

Chapter 7

Argument linkage for Niger-Congo 'give'

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Relative to the Niger-Congo languages of West Africa, we survey 'give' predication, i.e., those involving physical change of possession of a theme object to a recipient. Linkage of theme (T) and recipient (R) arguments to a predication is of three predication types: ditransitive verb, verb-verb, and verb-oblique. Across West Africa, linkage types couple. They reflect two areal zones: the Bandama-Tano-Volta watershed and the Niger River delta. Both show ditransitive linkage ($V_1 NP_R NP_T$) and verb-verb linkage ($V_2 NP_T V_1 NP_R$). Outside these zones, single linkage types predominate, including verb-oblique ($V_2 NP_T OBL NP_R$). Where available, we assess correlations between predication form (linear order of arguments, linkage type) and predication function (possession change vs. transfer without possession change). In ditransitive only languages, adjacency of R to 'give' tends to convey possession change, while transfer emerges with T adjacency. For languages that couple ditransitive and verb-verb, verb-verb conveys transfer while ditransitive expresses possession change.

1 Introduction

Recent studies of argument structure have investigated 'give' verbs from typological and crosslinguistic perspectives (Bouveret 2021, Malchukov et al. 2011, Newman 1996, 1998). An explicitly areal dimension to 'give' studies was added



by Comrie's (2012) assessment of 'give' constructions across Europe and North-Central Asia.

For this paper, we undertake an areal survey of 'give' among 14 Niger-Congo language groups. Relevant constructions, which may consist of one- or two-element predications, convey physical transfer in which an agent causes a theme to become possessed by an animate recipient. In other words, someone transfers something to someone else, and thereby loses possession of it.

Relative to West Africa, we assembled a convenience sample of 'give' constructions from the Niger-Congo language groups in Table 1. Countries in which the surveyed languages from these groups are spoken are provided for reference.

Table 1: Language groups in this survey and countries where they are spoken

Language group	Countries
Atlantic	Senegal
Delta Cross	Nigeria
Dogon	Burkina Faso, Mali
Edoid	Nigeria
Gur	Burkina Faso, Ghana
Igboid	Nigeria
Ijoid	Nigeria
Jukunoid	Nigeria
Kru	Ivory Coast
Kwa	Benin, Ghana, Ivory Coast, Togo
Mande	Burkina Faso, Gambia, Guinea, Guinea-Bissau, Mali, Senegal
Nupoid	Nigeria
Senufo	Mali
Yoruboid	Nigeria

Our survey encompasses languages from near the headwaters of the Niger River in the Guinea Highlands to the tributaries of Nigeria's Niger Delta around Port Harcourt. Across these languages, we scrutinize the linkage relation of theme and recipient arguments to their predication.

2 Ditransitivity and its nature

Regarding ditransitive predications and their cross-linguistic realization, Whaley (1997: 148) has footnoted, “It is an intriguing fact that the verb form meaning ‘give’ is commonly employed in serial constructions to mark benefactive”. A similar statement could be advanced about the marking of ‘give’ recipient. Indeed, Heine & Kuteva (2002: 149–154) and Kuteva et al. (2019) find that in many genetically unrelated languages the marker for a benefactive or recipient argument has grammaticalized from a verb meaning ‘give’.

In these general statements, there are two dimensions that should not be lost. What Whaley alludes to and Heine and Kuteva recognize are two dimensions of grammatical analysis that apply to ‘give’ verbs and their framing of theme and recipient. One concerns a contrast in the linear ordering of theme and recipient arguments, as illustrated in (1) with R signaling recipient and T theme.

- (1) a. $NP_R NP_T$
b. $NP_T NP_R$

A second dimension has to do with how these arguments relate to their predication. In West Africa, three patterns are pertinent. In one, a ‘give’ verb, as a ditransitive predicate, links to two arguments: recipient and theme. In a second pattern, a ‘give’ verb links to only a single argument. Another distinct verb, ‘take’ for example, links to the remaining argument. In a third pattern, a non-‘give’ verb links to one argument, while the second argument is linked to a non-verbal oblique marker, such as an adposition.

Undergirding these predication types is the potentially variable nature of theme and recipient linkage. There are three linkage types. Ditransitive linkage relies on a single verb. Verb-verb linkage associates each argument to a distinct element of a predication, both of which are verbs. And verb-oblique linkage fixes each argument to a distinct predicate element, one of which is a verb and the other is a non-verb, grammatical form. In our survey, one or more of these linkage types, shown in (2), identifies argument-predicate relations for ‘give’ events. In each, V_1 represents a ‘give’ verb, and V_2 is a verb with a meaning distinct from ‘give’ (either ‘take’ or some other transitive verb). OBL is a non-verbal grammatical form.

- (2) a. $V_1 NP_R NP_T$
b. $V_2 NP_T V_1 NP_R$
c. $V_2 NP_T OBL NP_R$

3 Language samples and analysis

Comparative analyses of ‘give’ events coding recipient and theme arguments among West Africa’s Niger-Congo languages are limited at best (Ameka 2013). Due to the very preliminary nature of this investigation and our modest sample of languages, we do not claim our sample to be more than it is. We do, however, assume that the data from each language is representative of its group and is suggestive of essential linkage types for ‘give’ events in West Africa. We hold to this assumption even though coverage provided ‘give’ clauses in the grammatical literature we consulted is uneven. Across statements, constraints affecting ‘give’ clauses are inconsistently discussed. Nonetheless, we highlight these constraints whenever they occur in order to provide a flavor of the range of issues that interlace with our principal concern: argument linkage relations and their familial and areal distribution. With this as background, we turn to ‘give’ clauses among the fourteen language groups in our sample.

3.1 Kwa

The Kwa languages we assess exist along a coastal axis from Baule in the west to Tafi and Fongbe in the east. They are spoken in a block of nation states that include Ivory Coast, Ghana, Togo, and the Republic of Benin. Relative to ‘give’ and its theme and recipient arguments, all exhibit ditransitive linkage and verb-verb linkage. None show verb-oblique linkage. A more general discussion of serial verb types in Kwa is found in Shluinsky (2017).

Baule, spoken in southeastern Ivory Coast, evinces the verb *man* ‘give’ (Creissels & Kouadio 2010). Although additional comments by Creissels and Kouadio suggest that *man* may be limited to gift giving and similar rituals, thus restricting theme argument character, we leave for another time the distinction between ‘give something for someone to possess’ and ‘present/offer a gift to someone’. Across West African languages, information bearing on this distinction is simply not available. Baule *man* occurs as a simple predicate and as the second element of a complex predicate. As a simple ditransitive, *man* takes a recipient argument and a theme argument (3a). Argument order is restricted to NP_R NP_T. In addition, *man* occurs in a verb-verb predicate, which similarly restricts argument order. Within a single clause, *man* and its recipient argument follow the verb *fa* ‘take’ with a theme argument (3b). These examples strongly suggest that Baule exhibits the ditransitive pattern V₁ NP_R NP_T and the verb-verb pattern V₂ NP_T V₁ NP_R.¹

¹Here and elsewhere, morphological glosses and tone marking are provided as in the cited

(3) Baule (adapted from Creissels & Kouadio 2010: 11)

- a. Kuàkú mǎn-nìn mín sǐkǎá.
 Kouakou give-PFV 1SG money
 ‘Kouakou gave me money.’
- b. Kuàkú fà-li sǐkǎá mǎn-nìn mín.
 Kouakou take-PFV money give-PFV 1SG
 ‘Kouakou gave me money.’

