *-wá*, denoting the concept of ‘emergence’ as in *òwúwa anya anwú* ‘sunrise’, although some notion of ‘split’ or ‘break’ may still be somehow related, given the synonymy of English *daybreak*.

15. Conflation cannot be equated with Distributed Morphology’s “vocabulary insertion” which occurs *after* spellout (Halle *et Marantz* 1993, 114). As to how serial constructions themselves are formed, Hale’s general critique of theta-roles played out, in the context of the Lexicon Project, as criticism of the GB/Minimalist analysis of serial verb constructions as thematic role projection alias “argument sharing” (Baker 1989; Collins 1997; Stewart 1998). An alternative, compatible with the LRS approach although never explicitly integrated with it, invoked lexical secondary predication alias “predicate adjunction” (Awóyalé 1988; Íhiónú 1988; Manfredi 1991; Déchaine 1993a,b). The choice between these two analyses is more than a matter of theoretical taste, and has far-reaching consequences for comparative grammar (Manfredi 2005a).

16. Lord herself recognized this dilemma (1975, 47, cf. Manfredi 2005a, 5) but the theoretical tools available at the time allowed no solution.

17. This conclusion deflates the fond hope of some generativists, that sufficiently close attention to any single human language should suffice to reveal UG’s basic contours. Closer to the truth is the antithetic claim, that typological space is vast and invariants/isomorphisms are few (Keenan *et Stabler* 1994, 2003). This is “the nonsufficiency of (any given number of) natural languages thesis (NNLT)” (Manfredi 2001).

References

- Akinlabí, A. [1985]. *Tonal underspecification & Yorùbá tone*. Dissertation, University of Ìbàdàn.
- Ámayo, A. [1976]. *A generative phonology of Èdó (Bini)*. Dissertation, University of Ìbàdàn.
- Ánòkà, K. [1972/1983]. *The verb meaning 'to buy' in Ìgbo*. M.A. thesis, University of Leeds, England/Excerpted in *Readings on the Ìgbo Verb*, edited by P. Nwáchukwu, 171-206. Igbo Language Association, Onjicha.
- Awóyalé, 'Y. [1988]. *Complex predicates and verb serialization*. Lexicon Project Working Paper 28. Center for Cognitive Science, M.I.T., Cambridge Mass.
- Baker, M. [1988]. *Incorporation; a theory of grammatical function-changing*. University of Chicago Press.
- . [1989]. Object sharing and projection in serial verb constructions. *Linguistic Inquiry* 20, 513-53.
- . [2003]. *Verbs, Nouns & Adjectives; their universal grammar*. Cambridge University Press.
- Báṁgbósé, A. [1966]. The assimilated low tone in Yorùbá. *Lingua* 16, 1-13.
- Biberauer, T. & I. Roberts, eds. [in press]. *Principles of Linearization*. Mouton de Gruyter, Berlin.
- Bowermann, M. [1982]. Evaluating competing linguistic models with language acquisition data; implications of developmental errors with causative verbs. *Semantica* 3, 1-73.
- Butt, M. [1994]. *The Structure of Complex Predicates in Urdu*. Dissertation, Stanford University, Palo Alto California.
- Carrell, P. [1970]. *A Transformational Grammar of Ìgbo*. Cambridge University Press.
- Carter, R. [1977]. Some linking regularities. *Recherches Linguistiques* 3-4, Université de Vincennes, Paris. [Consulted as ms. dated 1976.]
- Chomsky, N. [1956]. Three models for the description of language. *IRE Transactions on Information Theory* 2, 113-24.
- . [1965]. *Aspects of the Theory of Syntax*. MIT Press, Cambridge, Mass.
- . [1986]. *Knowledge of Language; its nature, origin & use*. Praeger, New York.
- . [1988]. *Language & Problems of Knowledge; the Managua Lectures*. MIT Press, Cambridge, Mass.
- . [2001]. Derivation by phase. *Ken Hale; a life in language*, edited by M. Kenstowicz, 1-52. MIT Press, Cambridge, Mass.
- Christaller, J. [1875]. *A Grammar of the Asante & Fante Language*. Missionsbuchhandlung, Basel.
- Clark, M. [1989]. *The Tonal System of Ìgbo*. Foris, Dordrecht.
