



SEMANTIC SPECIALIZATION IN IGBO RECIPROCAL VERBAL MARKERS: A STRONGEST MEANING HYPOTHESIS ACCOUNT OF -RÍTÁ AND -GWÁRÁ

Omezie, Uche Helen

Linguistics Department, Nnamdi Azikiwe University, Awka

+2348067631850

gr8urch@gmail.com

&

Okoye, Adaobi Ngozi

Nnamdi Azikiwe University, Awka.

+234 803 648 8025

an.okoye@unizik.edu.ng

Abstract

This study investigates the semantic contrast between two Igbo verbal reciprocal suffixes, -rítá and -gwárá, a distinction first noted but not systematically explored by Okeke (2015: 89-95) with the aim to establish the semantic functions of the two verbal reciprocal suffixes. It adopts two theoretical frameworks: Gaby and Faller's (2003) six-way typology of reciprocal events (Strong, Adjacent, Pairwise, Melee, Chained, and Asymmetric) as a classificatory grid, and the Strongest Meaning Hypothesis (Dalrymple, Kanazawa, Kim, Mchombo, and Peters 1998) as an explanatory procedure. The study tests the two suffixes against native-speakers judgments drawn from Standard Igbo. The results show that -rítá is a semantically neutral marker whose interpretation is entirely predicate-driven, ranging freely across all six event types, while -gwárá is restricted to event structures compatible with an inherently ordered, initiator-respondent schema. Crucially, -gwárá is shown to resist Melee reciprocity even where the predicate involved is semantically compatible with retaliation, indicating that the suffix constrains event structure directly rather than merely restricting predicate choice. The study situates this finding within Filip and Carlson's (2001) account of marker-specific modulation of the Strongest Meaning Hypothesis in Czech, arguing that Igbo -gwárá constrains reciprocal shape (temporal and causal ordering) where Czech aspectual prefixes constrain reciprocal strength, thereby extending the cross-linguistic reach of the Strongest Meaning Hypothesis to a previously undocumented type of marker-specific effect.

Keywords: reciprocity, Igbo, Strongest Meaning Hypothesis, verbal morphology, semantic typology, Niger-Congo

1. Introduction

Reciprocity has long been recognized as one of the more theoretically demanding domains of natural language semantics. This is not because the concept itself is exotic, but because its formal simplicity conceals considerable interpretive complexity. At its core, a reciprocal situation is one in which participants stand in a mirror-image relation to one another: each is understood to bear the same thematic role toward every other member of the set (Okeke 2015: 89). Yet this apparently symmetrical definition rarely translates into a symmetrical set of readings in actual discourse. Cross-linguistic and formal-semantic research has repeatedly shown that reciprocal expressions are compatible with a range of logically distinct interpretations, from the fully exhaustive reading in which every participant relates to every other, to weaker construals in which participants are related only in pairs, in a chain, or in some other partial configuration (Dalrymple, Kanazawa, Kim, Mchombo, and Peters 1998; Gaby and Faller 2003). The central theoretical puzzle, then, is not simply how languages mark reciprocity

morphosyntactically, but how a single reciprocal marker can give rise to such a wide range of meanings, and what principles govern which meaning is selected in a given context.

This puzzle is particularly salient in African languages, where reciprocal meaning is often distributed across more than one grammatical device within a single language rather than being carried by a single dedicated marker, as in English each other (Heine 2000; König and Gast 2008). Igbo, a Volta-Niger language of the Niger-Congo phylum spoken predominantly in south-eastern Nigeria, is a case in point. The language encodes reciprocity through at least three distinct strategies: a nominal construction formed by the anaphor *onwe* plus a pronoun (*onwe ha*, *onwe unu*, *onwe anyi*), a set of verbal suffixes attached directly to the predicate, and a closed class of lexically reciprocal verbs whose meaning is inherently mutual (e.g. *zụ* 'meet', *bi ọma* 'embrace') (Mmadike 2008; Okeke 2010). Of these, the verbal strategy is of particular theoretical interest because Igbo does not employ a single reciprocal suffix but two: *-rítá* and *-gwára*

Existing descriptions of Igbo reciprocity have largely treated these two suffixes as interchangeable exponents of the same grammatical function. Okeke (2008), working within a Government and Binding framework, identifies *-rítá* as the principal verbal marker of reciprocity in Igbo but does not treat *-gwára* as a distinct category. It is only in Okeke's (2015) later, more empirically grounded study that a semantic difference between the two suffixes is first observed: *-gwára* is shown to co-occur naturally with predicates denoting conflict or retaliation, as in *Emeka kuru m ihe, m kugwara ya* ('Emeka hit me and I hit him back'), and to be systematically unacceptable with predicates expressing cooperative or affectionate actions such as in *ye onyinye* ('give a gift') or *hu n'anya* ('love'). This is a striking finding, yet it remains, in Okeke's own study, a single empirical observation rather than a fully worked-out semantic account.