We note here a point regarding argument occurrence which is also applicable to other languages in our sample. Baule *man* can maintain its ditransitive character when followed by a single noun phrase that expresses a theme argument. Its recipient argument can be understood from context. The positioning of only a recipient after *man* is not open to such contextualization; recipient-only structures with verb *man* are ungrammatical (4b).

(4) Baule (adapted from Creissels & Kouadio 2010: 18)

- a. Kuàkú mǎn-nìn sǐkǎá.
 Kouakou give-PFV money
 ‘Kouakou gave money (to someone).’
- b. * Kuàkú mǎn-nìn kǒfí.
 Kouakou give-PFV kofi
 ‘Kouakou gave Kofi (something).’ [intended]

Akan, spoken over much of southern Ghana, has two verbs, *ma* and *kye* with English ‘give’ as translation (Osam 2004: 23). Of these, *kye* is associated with ritual activity (Reginald Duah, personal communication). *Ma* occurs as a simple predicate and as one element of a complex predicate. As a ditransitive predicate, *ma* precedes arguments for recipient and theme (5a). Argument order is restricted to NP_R NP_T. In a verb-verb predication, *ma* follows verb *de* ‘take’. *De* takes a theme argument and *ma*, a recipient (5b); argument order is restricted. Based on *ma* behavior, Akan exhibits the linkage types ditransitive V₁ NP_R NP_T and verb-verb V₂ NP_T V₁ NP_R.

source. High tone is marked with an acute diacritic, Mid tone with a macron, and Low tone with a grave diacritic, as is conventional. We have taken the liberty to indicate downstep with a superscript [!]. In some traditions, it is conventional to indicate *open* or *lax* vowels with an underline, but we have chosen to convert these to the appropriate IPA vowel symbol. The reader is encouraged to consult the source for more detail.

(5) Akan (Reginald Duah, personal communication)

- a. Kofi ma-a maame no oguan.
Kofi give-COMP woman the sheep
'Kofi gave the woman a sheep / a sheep to the woman.'
- b. Kofi de oguan no ma-a maame no.
Kofi take sheep the give-COMP woman the
'Kofi gave the sheep to the woman / the woman the sheep.'

The verb *kye* in Akan exhibits linkage types similar to *ma*. As a ditransitive predicate, *kye* takes recipient and theme in that order (6a). *Kye* also shows a verb-verb predication with the verb *de* 'take' (6b). *Kye* and its recipient argument follow *de* and its theme argument. Distinct orders for theme and recipient characterize *kye* linkage types: ditransitive $V_1 \text{ NP}_R \text{ NP}_T$ and verb-verb $V_2 \text{ NP}_T V_1 \text{ NP}_R$.

(6) Akan (Osam 2004: 23)

- a. Abena kye-e abofra no sika.
Abena give-COMP child the money
'Abena gave the child money / gave money to the child.'
- b. Abena de sika no kye-e abofra no.
Abena take money the give-COMP child the
'Abena gave the child the money / the money to the child.'
- c. * Abena kye-e abofra no sika no.
Abena give-COMP child the money the
'Abena gave the child the money / the money to the child.'
[intended]

Various constraints affect the realization of *ma* and *kye* arguments, as is the case for some other languages in our sample. Nevertheless, none of these constraints undermine our basic contention that Akan 'give' verbs manifest ditransitive and verb-verb linkage. Among constraints on ditransitive linkage is a definiteness prohibition on the second argument, the theme. It rejects both the definite article *no* (7a) and third person definite pronoun *no* (7b). No similar prohibition exists for verb-verb linkage.

(7) Akan (Reginald Duah, personal communication)

- a. * Kofi ma-a maame no oguan no.
Kofi give-COMP woman the sheep the
'Kofi gave the woman the sheep / the sheep to the woman.'
[intended]

- b. * Kofi ma-a maame no.
 Kofi give-COMP woman it
 ‘Kofi gave it to the woman / the woman it.’ [intended]

Another Kwa language of southern Ghana is Ga. Its ‘give’ equivalent is the verb *han* (Kropp Dakubu 2003, 2004, 2009). *Han* occurs as a simple ditransitive predicate and as one element of a complex predicate. Ditransitive *han* appears with recipient and theme arguments (8a). Argument order is limited to NP_R NP_T, and similar to Akan, ditransitive *han* prohibits theme definiteness (8b). In a verb-verb predication, *han* and its recipient argument follow the verb *ke* ‘move’ and its theme argument (8c). No alternative order for predication arguments is acceptable. Linkage patterns for Ga are ditransitive V₁ NP_R NP_T and verb-verb V₂ NP_T V₁ NP_R.

- (8) Ga (Kropp Dakubu 2004: 116-117)
- a. Oto hán è-bí 'e tsòbí.
 Oto give 3s-child DEF doll
 ‘Oto gave his child a doll.’
- b. * Oto hán è-bí 'e tsòbí !e.
 Oto give 3s-child DEF doll DEF
 ‘Oto gave his child the doll.’ [intended]
- c. Oto ke tsobí !e han è-bi !e.
 Oto move doll DEF give 3s-child DEF
 ‘Oto gave the doll to his child / gave his child the doll.’

A Kwa language in our sample spoken in southeastern Ghana and southwestern Togo is Ewe. It employs the ‘give’ verb *na* (Dzameshie 2004), apparently associated with ritual giving. As a predicate, *na* appears in ditransitive and verb-verb linkages. Ewe *na*, as a ditransitive predicate, permits a recipient and a theme argument, although not necessarily in that order. Either NP_R NP_T or NP_T NP_R argument order is grammatically sanctioned (9a–b). In addition, Ewe *na* occurs in a verb-verb predication, where the verb *tso* ‘take’ and its theme argument precede *na* and its recipient argument (9c). Ewe exhibits verb-verb V₂ NP_T V₁ NP_R, where argument order is restricted and ditransitive V₁ NP_R NP_T or V₁ NP_T NP_R, where argument order is unrestricted.

- (9) Ewe (Essegbey 1999: 143, 145, 156)
- a. Kofi ná ga amí.
 Kofi give money Ami
 ‘Kofi gave money to Ami.’

- b. Kofi ná amí ga.
Kofi give Ami money
'Kofi gave Ami money.'
- c. Kofi tsó ga lá ná nyónuví ádé.
Kofi take money DEF give girl SPECI
'Kofi gave the money to a certain girl.'

The distinct orders of recipient and theme under ditransitive linkage in Ewe are not semantically equivalent, as shown by an appended clause explicitly rejecting possession, (10a–b), from Essegbey (1999). Positioning the recipient adjacent to the verb conveys a change of possession, i.e., the recipient accepts the transferred object and takes possession of it. An appended clause rejecting possession renders the multi-clause structure only marginally acceptable (10a). On the other hand, a non-adjacent recipient, i.e., positioned after the theme, articulates transfer without change of possession. The non-adjacent argument can both be recipient and yet not take possession of the transferred entity. An appended clause rejecting possession of theme is thus acceptable (10b).