- Collins, C. [1997]. Argument sharing in serial verb constructions. *Linguistic Inquiry* 28, 461-97.
- . [2002]. Multiple verb movement in Ẹ̀Hoan. *Linguistic Inquiry* 33, 1-29.
- Curme, G. [1952] *A Grammar of the German Language*. Ungar, New York. [Not personally consulted; cited by Perlmutter & Postal (1984).]
- Déchaine, R.-M. [1991]. Bare sentences. *SALT* 1, 31-50. Distributed by *Cornell Working Papers in Linguistics*, Ithaca New York.
- . [1993a]. Serial verb constructions. *Syntax; ein Internationales Handbuch zeitgenössischer Forschung*, 1.Halbband, edited by J. Jacobs & al., 799-825. De Gruyter, Berlin.
- . [1993b]. *Predicates Across Categories, towards a category-neutral syntax*. Dissertation, UMass, Amherst.
- Éménanjo, 'N. [1981/1985]. *Auxiliaries in Ìgbo Syntax*. Dissertation, University of Ìbàdàn/Indiana University Linguistics Club, Bloomington.
- . [1984]. Ìgbo verbs; transitivity or complementation? 5th Annual Conference of the Linguistic Association of Nigeria, Department of Linguistics & Nigerian Languages, University of Nigeria, Nsúkà ("Nsukka").
- . [1986]. Ìgbo verb complements and the argument structure of compounds. Department of Linguistics, Harvard University, 21 March.
- Erteschik-Shir, N. & T. Rapoport, eds. [2005]. *The Syntax of Aspect; deriving thematic & aspectual interpretation*. Oxford University Press.
- Fillmore, C. [1966]. Deictic categories in the semantics of 'come'. *Word* 19, 208-31/*Foundations of Language* 2, 219-27.
- . [1968]. The case for case. *Universals in Linguistic Theory*, edited by E. Bach & R. Harms, 1-88. Holt, New York.
- . [1969]. Types of lexical information. *Studies in Syntax & Semantics*, edited by F. Kiefer, 109-37. Reidel, Dordrecht.
- Goldsmith, J. [1976]. *Autosegmental phonology*. Dissertation, M.I.T., Cambridge, Mass.
- Green, M. & G. Ígwè. [1963]. *A Descriptive Grammar of Ìgbo*. Akademie, Ost-Berlin.
- Grimshaw, J. [1990]. *Argument Structure*. MIT Press, Cambridge, Mass.
- Gruber, J. [1965/1976]. *Studies in lexical relations*. Dissertation, M.I.T., Cambridge, Mass./*Lexical Structures in Syntax & Semantics, Part 1*. North-Holland, Amsterdam.
- Guerssel, M. [1986]. On Berber verbs of change: a study of transitivity alternations. *Lexicon Project Working Paper* 9. Center for Cognitive Science, M.I.T., Cambridge, Mass.
- Hale, K. [1986]. Notes on world view and semantic categories; some Warlpiri examples. *Features & Projections*, edited by P. Muysken & H. van Riemsdijk, 233-54. Foris, Dordrecht.
- . [1995/1996a]. Universal grammar and the necessity of linguistic diversity. Presidential address, Linguistic Society of America, New Orleans/Universal grammar and the roots of linguistic diversity. *MITWPL* 28, 137-61.
- . [1996b]. Break the pot/*sleep the child. Ms., M.I.T., Cambridge, Mass. [Incomplete draft.]
- . [1997]. Some observations on the contributions of local languages to linguistic science. *Lingua* 100, 71-89.
- Hale, K. & al. [1995]. Ìgbo bipositional verbs in a syntactic theory of argument structure. *Theoretical Approaches to African Linguistics* (= Selected Papers from ACAL 25, Rutgers University), edited by A. Akinlabí, 83-107. Africa World Press, Trenton New Jersey.
- Hale, K. & S. Keyser. [1993]. On argument structure and the lexical expression of syntactic relations. *The View from Building 20*, edited by K. Hale & S. Keyser, 53-109. M.I.T. Press, Cambridge, Mass.
- . [2000]. Conflation. *Cuadernos de Lingüística* 7, 39-76. Instituto Universitario Ortega y Gasset, Madrid. [Page numbers from manuscript.]
- . [2002]. On the double-object construction. *Prolegomenon to a Theory of Argument Structure*, 159-88. MIT Press, Cambridge, Mass.