This gap matters both descriptively and theoretically. Descriptively, it leaves unresolved whether *-rítá* and *-gwara* are genuine near-synonyms or two functionally distinct categories, one flexible, one restricted. Theoretically, it leaves untested, for Igbo, one of the more influential formal accounts of reciprocal interpretation, the Strongest Meaning Hypothesis (SMH) proposed by Dalrymple et al. (1998), which holds that a reciprocal sentence receives the logically strongest reading consistent with the predicate and world knowledge, weaker readings arising only where that default is independently blocked. If *-gwara* lexically encodes an asymmetric, retaliatory event structure, the SMH predicts it should resist exactly the readings, fully exhaustive or diffuse 'melee' reciprocity, that *-rítá* permits. The present study tests this prediction directly, using the six-way typology of reciprocal event types established in Gaby and Faller's (2003) cross-linguistic Reciprocity Questionnaire (strong, adjacent, pairwise, melee, chained, asymmetric) to check the compatibility of both suffixes with each event type.

Three questions guide the analysis: what is the semantic range of *-rítá* across the six event types; how does *-gwara*'s distribution differ, and what lexical-semantic property motivates the difference; and how far can the SMH account for that difference? Answering them extends Okeke's (2015) preliminary observation into a full semantic paradigm and, in doing so, extends the SMH itself, previously tested mainly on English and a handful of other languages, to a Niger-Congo language with a bipartite verbal reciprocal system, contributing new cross-linguistic evidence to debates about the universality of strongest-meaning effects in reciprocal interpretation.

2. Background and Analytical Framework

2.1 Reciprocity and Its Marking

A reciprocal situation is one in which participants act on every other in the same way (Okeke 2015: 89; Vázquez and Fernández-Montraveta 2016: 119), though its interpretation is not fixed by grammar alone. Dalrymple et al. (1998: 193) note that a reciprocal sentence carries 'just one meaning, a context-sensitive one', a conclusion Okeke (2015: 89-90) reaches independently for Igbo, which is what makes individual reciprocal markers worth investigating rather than assuming. Languages

encode this meaning differently: lexical reciprocals build mutuality into the verb itself, as with Igbo *zu* ('meet') and *bi oma* ('embrace') (Mmadike 2010: 4; Nedjalkov 2007: 14), while grammatical reciprocity adds it productively through a dedicated device (Okeke 2008; Palmieri 2024: 14). Igbo distributes the latter strategy across a nominal anaphor (*onwe* + pronoun) and two verbal suffixes, *-rita* and *-gwara*, the internal richness this article isolates for closer examination.

2.2 The Analytical Framework: Event Typology and the Strongest Meaning Hypothesis

Two complementary frameworks anchor the analysis below. The first, developed by Gaby and Faller (2003: 77-78) within the Max Planck Institute's cross-linguistic fieldwork tradition, treats reciprocity not as a single event type but as a family of six: Strong Reciprocal, in which every participant acts on every other; Adjacent Reciprocal, restricted to neighbouring participants, as when people sit 'alongside each other'; Pairwise Reciprocal, partitioning a group into discrete dyads, as with guests who 'are married to each other'; Melee Reciprocal, diffuse and unstructured, as with dogs that 'ate one another'; Chained Reciprocal, a linear sequence as with follow or chase; and Asymmetric Reciprocal, mutual but unevenly distributed. Majid, Bowerman, van Staden, and Boster (2003), whose questionnaire underlies this classification, note that languages differ markedly in whether a single marker covers all six types or distributes them across distinct grammatical strategies.

The second framework, the Strongest Meaning Hypothesis (SMH), explains why a given construction receives one of these readings rather than another. Dalrymple et al. (1998: 193) propose that a reciprocal expression is interpreted as bearing 'the logically strongest candidate meaning' consistent with the predicate and relevant world knowledge; hearers default to full exhaustive symmetry and retreat down the hierarchy only when that default is independently blocked, as when The Boston pitchers sat alongside each other is understood as an ordered line rather than an impossible all-to-all arrangement (Dalrymple et al. 1998: 193; Filip and Carlson 2001: 421). Filip and Carlson (2001: 421) stress that this weakening is truth-conditional, not merely pragmatic, a distinction that matters for treating any restriction on *-gwara* as semantic rather than a mere preference.