(10) Ewe (Essegbey 1999: 164)

- a. ? Kofi ná amí ga gaké mé-xɔ-e o.
Kofi give Ami money but NEG-receive-3SG NEG
'Kofi gave Ami money but she did not take it.' [marginal]
- b. Kofi ná ga amí gaké mé-xɔ-e o.
Kofi give money Ami but NEG-receive-3SG NEG
'Kofi gave money to Ami but she did not take it.'

Another Kwa language in our sample is Fongbe. It is spoken in southern parts of Togo and the Republic of Benin. Fongbe exhibits the 'give' verb *na* (Lefebvre & Brousseau 2002). As with Ewe, the behavior of this verb allows one to tease apart simple transfer from possession or ownership change.

Fongbe *na* occurs as a ditransitive predicate and as an element in a verb-verb predicate. As a ditransitive predicate, *na* permits recipient followed by theme as well as theme followed by recipient. Either NP_R NP_T or NP_T NP_R argument order is grammatically sanctioned (11a–b). In addition, Fongbe *na* occurs in a predication with verb-verb linkage. *Na* and its recipient argument follow the verb *tso* 'take' and its theme (11c).

(11) Fongbe (Lefebvre & Brousseau 2002: 447-448)

- a. Kòkú ná àsíbá àsón.
Koku give Asiba crab
‘Koku gave Asiba crab.’
- b. Kòkú ná àsón àsíbá.
Koku give crab Asiba
‘Koku gave Asiba crab.’
- c. Kòkú tsó àsón ó ná àsíbá.
Koku take crab the give Asiba
‘Koku gave the crab to Asiba.’

In Fongbe, ditransitive predications with *na* and one or another of its verb argument orders correlate with distinct semantic interpretations, too. These denote transfer of object as opposed to possession change of object (Lefebvre & Brousseau 2002). Ditransitive linkage manifests equivalent grammatical standing relative to an inference of inchoative possession change. Both (12a) and (13a) allow, respectively, (12b) and (13b), statements of inference holding that the recipient has come into “possession” of the theme.

(12) Fongbe (Lefebvre & Brousseau 2002: 447)

- a. Kòkú ná àsíbá àsón.
Koku give Asiba crab
‘Koku gave Asiba crab.’
- b. Àsón húzú / nyí àsíbá tòn.
crab become / be Asiba GEN
‘The crab has become / is Asiba’s.’

(13) Fongbe (Lefebvre & Brousseau 2002: 447)

- a. Kòkú ná àsón àsíbá.
Koku give crab Asiba
‘Koku gave Asiba crab.’
- b. Àsón húzú / nyí àsíbá tòn.
crab become / be Asiba GEN
‘The crab has become / is Asiba’s.’

However, when one adjoins a ditransitive or a verb-verb linkage structure to a grammatically appended ‘but’ clause, that negates possession change; grammaticality is not symmetrical. Ditransitive linkage, regardless of argument order, is unacceptable with an explicit rejection of possession change in a ‘but’ clause where the theme is possessum and recipient is possessor (14a–b). On the other hand, a verb-verb linkage joined to the same explicit rejection of possession change clause is grammatical. Verb-verb linkage therefore appears compatible with transfer of theme but not possession change of theme.

(14) Fongbe (Lefebvre & Brousseau 2002: 473)

- a. * Kòkú ná àsíbá àsón vó àsón nyí àsíbá tòn àá.
Koku give Asiba crab but crab be Asiba GEN NEG
‘Koku gave Asiba crab, but the crab is not hers.’ [intended]
- b. * Kòkú ná àsón àsíbá vó àsón nyí àsíbá tòn àá.
Koku give crab Asiba but crab be Asiba GEN NEG
‘Koku gave Asiba crab, but the crab is not hers.’ [intended]
- c. Kòkú tsó àsón ó ná Àsíbá vó àsón ó nyí àsíbá tòn àá.
Koku take crab the give Asiba but crab the be Asiba GEN NEG
‘Koku gave the crab to Asiba, but the crab is not Asiba’s.’

A final group of Kwa languages in our sample is spoken in the mountainous terrain of southeastern Ghana and southwestern Togo. The “Togo Mountain Languages” in our sample include Logba, Tafi, and Avatime. Their ‘give’ verbs exhibit behavior consistent with other Kwa languages, although these languages uniformly restrict argument order in ditransitive predications.

In Avatime, the verb *ki* ‘give’ participates in two predication types (Defina 2016). In ditransitive linkage, *ki* takes recipient and theme arguments whose order is restricted to NP_R NP_T (15a). In a complex predicate, *ki* and its recipient argument follow *ko* ‘take’ and its theme argument. The argument order is NP_T NP_R (15b–c). For Avatime, ‘give’ linkage patterns restrict argument order asymmetrically. For ditransitive it is V₁ NP_R NP_T, and for verb-verb it is V₂ NP_T V₁ NP_R.

(15) Avatime (Defina 2016: 42–42, 57)

- a. A-ki=yɛ lɪ-ba=lɛ.
C₁S.PFV-give=C₁S.OBJ C₃S-hoe=DEF
‘He gave him the hoe.’
- b. A-kò lɪ-ba=lɛ kí=yɛ.
C₁S.PFV-take C₃S-hoe=DEF give=C₁S.OBJ
‘He gave him the hoe.’

- c. A-kò kò-sà=a kí ó-dzε=ε.
 C₁S.PFV-take C₅S-cloth=DEF give C₁S-woman=DEF
 ‘He gave the cloth to the woman.’

Other Togo Mountain Languages such as Logba (Dorvlo 2008) and Tafi (Bouafor 2013) exhibit similar predications. In Logba, the verb *ta* ‘give’ occurs as a ditransitive predicate and as one element of a verb-verb predicate. As a ditransitive, *ta* takes a recipient argument and a theme argument (16a), in that order. *ta* also follows the verb *mi* ‘take’ in another predication type: *Ta* and its recipient argument follow *mi* and its theme argument (16b). Linkage types in Logba are ditransitive V₁ NP_R NP_T and verb-verb V₂ NP_T V₁ NP_R. Both predications restrict argument order, although the results are dissimilar.

(16) Logba (Dorvlo 2008: 137, personal communication)

- a. Howusu ó-tá Asafo e-feshi.
 Howusu SM.SG-give Asafo CM-sheep
 ‘Howusu gave Asafo sheep.’
 b. Howusu o-mi e-feshi=e ta Asafo.
 Howusu SM.SG-take CM-sheep=DEF give Asafo
 ‘Howusu gave the sheep to Asafo.’

A composite set of predication patterns evident in each Kwa language of our sample is shown in Table 2. Two linkage types stand out. Uniformly, a V₁ ‘give’ verb exhibits ditransitive linkage V₁ NP_R NP_T and verb-verb linkage V₂ NP_T V₁ NP_R. Argument order across these patterns is not similar. Verb-verb is restricted to NP_T NP_R order for all sample languages, whereas ditransitive is restricted for some languages but not for others. Ewe and Fongbe, in particular, allow ditransitive linkage where argument order appears syntactically unrestricted, i.e., both NP_R NP_T and NP_T NP_R occur. The remaining languages, Akan, Baule, and Ga, as well as Logbo, Tafi, and Avatime rely on ditransitive NP_R NP_T, where argument order is restricted.