- Halle, M. & A. Marantz. [1993]. Distributed morphology and the pieces of inflection. *The View From Building 20*, edited by K. Hale & S. Keyser, 111-76. MIT Press, Cambridge, Mass.
- Hellwig, B. [2010]. Meaning and translation in linguistic fieldwork. *Studies in Language* 34, 802-31.
- Higginbotham, J. [1985]. On semantics. *Linguistic Inquiry* 16, 547-93.

- Hoekstra, T. & R. Mulder. [1990]. Unergatives as copular verbs; locational and existential predication. *Linguistic Review* 7, 1-79.
- Huang, J. & al. [2009]. *The Syntax of Chinese*. Cambridge University Press.
- Ìgwè, G. [1985/1999]. *Ìgbo-English Dictionary*. University Press Ltd., Ìbàdàn.
- Ìhìonú, P. [1988]. Serialization and consecutivization in Ìgbo. 2nd Niger-Congo Syntax & Semantics Workshop, M.I.T., Cambridge Mass., 11 April.
- . [1989]. The OV syntax of Ìgbo. 3rd Niger-Congo Syntax & Semantics Workshop, M.I.T., Cambridge Mass., 24 January.
- Jackendoff, R. [1972]. *Semantic Interpretation in Generative Grammar*. MIT Press, Cambridge Mass.
- . [1990]. *Semantic Structures*. MIT Press, Cambridge Mass.
- Jespersen, O. [1942]. *A Modern English Grammar on Historical Principles* 6; *morphology*. Munksgaard, Copenhagen.
- Keenan, E. & E. Stabler. [1994]. There is more than one language. *Langues & grammaire* 1, 217-35. UParis-8, Vincennes.
- . [2003]. *Bare Grammar; lectures on linguistic invariants*. C.S.L.I., Stanford, California.
- Laka, I. [1993]. Unergatives that assign ergative, unaccusatives that assign accusative. *MITWPL* 18, 149-72.
- Larson, R. [1988]. On the double-object construction. *Linguistic Inquiry* 19, 335-91.
- Lord, C. [1974]. Causative constructions in Yorùbá. *Studies in African Linguistics Supplement* 5, 195-204.
- . [1975]. Ìgbo verb compounds and the lexicon. *Studies in African Linguistics* 6, 23-47.
- Manfredi, V. [1991]. *Ágbò & Éhgbò; Ìgbo linguistic consciousness, its origins & limits*. Dissertation, Harvard University, Cambridge, Mass. <http://people.bu.edu/manfredi/dissertation.pdf>.
- . [2001]. Survey of adverbial and modal phenomena in Benue-Kwa. 11th Niger-Congo Syntax & Semantics Workshop, UVenezia, 1 June.
- . [2005a]. Tense parameters and serial verbs [second draft]. <http://people.bu.edu/manfredi/svc.pdf>.
- . [2005b]. Aspect versus the serialization parameter. Institute for African Studies, Universität Leipzig, 12 October 2005. <http://people.bu.edu/manfredi/Leipzig.pdf>.
- . [2007]. Nuclear stress in eastern Benue-Kwa (Niger-Congo). *Focus Strategies in African Languages; the interaction of focus and grammar in NigerCongo & Afro-Asiatic*, edited by O. Abo[h] & al., 15-54. Mouton deGruyter, Berlin. <http://people.bu.edu/manfredi/nsrEasternBK.pdf>.
- . [2009]. Morphosyntactic parameters and the internal classification of Benue-Kwa (Niger-Congo). *Historical Syntax & Linguistic Theory*, edited by P. Crisma & G. Longobardi, 329-43. Oxford University Press. <http://people.bu.edu/manfredi/DIGS9.pdf>.
- Massam, D. [1985]. Cognate objects as thematic objects. *Canadian Journal of Linguistics* 35, 161-90.
- Nwáchukwu, P. [1976a]. *Noun Phrase sentential complementation in Ìgbo*. Dissertation, University of London.
- . [1976b]. Stativity, ergativity and the *-rV* suffixes in Ìgbo. *African Languages/Langues africaines* 2, 119-42.
- . [1984]. Stative verbs in Ìgbo syntax. *Journal of West African Languages* 11, 81-101.