Filip and Carlson (2001) also show, for Czech, that individual morphemes can modulate the SMH computation directly: the distributive prefix *po-* strengthens readings toward exhaustiveness (Filip and Carlson 2001: 437), while the collectivizing *na-* weakens them toward looser coverage (Filip and Carlson 2001: 454). This is the central theoretical warrant for the present study: if a Czech aspectual prefix can skew the SMH's default prediction, there is no principled reason an Igbo verbal suffix could not do the same through different lexical content, namely the inherently retaliatory event semantics Okeke (2015) first noticed in *-gwara*. Gaby and Faller's (2003: 78) observation that reciprocal markers frequently double as markers of distributivity elsewhere in the grammar, and Siloni's (2001: 2) decomposition of English *each other* into a distributor (each) and a reciprocator (other), further show that reciprocal systems are typically internally composite rather than monolithic, a precedent this article extends to the Igbo verbal domain specifically.

2.3 Reciprocity in Igbo and the Present Study

Descriptive work on Igbo reciprocity begins with Okeke (2008), who identifies two coexisting strategies within a Government and Binding framework: a nominal anaphor (*onwe* + pronoun) and a verbal suffix, *-rita*, as in *Ha maritara onwe ha ıra* ('They slapped one another'). The study's concerns are syntactic rather than semantic, leaving the interpretive range of *-rita* unexplored. Mmadike (2010) and Uchechukwu (2011b) extend the picture in complementary directions, the former documenting Igbo's lexically reciprocal verbs and showing that their symmetry can be disturbed by aspectual marking, the latter tracing the reflexive-reciprocal ambiguity of the plural *onwe*-construction to Heine's (2000) grammaticalization pathway from 'self/owner' markers to reciprocals. Neither study, however, asks whether the verbal strand of the system shows comparable flexibility or restriction, the question this article takes up.

It is Okeke's (2015) later study that anticipates the present article most directly, and serves as its immediate predecessor. Testing reciprocal and reflexive marking across four verb classes, Okeke (2015) discovers that Igbo verbal reciprocity is not carried by *-rịta* alone: a second suffix, *-gwara*, co-occurs naturally with retaliatory predicates, as in Emeka *kuru m ihe, m kugwara ya* ('Emeka hit me and I hit him back'), and is judged unacceptable with affectionate or cooperative predicates such as in *ye onyinye* ('give a gift') or *hu n'anya* ('love'). This is a striking result, but it remains, in Okeke's own study, a single empirical observation: it is not classified against any independently motivated typology of reciprocal event types, nor explained through any general theory of reciprocal interpretation.

This is the gap the present study closes. Evidence from other Niger-Congo languages, from verbal-affix reciprocal marking in Yoruba and Limbum (Safir and Selvanathan 2016) to reduplication-based marking in Akan (Saah 2018), shows that languages in this family use many different grammatical strategies to express reciprocity. Therefore, the use of a two-part verbal system in Igbo is not unusual as a general type of reciprocal-marking strategy. However, the particular distinction in meaning expressed by the two parts of the Igbo system may be distinctive.

3. Data and Method

Testing whether *-rịta* and *-gwara* diverge in the way section 2.3 suggests requires two things: a grid fine-grained enough to classify each construction's reading, and a procedure for predicting which reading a given construction should receive. The six-way typology introduced in section 2.2 supplies the grid: every *-rịta* and *-gwara* construction examined below is checked against all six event types, and what matters is not whether any single sentence fits several types at once, but whether the two suffixes differ systematically in the range of types they are ever compatible with. The SMH supplies the procedure, applied as a step-by-step computation: the strongest available reading (Strong Reciprocity) is provisionally assigned, then checked against the predicate's lexical semantics and relevant world knowledge (Dalrymple et al. 1998: 193); if nothing blocks it, it is retained, and if something does, physical impossibility, an inherently sequential event structure, or a predicate presupposing an ordered initiator and respondent, the reading is weakened to the next available type until a stable interpretation is reached.

Consider how this procedure treats a *-gwara* construction adapted from Okeke (2015):

- (1) *Emeka kuru m okpo, m kugwara ya.*
 Emeka hit-PST me blow, I hit-REC him
 'Emeka hit me, and I hit him back.'

Nothing in the predicate *ku* ('hit') alone rules out an unstructured, many-against-many reading; it is *-gwara* itself that imposes the ordered, initiator-then-respondent structure that makes (1) an act of retaliation rather than a simultaneous exchange of blows. This is the kind of marker-specific intervention in the SMH computation that Filip and Carlson (2001) document for Czech (section 2.2), and it is the working hypothesis the analysis below tests systematically.