3.2 Gur

Two languages in our sample belong to the Gur group: Dagaare and Kasem are spoken in Northern Ghana and southern Burkina Faso. As with Kwa, each Gur language articulates two predication patterns that link recipient and theme arguments.

Table 2: Linkage types for ‘give’ in Kwa

	V ₁ NP _R NP _T	V ₁ NP _T NP _R	V ₂ NP _T V ₁ NP _R
Baule	+	–	+
Akan	+	–	+
Ga	+	–	+
Ewe	+	+	+
Fongbe	+	+	+
Logba	+	–	+
Tafi	+	–	+
Avatime	+	–	+

Dagaare exhibits the ‘give’ verb *ko*. It occurs as a simple predicate and as one element of a complex verb-verb predicate. As a ditransitive predicate, *ko* takes a recipient and a theme argument (17a), only in that order. In a non-ditransitive predication, *ko* takes a recipient argument and follows the verb *de* ‘take’ and its theme argument (17b). Verb-verb argument order is exclusively NP_T NP_R. Dagaare linkage patterns are ditransitive V₁ NP_R NP_T and verb-verb V₂ NP_T V₁ NP_R. According to data available in Bodomo (1997), each linkage type restricts argument order differently.

(17) Dagaare (Bodomo 1997: 105)

- a. O ko la dere a gane.
he give.PERF FACT Dere DEF book
‘He gave Dere the book.’
- b. O de la a gane ko dere.
he take.PERF FACT DEF book give Dere
‘He gave Dere the book.’

Kasem, another Gur language, displays similar linkage and argument order patterns in ditransitive and verb-verb predications. It provides a ‘give’ verb *pV*, variously realized as *pe* or *pa* depending on tense/aspect selection (Hewer 1983, Nabaarese 2013, personal communication). *pV* occurs as a simple ditransitive predicate taking arguments for recipient and theme (18a) in the order NP_R NP_T. *pV* also appears in a complex predicate with the verb *kwe* ‘take’ and its theme argument. *pV* and its recipient argument follow *kwe* and its theme argument

(18b–c). Like Dagaare, Kasem manifests the linkage types ditransitive V_1 NP_R NP_T and verb-verb V_2 NP_T V_1 NP_R, each relying on a distinct argument order.

(18) Kasem (Nabaarese, personal communication)

- a. Kofi pɛ ama pɛɛne.
Kofi COMP.give.to Ama pen
‘Kofi gave Ama a pen.’
- b. Kofi kwè amo pɛɛne ɔ pa ama.
Kofi COMP.take my pen 3SG give.to Ama
‘Kofi gave my pen to Ama.’
- c. Kofi wora ɔ kwe-a amo pɛɛne ɔ pa-e ama.
Kofi CONT 3SG take-CONT my pen 3SG give.to-CONT Ama
‘Kofi is giving Ama my pen.’

We note in (18b–c) that Kasem, unlike Dagaare, requires explicit subject indexing across its verb-verb predicate. Third person singular *ɔ* agrees in number and person with the subject phrase *Kofi*, preceding *kwe*. A final example illustrates that indexing in Kasem is not a function of tense/aspect conditions, as one might conjecture. (18c), which displays continuous (CONT) aspect and a third person subject, requires indexing on the second verb. Subject indexing is required on all instances of verb-verb linkage (18b–c) in Kasem, regardless of tense-aspect. No indexing appears in ditransitive V_1 NP_R NP_T (18a).

Table 3 summarizes linkage types applicable to ‘give’ predications in Dagaare and Kasem. Differentially restricting argument order across predications, each Gur language manifests ditransitive V_1 NP_R NP_T as well as verb-verb V_2 NP_T V_1 NP_R.

Table 3: Linkage types for ‘give’ in Gur

	V_1 NP _R NP _T	V_1 NP _T NP _R	V_2 NP _T V_1 NP _R
Dagaare	+	–	+
Kasem	+	–	+

3.3 Atlantic and Kru

In our survey, there are languages from both the Atlantic and Kru groups. Jóola Banjal and Diola-Fogny from Atlantic are spoken in Senegal. Vata, an Eastern Kru

dialect, also identified as Dida, is spoken in southwestern Ivory Coast, west of the Bandama River. Regardless of group, each language exhibits a single linkage type for recipient and theme.

Jóola Banjal has the ‘give’ verb *sen* (Bassène 2007). It occurs only in a ditransitive predication. *Sen* takes recipient and theme arguments in a flexible linear order. Jóola Banjal ditransitive linkage is either $V_1 NP_T NP_R$ (19a) or $V_1 NP_R NP_T$ (19b). A similar constraint operated in the Kwa languages Ewe and Fongbe. Jóola Banjal, however, displays neither verb-verb linkage nor verb-oblique linkage.

(19) Jóola Banjal (adapted from Bassène 2007: 130)

- a. Ø-aare axu na-sen-e fu-mangu a-nynyil axu.
CL1-woman CL1.DEM S3S-give-TAM CL7-mango CL1-child CL1.DEM4
‘The woman gave a mango to the child.’
- b. Ø-aare axu na-sen-e a-nynyil axu fu-mangu.
CL1-woman CL1.DEM S3S-give-TAM CL1-child CL1.DEM4 CL7-mango
‘The woman gave the child a mango.’

Diola-Fogny exhibits the ‘give’ verb *sen* (Sapir 1965). It occurs in a ditransitive predication that shows recipient and theme arguments. The verb *sen* grammatically sanctions only the argument order $NP_R NP_T$ (20a–b), with no mention made of the order $NP_T NP_R$. Ditransitive linkage for Diola-Fogny is limited to $V_1 NP_R NP_T$. It fails to display verb-verb or verb-oblique linkage.

(20) Diola-Fogny (Sapir 1965: 30)

- a. Ni-sen-ɔ ebe.
I-give-him cow
‘I gave a cow to him.’
- b. Na-sen-ɔm-ɔ.
he-give-me-him
‘He gave him to me.’

Vata, a Kru language, employs the ‘give’ verb *nyɛ* (Koopman 1984). Its positioning relative to theme and recipient arguments is a function of the presence of a segmental auxiliary. When a future marker like *ka* occurs in auxiliary position, *nyɛ* follows its arguments (21a–b). Basic constituents of the clause are ordered SOV. In perfective and imperfective aspect, where no segmental auxiliary occurs, *nyɛ* precedes theme and recipient arguments (21c). Constituent word order is then SVO.

(21) Vata (adapted from Koopman 1984: 29, 157)

- a. N ká yɔ-ɔ saká nyɛ.
 I FUT.A child rice give
 ‘I will give rice to the child.’
- b. N ká saká yɔ-ɔ nyɛ.
 I FUT.A rice child give
 ‘I will give rice to the child.’
- c. À nyɛ à nɔ dâlà.
 we give our mother money
 ‘We gave money to our mother.’

The verb *nyɛ* orders recipient and theme arguments differently depending on the basic order of its clause. When a segmental auxiliary is present, argument order can be either NP_R NP_T or NP_T NP_R (21a–b). A similar versatility of argument order operated in Atlantic Jóola Banjal and in Kwa. When no overt auxiliary occurs in Vata, argument order appears limited to NP_R NP_T (21c). Regardless of auxiliary occurrence, Vata manifests ditransitive linkage, which is either V₁ NP_R NP_T under SVO or the contrasting NP_R NP_T V₁ or NP_T NP_R V₁ under SOV. Vata fails to display the linkage types verb-verb or verb-oblique.