- . [1987]. *The argument structure of Ìgbo verbs*. Lexicon Project Working Paper 18. Center for Cognitive Science, M.I.T., Cambridge Mass.
- . [1995]. *Tone in Ìgbo Syntax*. Department of Linguistics & Nigerian Languages, University of Nigeria, Nsóká (“Nsukka”).
- Ògie, O. [2009]. *Multi-verb constructions in Èdó*. Dissertation, Trondheim University, Norway.
- Ostler, N. [1979]. *Case-linking; a theory of case and verb diathesis applied to classical Sanskrit*. Dissertation, M.I.T., Cambridge Mass.
- Perlmutter, D. [1978]. Impersonal passives and the Unaccusative Hypothesis. *BLS* 4, 157-89.
- Perlmutter, D. & P. Postal. [1984]. The 1-advancement exclusiveness law. *Studies in Relational Grammar* 2, edited by D. Perlmutter & C. Rosen, 81-125. University of Chicago Press.
- Pesetsky, D. [1994]. *Zero Syntax; experiencers & cascades*. MIT Press, Cambridge, Mass.
- Roberts, D. [2011]. A tone orthography typology. *Written Language & Literacy* 14, 82-108.
- Scheer, T. [2010]. Intermodular argumentation; morpheme-specific phonologies are out of business in a phase-based architecture. *The Sound Patterns of Syntax*, edited by N. Erteschick-Shir & L. Rochman, 333-51. Oxford University Press.
- Shieber, S. [1985]. Evidence against the context-freeness of natural language. *Linguistics & Philosophy* 8, 333-43.
- Stabler, E. [2009]. Computational models of language universals; expressiveness, learnability and consequences. *Language Universals*, edited by M. Christiansen & al., 200-23. Oxford University Press.
- Stewart, O. [1998]. *The serial verb construction parameter*. Dissertation, McGill University, Montréal.
- Surányi, B. [2008]. The theory of head movement and cyclic Spell Out. *Sounds of Silence; empty elements in syntax & phonology*, edited by J. Hartmann & al., 293-337. Elsevier, Amsterdam.
- Swift, L. & al. [1962]. *Ìgbo Basic Course*. Foreign Service Institute, Washington D.C.
- Úchèchúkwu, C. [2006]. *Grammatiktheorie mit lexikographischem Ausblick; Grammatiktheoretische Grundlage der zweisprachigen Lexikographie der Sprachen Ìgbo und Deutsch*. Dissertation, Otto-Friedrich-Universität Bamberg.
- Úwalaáka, M. [1981/1988]. *The syntax & semantics of the Ìgbo verb; a Case Grammar analysis*. Dissertation, University of Ìbàdàn/*The Ìgbo verb; a semantico-syntactic analysis. Beiträge zur Afrikanistik (Wien) Band 35, Nr. 48*.
- Vendler, Z. [1967]. *Linguistics & Philosophy*. Cornell University Press, Ithaca, New York.
- Verkuyl, H. [1993]. *A Theory of Aspectuality; the interaction between temporal & atemporal structure*. Cambridge University Press.
- Welmers, W. [1970]. The derivation of Ìgbo verb bases. *Studies in African Linguistics* 1, 49-59.
- Welmers, W. & B. Welmers. [1968a]. *Ìgbo—a learner's dictionary*. Department of Linguistics, University of California, Los Angeles.
- Welmers, W. & B. Welmers. [1968b]. *Ìgbo—a learner's manual*. Department of Linguistics, University of California, Los Angeles.
- Williams, A. [2007]. Patients in Ìgbo and Mandarin. *Event Structures in Linguistic Form & Interpretation*, edited by J. Doelling & al., 3-30. DeGruyter, Berlin. <http://ling.umd.edu/~alsndrw/Papers/leipzig.pdf>.
- Williamson, K. [1982]. A tentative scheme for Ìgbo verb forms. Class notes (Hum. 433.1), University of Port Harcourt.
- Winston, F. [1973]. Polarity, mood and aspect in Òhúnhùn Ìgbo verbs. *African Language Studies* 14, 119-81.
- Zubizarreta, M.-L. & E. Oh. [2007]. *On the Syntactic Composition of Manner and Motion*. MIT Press, Cambridge, Mass.
- Zucchi, A. [1998]. Aspect shift. *Events & Grammar*, edited by S. Rothstein, 349-70. Kluwer, Dordrecht.