Because *-rịta* is not expected to intervene in the SMH computation this way, it should default, for any given predicate, to whichever reading the predicate's own lexical semantics and surrounding context independently license, in principle the full range of six types. *-gwara*, by contrast, is predicted to be compatible only with event types whose internal structure matches a sequential, asymmetric initiate-and-respond schema, as summarized in Table 1: Asymmetric and Chained reciprocity should be available to it, Strong reciprocity only in the restricted dyadic sense where sequencing and exhaustiveness coincide, and Melee reciprocity, whose defining property is unstructured simultaneity, should be systematically excluded. These predictions are deliberately falsifiable: a genuinely unstructured Melee reading for *-gwara*, or an independent restriction on *-rịta* comparable to *-gwara*'s, would require revising the account.



Table 1: Predicted compatibility of -*rīta* and -*gwara* with Gaby and Faller's (2003) reciprocal event types

S/N	Event Type	- <i>rīta</i>	- <i>gwara</i>
1.	Strong	Predicted, predicate-dependent	Predicted only at the dyadic level
2.	Adjacent	Predicted, predicate-dependent	Not predicted
3.	Pairwise	Predicted, predicate-dependent	Predicted only where pairs map onto initiator-respondent dyads
4.	Melee	Predicted, predicate-dependent	Not predicted
5.	Chained	Predicted, predicate-dependent	Predicted
6.	Asymmetric	Predicted, predicate-dependent	Predicted

The data tested against these predictions combine examples adapted from existing grammatical descriptions of Igbo with sentences constructed to probe the six-way typology directly, following the mixed documentary-and-elicitation approach standard in descriptive semantic fieldwork. Constructed sentences were checked against the judgments of adult native speakers of Standard Igbo, purposively selected for fluency and metalinguistic awareness and resident in Awka, Anambra State; for each construction, consultants indicated whether the sentence was acceptable and, where it was, which interpretation it most naturally received, with readings classified against the Gaby and Faller (2003) grid.

This procedure is qualitative and descriptive throughout. The object of inquiry is the semantic range -*rīta* and -*gwara* make available in principle, not the frequency with which speakers choose each reading in performance.

4. Analysis: The Semantic Range of -*rīta* and -*gwara*

This section works through Gaby and Faller's (2003) six reciprocal event types, applying the Strongest Meaning Hypothesis (Dalrymple et al. 1998) to representative -*rīta* and -*gwara* constructions within each. Strong, Melee, and Asymmetric reciprocity receive the fullest treatment below, since they carry the sharpest contrasts between the two suffixes; Adjacent, Pairwise, and Chained reciprocity are treated together as supporting cases that confirm the same pattern more briefly. In the data, every sentence is first written out properly before stretching out to label its deep structure.

4.1 Strong Reciprocity

Strong Reciprocity, every participant acting on every other, is the reading the SMH treats as the default starting point for any reciprocal computation, weakened only when the predicate or context makes it untenable (Dalrymple et al. 1998: 193). With -*rīta*, this default is rarely disturbed:

(2) *Ūmụaka ahụ makurītara mgbe ha zūtere n'ụzọ.*

Ūmụaka ahụ makū-rīta-ra mgbe ha zū-tere n'ụzọ.

children DET hug-REC-PST when they meet-PST PREP-road

'The children hugged each other when they met on the road.'

Nothing in the meaning of *makū* ('hug') restricts the interaction to pairs, neighbours, or a fixed order, so the Strong reading survives the SMH check unaltered: every child is understood to have hugged every other child.

-*gwara* behaves rather differently, and the sentence used to illustrate the SMH procedure in section 3, example (1), *Emeka kūrū m ọkpọ, m kugwara ya* ('Emeka hit me, and I hit him back'), is

worth returning to here for a reason that matters analytically. A Strong reading is technically satisfied in this example, since with exactly two participants any completed exchange is, trivially, exhaustive. But the route to that reading is not the same as it is for *-rīta*. The symmetry in (1) is not conceptually basic; it is derived from a sequence, Emeka must strike first, the narrator responds second, so that what looks, at the level of truth conditions, like ordinary Strong Reciprocity is in fact assembled out of two temporally ordered, asymmetric sub-acts. The data available for this study do not include a *-gwara* construction involving more than two participants, which leaves open whether the suffix could ever support a genuinely multi-party exhaustive reading, or whether its retaliatory semantics restrict it to the dyadic case as a matter of principle. This gap is returned to in section 5.