An inventory of linkage types for ‘give’ predications in Atlantic and Kru is presented in Table 4. The only linkage type sanctioned is ditransitive. For Diola-Fogny, ditransitive V₁ NP_R NP_T is restricted to order NP_R NP_T, as is Vata under perfective or imperfective aspect. Jóola Banjal and Vata are not similarly constrained under non-perfective/imperfective aspects. Their ditransitive linkage permits either argument order NP_R NP_T or NP_T NP_R.

Table 4: Linkage types for ‘give’ in Atlantic and Kru

	V ₁ NP _R NP _T	V ₁ NP _T NP _R
Jóola Banjal	+	+
Diola-Fogny	+	–
Vata	+	+

3.4 Dogon

The Dogon languages are spoken primarily in Mali, although some communities may also exist in Burkina Faso. As with Mande and Ijoid, the status of Dogon as part of Niger-Congo is controversial since it lacks typical Niger-Congo features such as SVO word order, noun class affixes, and verb suffixes of derivation such as causative (see Williamson & Blench 2000). For basic sentences, Dogon languages exhibit SOV constituent order.

Our assessment of Dogon is based on the grammars of Heath (2016, 2017a,b,c). In the expression of ‘give’ events, Dogon languages exhibit linkage patterns that are exclusively ditransitive. Argument order in this single linkage type can vary for some languages between NP_T NP_R and NP_R NP_T. Bunoge shows both NP_T NP_R and NP_R NP_T in (22) from Heath (2017a). Dogul Dom manifests NP_R NP_T in (23) from Heath (2016), while both Najamba (24) and Yorno So (25) from Heath (2017c) display only order NP_T NP_R.

(22) Bunoge (Heath 2017a: 215, 324)

- a. Bármà à-ηgù ì tábè.
pot 3PL=ACC 1SGSBJ give.PFV
‘I gave him/her a pot.’
- b. ʔÁ:mádù ηgù tóndí-gè ì tábè.
Amadou ACC money 1SGSBJ give.PFV
‘I gave the money to Amadou.’

(23) Dogul Dom (Heath 2016: 186)

- Ó=ỳ bú:dù òdè-η.
2SG=ACC money give.PFV-1SGSBJ
‘I gave the money to you.’

(24) Najamba (Heath 2017c: 245)

- Ìḡgwě: mí yè mó á:màdù gí òdè`rín.
dog 1SGPOSS PSM.ANSG DEF.ANSG Amadu ACC give.PFV-1SGSBJ
‘I gave Amadou my dog.’

(25) Yorno So (Heath 2017c: 360)

- Sũm léy sáy mí-ỳ òb-ù-Ø.
hundred two only 1SG-ACC give-PFV-3SGSBJ
‘He only gave me two hundred riyals.’

None of the available Dogon grammars concentrated on word order for ‘give’ events. Nonetheless, linear order of arguments in one language was flexible. As we found earlier, a similar flexibility of argument order in ditransitives appeared in Ewe, Fongbe, Jóola Banjal, and Vata. It remains to be determined whether all Dogon languages exhibit flexibility for the order of theme and recipient arguments and whether this correlates with any specific meaning change. This issue aside, no Dogon language displayed linkage type verb-verb or verb-oblique, as Table 5 indicates.

Table 5: Linkage types for ‘give’ in Dogon

	V ₁ NP _R NP _T	V ₁ NP _T NP _R
Bunoge	+	+
Dogul Dom	+	?
Najamba	+	?
Yorno So	+	?

3.5 Mande and Senufo

The Mande and Senufo languages occupy western sectors of West Africa. Mande languages in our sample are Mandinka and Bambara. Mande is spoken in the countries of Guinea, Guinea-Bissau, Senegal, and The Gambia. Bambara, on the other hand, is spoken in Mali, Senegal, and Burkina Faso. Senufo in our sample is represented by Supyire; it is spoken in southeastern Mali. All Mande and Senufo languages in our sample order basic sentence constituents as SOV. They also manifest a uniform linkage for recipient and theme.

From the Mande group, Mandinka and Bambara articulate ‘give’ predications with a verb-oblique linkage. Argument order is NP_R NP_T or NP_T NP_R, although never with a predication defined by a single verb.

Mandinka exhibits the verbs *dii* and *so*, which are translated as ‘give’ (Creissels 2015). Each occurs with an adposition in a complex predicate where argument order for theme and recipient can contrast. Consistent with SOV word order, *dii* takes a preceding theme argument. It is followed by a phrase in which the postposition *la* is preceded by a recipient argument (26a). Verb *dii* manifests the verb-oblique linkage NP_T V₁ NP_R OBL, where arguments are ordered as NP_T NP_R. In contrast, Mandinka *so* ‘give’ takes a preceding recipient as one argument of its verb-oblique linkage; the theme argument follows the verb and is marked by the postposition *la* (26b).

(26) Mandinka (Creissels 2015: 225)

- a. Kew-ó ye kóð-ôo díi mus-óo la.
man-DEF CMP.POS.TR money-DEF give woman-DEF OBL
'The man gave money to the woman.'
- b. Kew-ó ye mus-ôo só kóð-óo la.
man-DEF CMP.POS.TR woman-DEF give money-DEF OBL
'The man gave money to the woman.'

Overall, Mandinka manifests only verb-oblique linkage. Its two 'give' verbs sanction argument orders that contrast: NP_T NP_R for *dii* and NP_R NP_T for *so*. Oblique is realized by postposition *la* in either instance. Depending on verb selection, linkage for Mandinka is NP_T V₁ NP_R OBL or NP_R V₁ NP_T OBL.

Bambara exhibits two 'give' verbs as well, *di* and *ɓɓn* (Creissels 2007). Both verbs are limited to verb-oblique linkage with theme and recipient arguments, although argument order is determined by the verb.

The verb *di* exhibits verb-oblique linkage; *di* takes a preceding theme argument. Associated with *di* is the postposition *ma* and its preceding recipient. The verb *ɓɓn* also manifests verb-oblique linkage. In contrast to *di*, *ɓɓn* takes a recipient as its preceding argument. These elements are followed by the postposition *ma* and its preceding theme argument. Regardless of the 'give' verb employed, Bambara manifests only verb-oblique linkage. However, argument order in this linkage type is conditioned by verb selection. When *di* occurs (27a), verb-oblique linkage is realized as NP_T V₁ NP_R OBL and its ordering of arguments. When *ɓɓn* appears (27b), verb-oblique linkage has the form NP_R V₁ NP_T OBL, with argument order NP_R NP_T.

(27) Bambara (Creissels 2007: 8-9)

- a. Mùso yé dúmuni dí n mà.
woman.DEF PF.POS food.DEF give 1S POSTP
'The woman gave the food to me.'
- b. Mùso yé n sòn dúmuni ná.
woman.DEF PF.POS 1S give food.DEF POSTP
'The woman gave me the food.'

Supyire, a Senufo language, also exhibits SOV word order for basic constituents, and it reveals only one 'give' verb (Carlson 1994). The verb *kan* and distinct postpositions occur in verb-oblique linkage predications. Although Supyire articulates the verb-oblique type of linkage, like the Mande languages, argument

order contrasts are determined by distinct postpositions. In one predication, *kan* precedes postposition *a*, and *kan* takes a theme argument, whereas the postposition *a* accepts a recipient (28a). In a second predication, *kan* precedes postposition *na*, and *kan* takes a recipient, while postposition *na* accepts a theme (28b). Accordingly, Supyire permits only one linkage type: verb-oblique. Nonetheless, argument order within this linkage type contrasts as NP_R NP_T or NP_T NP_R. Argument order is determined by selection of postposition. Verb-oblique linkage is NP_T V₁ NP_R OBL for *kan a* but NP_R V₁ NP_T OBL for *kan na*.

(28) Supyire (Carlson 1994: 270, 400)

- a. *Kà nògò-lyèngí sì ngkùù kan u à.*
and man-old.DEF NARR chicken give him to
‘Then my father gave a chicken to him.’
- b. *Mii a u kan biki na.*
I PERF him give pen at
‘I have given him a pen.’

A view of Mande and Senufo linkage types is shown in Table 6. As we have seen, languages in these two groups employ only one linkage type for ‘give’: verb-oblique. Argument order in this linkage type varies according to the selection of either main verb or postposition. In Mande, distinct argument orders within verb-oblique linkage correlate with contrasting ‘give’ verbs. In Senufo, distinct argument orders within verb-oblique linkage correlate with contrasting postpositions. In Bambara, distinct argument orders within verb-oblique correlate with contrasting patterns of selection for both verb and postposition.

Table 6: Linkage types for ‘give’ in Mande and Senufo

	NP _T V ₁ NP _R OBL	NP _R V ₁ NP _T OBL
Mandinka	+ dii...la	+ so...la
Bambara	+ di...ma	+ sɔn...na
Supyire	+ kan...a	+ kan...na

3.6 Delta Cross and Ijoid

Additional languages in our sample come from the Delta Cross group of East Benue Congo and non-Benue Congo Ijoid. All are spoken in eastern Nigeria's Niger Delta. Even though order of basic constituents varies across these groups, two linkage types are evident for 'give' predications and their expression of recipient and theme arguments.

Delta Cross languages in our sample include Obolo and Kana. Obolo has the 'give' verb *nyi* (Aaron 1999, Faraclas 1984). It manifests ditransitive linkage and verb-verb linkage, both of which restrict argument order. As a ditransitive predicate, *nyi* takes two arguments, a recipient followed by a theme (29a). Argument order is restricted to NP_R NP_T. In a verb-verb predicate, *nyi* combines with verb *sa* 'take'. *Nyi* takes a recipient argument and *sa*, a theme (29b). Within this last predication type, argument order is restricted to NP_T NP_R. Overall, Obolo shows linkage types where argument order is differently restricted: ditransitive V₁ NP_R NP_T compared to verb-verb V₂ NP_T V₁ NP_R.

(29) Obolo (Aaron 1999: 53, 83)

- a. Kpèé-yáká í-nyí ómó mkpó géègè.
CPL-NEG.INC NSP-give 3SG thing any
'They didn't give him anything anymore.'
- b. mèi-ní-gwó èsé í-sà í-nyí gwújà yà.
that.NSP-INC-scoop crayfish NSP-take NSP-give child CPL-NEG.INC
'that she scooped some crayfish and gave it to the boy.'
- c. í-'nèè-nií-sà àchá yà í-nyí.
3SG-REDUP-INC-take hoe DDEMSG NSP-give
'then he gave the hoe (to the people).'

The Delta Cross language Kana manifests ditransitive linkage and verb-verb linkage as well. In each linkage type, argument order is constrained, although order in ditransitive predications is atypical. Kana has a 'give' verb *ne* (Ikoro 1996). *Ne* occurs as a ditransitive predicate taking a theme and a recipient (30a). Argument order is limited to NP_T NP_R, which is relatively unusual for ditransitive linkage in our survey. In a predication with verb-verb linkage, *ne* follows the verb *su* 'take'. *Ne* takes a recipient argument and *su*, a theme (30b). Argument order in this verb-verb predication is again restricted to NP_T NP_R. Like Obolo, Kana manifests the linkage types ditransitive V₁ NP_T NP_R as well as verb-verb V₂ NP_T V₁ NP_R. Both linkage types in Kana restrict arguments to the same linear order.

(30) Kana (Ikoro 1996: 254)

- a. Bàrìlè é-nɛ péé yɔ.
Barile DF-give goat oraclist
‘Barile will present an oraclist a goat / a goat to an oraclist.’
- b. Bàrìlè é-sú péé nɛ yɔ.
Barile DF-take goat give oraclist
‘Barile will give / present a goat to an oraclist.’

The final language group of the Niger Delta in our sample is Ijoid. As with Dogon, Mande, and Senufo, word order of basic clause constituents in Ijoid is SOV. Our sample includes data from the Kolokuma dialect of Ijò (Williamson 1965). Ijò exhibits ditransitive and verb-verb linkage types. Like most other languages in the Niger Delta area, it does not show verb-oblique linkage.

Ijò has the ‘give’ verb *piri*. It occurs in a ditransitive predicate where a theme argument precedes a recipient argument (31a). Argument order for this predication, NP_T NP_R, is the mirror image of SVO languages of a similar linkage type in our sample. In Ijò, no other argument order is sanctioned. In a verb-verb linkage, *piri* appears with transitive verb *aki* ‘take’. *Piri* and its preceding recipient follow *aki* and its preceding theme (31b). Verb-verb linkage in Ijò limits argument order to NP_T NP_R. As with other languages from the Niger Delta, Ijò restricts theme and recipient to a single order regardless of linkage as ditransitive NP_T NP_R V₁ or verb-verb NP_T V₂ NP_R V₁.

(31) Ijò (Williamson 1965: 54)

- a. Erí opúru-mɔ-nì tɔboú piri-mi.
he crayfish-PL-LK boy give-SPA
‘He gave the boy the crayfish.’
- b. Erí opúru-mɔ àkɪ tɔboú piri-mi.
he crayfish-PL take boy give-SPA
‘He gave the crayfish to the boy.’

A summary of ‘give’ predications in the Delta Cross and Ijoid groups is presented in Table 7. Two linkage types are evident: ditransitive and verb-verb. In the easternmost part of the Niger Delta, Delta Cross languages exhibit ditransitive linkage where argument order varies: V₁ NP_R NP_T for Obolo but V₁ NP_T NP_R for Kana. Verb-verb linkage among these languages is confined to V₂ NP_T V₁ NP_R. Ijò, spoken across the Niger Delta but notably in its westernmost regions, manifests the same linkage types but with argument order in the ditransitive being the mirror image of Delta Cross Obolo. Ijò shows NP_T NP_R V₁ for ditransitive

linkage and NP_T V₂ NP_R V₁ for verb-verb linkage. As a point of comparison with respect to linkage types, Delta Cross and Ijoid strongly resemble Kwa and Gur. All exhibit linkage patterns that are ditransitive and verb-verb.