4.2 Adjacent, Pairwise, and Chained Reciprocity: Supporting Cases

These three event types confirm the same asymmetry established in section 4.1, more briefly. With *-rīta*, all three are unproblematic, and the specific reading comes from the predicate or an accompanying distributive expression rather than the suffix: *che...ihu* ('face') restricts *Oche ndị ahụ cherītara ihu* ('The chairs are facing one another') to an Adjacent pairing; the reduplicated numeral *abụọ abụọ* forces a Pairwise reading in (3); and the directional phrase *bido n'isi ruo na njedebe* yields a Chained reading in (4).

- (3) *Igwe mmadụ ahụ nọkọrītara abụọ abụọ*
Igwe mmadụ ahụ nọ kọ_ rīta_ ra abụọ abụọ
Group person DET stay together_REC_rv(PST) two two
“The people in that group stayed together in pairs.”

- (4) *Ụmụ akwukwọ nye fe_ rīta_ ra ibe ha bọlụ bido n' isi*
Children book give across_REC_rv(PST) fellow their ball start PREP head
ru- o na njedebe
reach-OVS PREP end

“The students passed the ball to one another from beginning to end”.

On the other hand, (5) and (6) are both judged unacceptable with *-gwara*, extending Okeke's (2015) observation that the suffix resists affectionate and neutral predicates alike.

- (5) **Ọtụtụ mmadu nọ n'oriri ahụ lụgwara ibe ha*
**Ọtụtụ mmadu nọ n' oriri ahụ lụ_ gwara ibe ha*
PL person stay PREP feast DET marry_REC fellow their
“*Many people in the feast married against one another.”

- (6) **Ha kọgwara ihe mere ụnyahụ*
**Ha kọ_ gwara ihe me_ re ụnyahụ*
They tell_REC thing happen_rv(PST) yesterday
“*They told against one another what happened yesterday”

On the other hand, (7) is grammatical, but only marginally so as an Adjacent construction, since the linear arrangement comes from *n'ahịrị* ('in line') rather than *-gwara* itself. The generalization across all three types is simple: *-rīta* is productively flexible, while *-gwara* is available only where the predicate is both structurally and semantically compatible with retaliatory sequencing, a combination none of these supporting cases actually instantiates.

- (7) **Ụmụaka tịgwara ibe ha ihe n'ahịrị*
**Ụmụaka tị_ gwara ibe ha ihe n' ahịrị*
Children beat_REC fellow their thing PREP line
“*The children 'beat against one another in line”

4.3 Melee Reciprocity

Melee Reciprocity, diffuse, unstructured, non-sequential mutual interaction, is where the contrast between the two suffixes becomes sharpest, and where *-gwara's* behaviour turns out to be more theoretically interesting than a simple predicate-mismatch story would suggest. *-rīta* handles diffuse group interaction without difficulty:

- (8) *Na-agbagharītanū ibe unu ka Chineke si gbaghara unu n'ime Kristi.*
Na- a- gbaghar -īta- nū ibe unu ka Chineke si gbaghara
AUX-prefix-forgive- REC-PL fellow your as God FOC forgive
unu n' ime Kristi.
you PREP-inside Christ

'Continue to forgive one another, just as God forgave you in Christ.'

Forgiveness within a community is not naturally organized into a neat, orderly, all-to-all exchange; it happens irregularly, distributed unevenly across overlapping acts of reconciliation. The SMH computation accordingly weakens the initial Strong hypothesis to a Melee reading, which is mutual, but diffuse rather than systematic, and *-rīta* places no obstacle in the way of this weakening.

The relevant test for *-gwara* is not, as it might first appear, whether it tolerates a cooperative predicate like forgiving (it plainly does not, for the reasons established in section 4.2). The more revealing test is what happens when *-gwara* combines with a predicate that is semantically compatible with retaliation, hatred, say, in a plural context where an unstructured, many-against-many reading would, in principle, be available:

- (9) *Onye kpọọ unu asị kpọgwaranu ya asị.*
Onye kpọ-ọ unu asị, kpọ-gwara-nu ya asị.
person call-OS you hate call-REC-PL him hate

'If anybody hates you, hate them back.'