Table 7: Linkage types for ‘give’ in Delta Cross and Ijoid

	V ₁ NP _R NP _T	V ₁ NP _T NP _R	V ₂ NP _T V ₁ NP _R	NP _T NP _R V ₁
Obolo	+		+	
Kana		+	+	
			NP _T V ₂ NP _R V ₁	
Ijo			+	+

3.7 Benue Congo

The remaining languages in our sample belong to the Benue Congo group, as spoken in Nigeria. They include Yukuben from Jukunoid, Ebira from Nupoid, Igbo from Igbooid, Yoruba from Yoruboid, and several from Edoid. Among these languages, there are three linkage types: ditransitive, verb-verb and verb-oblique.

Jukunoid languages are spoken east of the Niger-Benue River confluence and northeast of Igbooid toward the Cameroon highlands. In our sample, Yukuben represents Jukunoid. It displays ditransitive linkage. It does so with the verb *nda* ‘give’ (Anyanwu 2013). As a ditransitive predicate, *nda* takes a recipient argument followed by a theme argument (32). Such predications restrict argument order since they allow only NP_R NP_T. Jukunoid thus exhibits ditransitive linkage V₁ NP_R NP_T. It does not manifest verb-verb or verb-oblique linkage.

(32) Yukuben (Anyanwu 2013: 204, 270)

- a. Nda í-dúng e-mi.
give CL-child CL-breast
‘Give the child a breast.’
- b. È-yí nda mú bà-tr nyí?
PREF-who give 2SG CL-cloth DET
‘Who gave you that garment?’

The Nupoid language Ebira is spoken in the Nigerian middle belt immediately west and south of the Niger-Benue River confluence. It is located some distance from Jukunoid, but directly east of Yoruba and north of Edoid. Ebira exhibits

predications whose linkage types are ditransitive and verb-verb, as was the case for Kwa and Gur, as well as for Delta Cross and Ijoid. Ebira has the ‘give’ verb *yí* (Adivé 1984). As a ditransitive predicate, *yí* takes a recipient argument followed by a theme argument (33a). In a verb-verb predication, *yí* follows the verb *si* ‘take’. *Yí* and its recipient follow *si* and its theme argument (33b). Both predication types limit argument order: ditransitive is NP_R NP_T, and verb-verb is NP_T NP_R. As for linkage type, Ebira shows ditransitive V₁ NP_R NP_T and verb-verb V₂ NP_T V₁ NP_R. Ebira does not exhibit verb-oblique linkage.

(33) Ebira (Adivé 1984: 132)

- a. Ìzé ô yí ozí ísá.
Ize she give child food
‘Ize gave the child food / fed the child.’
- b. Ìzé ô sí ísá yí ozí.
Ize she take food give child
‘Ize gave the child food.’

Turning to Igbo, Igbo is spoken over a large area east of the Niger River and in parts of the Niger Delta. It features predications that are a ditransitive or verb-verb, just as found in Ebira, Delta Cross, and Ijoid. Igbo has the ‘give’ verb *nye* (Uwalaka 1988). As a ditransitive predicate, *nye* takes an immediately following recipient argument, in turn followed by a theme argument (34a). The argument order is NP_R NP_T. *Nye* also participates in verb-verb linkage with the verb *wee* ‘take’. The verb *nye* and its recipient argument follow *wee* and its theme argument (34b). The linear order of arguments is NP_T NP_R. Although argument order varies according to linkage type, Igbo displays both ditransitive V₁ NP_R NP_T and verb-verb V₂ NP_T V₁ NP_R. There is no evidence that Igbo shows verb-oblique linkage. As with most other language descriptions in our sample, no mention is made of a potential functional difference between grammatically sanctioned linkage types.

(34) Igbo (Uwalaka 1988: 122, personal communication)

- a. Àdha nyè-rè ucè ego.
Adha give-PAST Uce money
‘Adha gave Uce money.’
- b. Àdha wèe-re ego nye ucè.
Adha take-PAST money give Uce
‘Adha gave money to Uce.’

In contrast to Igbo, Yoruba is spoken in southwestern Nigeria, including the border region with the Republic of Benin. Different from other Benue-Congo languages, Yoruba uses ‘give’ expressions with predications that are either verb-oblique or verb-verb. Its ‘give’ verb is *fun* (Atoyebi et al. 2010, Lord 1993). In a verb-oblique predication, *fun* appears with the adposition *ni*. The verb *fun* and its recipient argument precede the oblique marker *ni* and its theme argument (35a). In a verb-verb predication, *fun* follows the verb *mu* ‘take.’ *Fun* takes a recipient argument, while *mu* takes a theme argument (35b). Linear order in both linkage types is constrained. Verb-oblique employs order NP_R NP_T, while verb-verb utilizes NP_T NP_R. Setting order restrictions aside, Yoruba manifests verb-oblique linkage V₁ NP_R OBL NP_T and verb-verb linkage V₂ NP_T V₁ NP_R. Yoruba does not show ditransitive linkage.

(35) Yoruba (Atoyebi et al. 2010: 2, 148)

- a. Bólá fún adé ní iwé.
Bola give Ade SECA book
‘Bola gave Ade a book.’
- b. Bólá mú iwé fún adé.
Bola take book give Ade
‘Bola gave a book to Ade.’

Our sample includes four Edoid languages, viz. Bini, Esan, Degema, and Emai (Elugbe 1989). Most are spoken west of the Niger River, east of the Yoruba, south of the Ebira, and west of the Igbo. Among Edoid languages, verb-oblique predications dominate. However, Degema, spoken on an island in the Niger Delta, exhibits both verb-oblique and ditransitive linkage.

We start with Emai and its ‘give’ expression, drawing upon our own previous research. Emai shows only verb-oblique predications. It exhibits a ritual event verb *kuee* with the two senses ‘give a present, provide a welcome gift or offering to someone’, as well as ‘betroth to someone, become engaged for marriage’. With either sense, *kuee* occurs in a verb-oblique predication with the applicative adposition *li/ni* (*ni* is reserved for clause final position when the applicative complement appears in focus or question word position, or when its complement is a pronoun). The verb *kuee* consistently takes a theme argument that is followed by *li/ni* and its recipient argument (36a–b).

(36) Emai (Schaefer & Egbokhare 2007: 241)

- a. Òjè kúéé òkpàn lí í'ré.
Oje:PRX PST:present:PFV gourd APP visitors
‘Oje has presented a gourd to his visitors.’

- b. Yàn kúéé ólì òkpòsò lí òhí.
 3PL:PRX PST:present:PFV the woman APP Ohí.
 ‘They have betrothed the woman to Ohí.’

For other less ritualized events, Emai has no single ‘give’ verb (Schaefer & Egbokhare 2007, 2010, 2017). Instead, it deploys a variety of transitive verbs of handling that convey object manipulation such as *zè* ‘scoop’ (37a), *roo* ‘pick out’ (37b), *vo* ‘fetch’ (37c), and *nwu* ‘carry’ (37d). Each occurs with the applicative adposition *li/ni* in verb-oblique predication V NP_T OBL NP_R, where argument order is confined to NP_T NP_R. This was also the case for argument order with *kuee*.

(37) Emai (Schaefer & Egbokhare 2007: 518-525)

- a. Ólì òkpòsò zé émàè lí ólì ònwìmè.
 the woman:PRX PST:scoop:PFV food APP the farmer
 ‘The woman has given food to the farmer.’
- b. Ólì òkpòsò róó ólì ùhàì lí ólì ònwìmè.
 the woman:PRX PST:pick:PFV the arrow APP the farmer
 ‘The man has given the arrow to the farmer.’
- c. Ólì ómòhè vó órán lí ólì ókpósódìòn.
 the man:PRX PST:fetch:PFV wood APP the old.woman
 ‘The man has given wood to the old woman.’
- d. Ólì òkpòsò nwú émà lí ólì ònwìmè.
 the woman:PRX PST:carry:PFV yam APP the farmer
 ‘The woman has given yam to the farmer.’