Hatred is precisely the kind of predicate that could support a chaotic, Melee-type reading, mutual antipathy circulating unevenly through a group, with no fixed order of who provoked whom. Yet this is not the reading (4) receives. Consultants consistently interpret it as describing a sequenced exchange: one party's hatred is understood as prior, and the addressee's hatred as a response to it, even though nothing in the surface syntax marks that ordering explicitly. In other words, even where the predicate itself would tolerate an unstructured multi-party reading, *-gwara* still forces the interpretation toward a sequential, initiator-responder structure, the reading this article treats as belonging properly to Asymmetric Reciprocity (section 4.4), not Melee. This is a stronger claim than '*-gwara* dislikes cooperative predicates,' and it is the clearest evidence in the data that the suffix's retaliatory content is an active constraint on event structure: *-gwara* appears to resist the unordered simultaneity that defines Melee Reciprocity as such, regardless of whether the predicate involved is affectionate or hostile.

4.4 Asymmetric Reciprocity

Asymmetric Reciprocity preserves mutuality while distributing participant roles unevenly. With *-rīta*, this asymmetry typically comes from the lexical semantics of the predicate rather than from any property of the suffix itself:

- (10) *Ha kuzirītara ibe ha ihe.*
Ha kuzi-rīta-ra ibe ha ihe.
they teach-REC-PST fellow their thing
'They taught one another.'

Teaching presupposes a temporary knowledge asymmetry, one participant instructs, the other receives, even where the roles may later reverse across the larger event. *-rīta* places no obstacle in the

way of this asymmetric reading; it simply marks the relation as reciprocal and lets the predicate determine its internal shape, exactly as it did for the readings analyzed in sections 4.1 to 4.3.

-*gwara*, by contrast, finds its most natural home here:

(11) *Onye ọbụla kọrọ gị ọnu, kọgwara ya.*

Onye ọbụla kọ- rọ gị ọnu, kọ- gwara ya.

person any scratch-STAT you mouth scratch-REC him

'If anybody abuse you, abuse them in return.'

Abusing is inherently sequential and role-differentiated, one party provokes, the other responds, and this is precisely the structure -*gwara* lexically encodes. Unlike the anomalous cases in section 4.2, (6) is fully acceptable, and it confirms directly what Okeke (2015) first observed and what the Melee data in (4) already suggested indirectly: -*gwara* is not a general-purpose reciprocal suffix that happens to carry an adversative flavour, but a marker whose entire semantic contribution is the imposition of an ordered, initiator-responder event structure. Where that structure is independently available, as it is here, -*gwara* is arguably the more natural choice of the two suffixes, since -*rịta* alone would leave the sequential, retaliatory component of the meaning unexpressed.

4.5 Summary of Findings

Table 2 draws together the patterns established across sections 4.1 to 4.4, alongside the predictions set out in Table 1 (section 3).

Table 2: Observed compatibility of -*rịta* and -*gwara* with Gaby and Faller's (2003) reciprocal event types

S/N	Event Type	- <i>rịta</i>	- <i>gwara</i>
1.	Strong	Attested, unrestricted	Attested only at the dyadic level; derived from sequencing rather than basic
2.	Adjacent	Attested, predicate-supplied	Grammatical but interpretively marginal; adjacency imported from context, not natural
3.	Pairwise	Attested, predicate/context-supplied	Blocked with cooperative predicates; untested with adversative pairwise predicates
4.	Melee	Attested, unrestricted	Blocked even with compatible (hostile) predicates; resolves to Asymmetric instead
5.	Chained	Attested, predicate-supplied	Blocked with neutral communicative predicates; untested with retaliatory sequential predicates
6.	Asymmetric	Attested, predicate-supplied	Attested, and arguably the prototypical case for this suffix

Two generalizations emerge from this pattern that go beyond what section 3 predicted in advance. First, -*rịta* is confirmed across every event type tested, and in every case its contribution is limited to marking reciprocity overtly and removing the reflexive ambiguity carried by the nominal onwe-construction; the specific subtype of reciprocal reading is, in every instance, supplied by the predicate

and context rather than by the suffix itself. Second, *-gwara*'s restriction is not simply a matter of which predicates it can combine with, though that is part of the picture (section 4.2). The Melee data in section 4.3 show something stronger: even where the predicate is fully compatible with retaliatory meaning, *-gwara* still resists the unstructured, simultaneous reading that defines Melee Reciprocity, forcing a sequential, ordered interpretation instead. This suggests that *-gwara*'s semantic specialization operates at the level of event structure, not merely predicate content, a distinction the discussion in section 5 takes up in relation to the Strongest Meaning Hypothesis more broadly, and to the Czech data discussed by Filip and Carlson (2001) in particular.

5. Discussion

5.1 The Central Finding: *-gwara* as a Structural Constraint on the SMH

The analysis in section 4 answers the three questions posed in section 1. On research question 1, *-rīta* is confirmed across all six event types, with every reading supplied by the predicate and context rather than the suffix, exactly as the SMH predicts for a semantically neutral reciprocal (Dalrymple et al. 1998). On research question 2, *-gwara* is confirmed as fully compatible with Asymmetric reciprocity, its prototypical environment, compatible with Strong reciprocity only in the dyadic sense where sequencing and exhaustiveness coincide, and blocked with Pairwise, Chained, and Adjacent readings whenever the predicate is cooperative or neutrally communicative, extending Okeke's (2015) original observation about *inye onyinye* ('give a gift') and *hụ n'anya* ('love'). Crucially, the Melee result in section 4.3 shows that this restriction is not reducible to predicate choice: *-gwara* is blocked even where the predicate, *kpo asi* ('hate'), is fully compatible with retaliatory meaning, because the suffix resists the unstructured, non-sequential event structure Melee reciprocity defines, regardless of predicate polarity.

This answers research question 3 as well, but only once the SMH is supplemented with the recognition, already established for Czech by Filip and Carlson (2001), that individual morphemes can constrain the SMH computation directly. Neither the predicate in (4) nor relevant world knowledge rules out an unstructured, many-against-many reading of mutual hatred; what blocks it is *-gwara* itself, contributing information neither source independently supplies, that the event has an ordered initiator and respondent. Where Czech *po-* and *na-* modulate reciprocal strength, pushing interpretation up or down the Dalrymple et al. (1998) hierarchy, Igbo *-gwara* modulates reciprocal shape. It does not shift exhaustiveness but rules out an entire class of event structures outright, regardless of where the predicate would otherwise land on that hierarchy. Put differently, Czech *po-/na-* answer 'how much of the group is involved?', while *-gwara* answers 'in what order?', a dimension of marker-specific modulation the existing SMH literature has not previously documented.

5.2 An Objection: Pragmatic or Semantic?

A natural objection is that the *-gwara* restriction reflects pragmatic nonpreference rather than a genuine semantic constraint, on a par with the oddness of an English sentence like *he accidentally murdered her on purpose*. Two considerations weigh against this. First, consultants judged the relevant constructions categorically unacceptable rather than merely unusual, which is more consistent with semantic anomaly than pragmatic markedness, where an intended meaning is typically still recognized. Second, and more tellingly, a pragmatic account offers no obvious reason why a fully compatible, hostile predicate like *kpo asi* ('hate') should still resist an unstructured Melee reading in favour of a structured Asymmetric one (section 4.3); once the predicate is right, a pragmatic account predicts the full range of its independently available readings should become accessible, which is precisely what does not happen. This pattern is what a lexically encoded structural constraint predicts, not a pragmatic preference.

5.3 Implications and Limitations

These findings bear on a broader typological question: how much internal semantic differentiation should we expect within a single language's grammatical reciprocal system? Existing cross-linguistic literature tends to treat grammatical reciprocal markers as relatively homogeneous, distinguished from lexical reciprocals (Nedjalkov 2007; Palmieri 2024) but not typically subdivided further among themselves; Saah's (2018) account of Akan, for instance, documents several distinct strategies, reduplication, quantification, and their combination, without reporting that any one is itself restricted to a subset of reciprocal event types in the way *-gwara* is. Igbo's bipartite verbal system suggests this apparent homogeneity may reflect which languages have been examined closely enough, rather than a genuine typological tendency, and it connects to, without duplicating, Safir and Selvanathan's (2016) structural finding that Niger-Congo reciprocal markers such as those in Limbum originate as functional heads: that account addresses where reciprocal meaning is generated syntactically, while the present study addresses what range of meaning it carries once merged, and a natural next step is to ask whether other languages with comparable functional-head reciprocal markers show similar semantic bifurcation.

The account offered here rests on a modest set of native-speaker judgments from the standard Igbo, and two gaps in particular limit its scope. No construction tested pairs *-gwara* with more than two participants, so whether the suffix permits a genuinely multi-party Strong reading, or is inherently dyadic, remains open; and no construction tested a predicate that is simultaneously sequential and retaliatory across more than two participants, an escalating chain of retaliation, for instance, which would sharpen the distinction between Chained and Asymmetric retaliatory readings. Neither gap threatens the central claim, but both would strengthen it, and closing them, together with subjecting Igbo's nominal (*onwe* + pronoun) and lexical reciprocal strategies to the same six-way test applied here to *-rịta* and *-gwara*, are natural directions for further research.

6. Conclusion

This study has established that Igbo's two verbal reciprocal suffixes serve distinct semantic functions: *-rịta* is unrestricted and predicate-driven, while *-gwara* is confined to event structures built around an ordered initiator-respondent relation. In doing so, it turns Okeke's (2015) single contrastive example into a systematic paradigm and gives the Strongest Meaning Hypothesis its first detailed test on a Niger-Congo language, with implications, set out in section 5, for how broadly reciprocal markers can be expected to specialize cross-linguistically.

The verbal system examined here is only one strand of Igbo's reciprocal grammar, however. Whether the nominal *onwe* + pronoun construction (Uchechukwu 2011b) shows *-rịta*'s flexibility, and whether Igbo's lexically reciprocal verbs (Mmadike 2010) show *-gwara*'s restriction, remain open questions for a fuller semantic map of how the language distributes the world's reciprocal meanings across its grammatical resources.

References

- Asher, R. E. (ed.). 2004. *Encyclopedia of Language and Linguistics*, Vol. 7. Oxford: Pergamon Press.
- Dalrymple, M., M. Kanazawa, Y. Kim, S. Mchombo, & S. Peters. 1998. Reciprocal expressions and the concept of reciprocity. *Linguistics and Philosophy* 21(2): 159-210.
- Filip, H., & G. Carlson. 2001. Distributivity strengthens reciprocity. *Linguistics and Philosophy* 24: 417-466.
- Gaby, A., & M. Faller. 2003. *Reciprocity questionnaire*. In N. J. Enfield (ed.), *Field Research Manual 2003*, Part I: Multimodal Interaction, Space, Event Representation, 77-80. Nijmegen: Max Planck Institute for Psycholinguistics.
- Haspelmath, M. 2004. *Coordinating Constructions*. Amsterdam: John Benjamins.
- Heine, B. 2000. Polysemy involving reflexive and reciprocal markers in African languages. In Z. Frajzyngier & T. S. Curl (eds.), *Reciprocals: Forms and Functions*, 1-29. Amsterdam: John Benjamins.



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- Heine, B., & H. Miyashita. 2008. The intersection between reflexives and reciprocals: A grammaticalization perspective. In E. König & V. Gast (eds.), *Reciprocals and Reflexives: Theoretical and Typological Explorations*, 169-223. Berlin: Mouton de Gruyter.
- König, E., & V. Gast. 2008. Reciprocity and reflexivity - description, typology and theory. In E. König and V. Gast (eds.), *Reciprocals and Reflexives: Theoretical and Typological Explorations*, 1-31. Berlin: Mouton de Gruyter.
- König, E., & S. Kokutani. 2006. Towards a typology of reciprocal constructions: Focus on German and Japanese. *Linguistics* 44(2): 271-302.
- Majid, A., M. Bozeman, M. van Staden, & J. Boster. 2003. *The MPI reciprocity questionnaire*. Nijmegen: Max Planck Institute for Psycholinguistics.
- Mmadike, B. 2010. Reciprocal and symmetrical relations in Igbo. *Journal of Language and Linguistics* 1(1): 1-15.
- Nedjalkov, V. P. 2007. *Overview of the research: Definitions of terms, framework, and related issues*. In V. P. Nedjalkov (ed.), *Reciprocal Constructions*, 3-114. Amsterdam: John Benjamins.
- Okeke, C. 2008. Reflexivization and reciprocity in Igbo. *California Linguistic Notes* 33(2): 1-30.
- Okeke, C. 2015. Reflexive and reciprocal verbs in Igbo. *Igbo Language Studies* 1: 87-104.
- Palmieri, G. 2024. *Lexical and Grammatical Reciprocity: Perspectives from Romance, Bantu and Beyond*. Amsterdam: LOT.
- Saah, S. K. 2018. The syntax of reciprocal constructions in Akan. *Ghana Journal of Linguistics* 7(2): 52-70.
- Safir, K., & N. Selvanathan. 2016. Niger-Congo transitive reciprocal constructions and polysemy with reflexives. In D. L. Payne, S. Pacchiarotti, and M. Bosire (eds.), *Diversity in African Languages*, 495-512. Berlin: Language Science Press.
- Siloni, T. 2001. Reciprocal verbs. *Proceedings of IATL* 17: 451-469.
- Uchechukwu, C. 2011b. The reflexive-reciprocal polysemy in Igbo. *UJAH - Unizik Journal of Arts and Humanities* (Special Edition): 200-206.
- Vázquez, G., & A. Fernández-Montraveta. 2016. Emphatic reciprocal expressions and symmetric verbs in Spanish: An empirical analysis. *Philologica Canariensia* 22: 117-136.