It is important to note that Emai handling verbs, when not in a predication with *li/ni*, do not denote ‘give’. As the sole predicate, these verbs convey various manners for handling entities, such as scooping, picking out, fetching, or carrying, as in (38).

(38) Emai (Schaefer & Egbokhare 2007: 518-525)

- a. Ólì òkpòsò zé émàè.
 the woman:PRX PST:scoop:PFV food
 ‘The woman has scooped food.’
- b. Ólì òkpòsò róó ùhàì.
 The woman:PRX PST:pick:PFV arrow
 ‘The man has picked out an arrow.’

- c. Ólí ómòhè vó órán.
the man:PRX PST:fetch:PRV wood
'The man has fetched wood.'
- d. Ólì òkpòsò nwú émà.
the woman:PRX PST:carry:PFV yam
'The woman has carried yam.'

It is equally important to point out that the oblique marker *li/ni* has no counterpart appearing as a synchronic verb. There are no transitive or ditransitive predications shaped by *li/ni* as the sole verb, especially one that might mean 'give' or something similar; see attempted forms in (39).

- (39) Emai (Schaefer & Egbokhare 2007: 518-525)
- a. * Ólì òkpòsò lí émàè.
the woman:PRX PST:give:PFV food
'The woman has given food.' [intended]
- b. * Ólì òkpòsò lí ójé émàè.
the woman:PRX PST:give:PFV Oje food
'The woman has given Oje food.' [intended]

Emai exhibits only the verb-oblique linkage V_1 NP_T OBL NP_R. As already shown, this linkage type restricts argument order to NP_T NP_R. Emai manifests neither ditransitive nor verb-verb linkage.

The most populous of the Edoid languages, spoken south of Emai but north of the western-most area of the greater Niger Delta region, is Bini. It is limited to verb-oblique predications for 'give'. Bini predicates in this domain consist of a verb of handling and an oblique marker (Agheyisi 1990). For instance, verb *rhie* 'pick out' and its argument precede the adposition *ne*. *Rhie* accepts a theme argument; *ne* follows with a recipient argument (40a). Argument order in Bini predications of this sort is limited to NP_T NP_R. Overall, Bini displays verb-oblique linkage V_1 NP_T OBL NP_R. Linkage possibilities for 'give' are further restricted, since there is neither ditransitive linkage (40b) nor verb-verb linkage. Virtually identical statements can be made about Esan, an Edoid neighbor to the north of Bini and east of Emai (Ejele 1986).

- (40) Bini (Agheyisi 1990: 92)
- a. Òzó rhìè ùkpòn mwén nè òsè órè.
Ozo pick.out cloth my to friend his
'Ozo gave my cloth to his friend.'

- b. * Òzó rhíè àsè órè ùkpòn mwén.
 Ozo give friend his cloth my
 ‘Ozo gave his friend my cloth.’ [intended]

An Edoid language whose speakers occupy parts of a Niger Delta island is Degema (Kari 2004). It shows verb-oblique linkage and ditransitive linkage; it also restricts argument order in both linkage types. Degema articulates ‘give’ with the verb *kiye* as a ditransitive predicate taking a recipient and theme argument. The linear order of arguments is restricted to NP_R NP_T. Another argument order in Degema appears with a verb-oblique predication, which consists of the ‘give’ verb *kiye* and the adposition *mu*. *Kiye* takes a theme argument and *mu* a recipient. Predications of this sort restrict argument order to NP_T NP_R. Compared to other Edoid languages, Degema shows not only the verb-oblique linkage V₁ NP_T OBL NP_R but also the ditransitive linkage V₁ NP_R NP_T. It fails to show verb-verb linkage.

(41) Degema (Kari 2004: 194)

- a. Ohoso ɔ=kíyé=n ómó yɔ́ ósama.
 Ohoso 3SGSCL=give=FE child DEF shirt
 ‘Ohoso gave the boy a shirt.’
- b. Ohoso ɔ=kíyé=n ɔsama mó ómó yɔ́.
 Ohoso 3SGSCL=give=FE shirt to child DEF
 ‘Ohoso gave a shirt to the boy.’

Predication types evident in our Benue Congo sample appear in Table 8. All three linkage types are evident; this is the only West African region we have surveyed where this is the case. Ditransitive linkage V₁ NP_R NP_T is found in Yukuben, Ebira, Igbo, and Degema. Verb-verb linkage is evident in Ebira, Igbo, and Yoruba. Verb-oblique linkage occurs in Yoruba, as well as Bini, Esan, Emai, and Degema. In addition, argument order within each linkage type is restricted: NP_R NP_T for ditransitive, NP_T NP_R for verb-verb, and NP_T NP_R for verb-oblique. There is also the uniquely ordered NP_R NP_T for verb-oblique in Yoruba. Overall, Benue Congo exhibits the linkage types ditransitive V₁ NP_R NP_T, verb-verb V₂ NP_T V₁ NP_R and verb-oblique, either V₂ NP_T OBL NP_R or V₂ NP_R OBL NP_T.

4 Discussion

Our survey of argument linkage for ‘give’ predications has netted three primary findings. Firstly, linkage types are not evenly distributed across the language

Table 8: Linkage types for ‘give’ in Benue Congo

	V ₁ NP _R NP _T	V ₂ NP _T V ₁ NP _R	V ₁ NP _R OBL NP _T	V ₂ NP _T OBL NP _R
Yukuben	+	–	–	–
Igbo	+	+	–	–
Ebira	+	+	–	–
Yoruba	–	+	+	–
Emai	–	–	–	+
Bini	–	–	–	+
Esan	–	–	–	+
Degema	+	–	–	+

groups of Niger-Congo. Secondly, some linkage types appear across physically adjacent language groups and so reflect potential areal zones of convergence. Linkage coupling or its absence, in fact, allows one to identify two primary areal zones in West Africa. Thirdly, the frequency with which a recipient argument abuts a ‘give’ verb reflects an adjacency condition that, while relatively uniform in distribution across language groups, is attenuated for ditransitive linkage in one areal subzone.

In what follows, we first note the frequency of the three linkage types relative to language groups and their members. For each type, we identify geographically defined areas within West Africa where a linkage type is or is not employed. Using a straightforward frequency count, it is ditransitive linkage that is most extensively distributed in our sample of language groups. Less widely distributed are predications that consist of two elements. Multi-element linkage patterns are also not evenly distributed across language groups. Verb-verb linkage is nearly twice as frequent as verb-oblique linkage.

4.1 Linkage type distribution

Occurrence of the three linkage types by language group is summarized in Table 9. Ditransitive linkage occurs in 11 of 14 groups, although not exclusively so for many of them. Ditransitive linkage is evident across the central West African states of Burkina Faso, Ivory Coast, Ghana, Mali, Togo, and the Republic of Benin. It is also found on either side of this block. Toward the west, ditransitive linkage occurs in Senegal and western Ivory Coast. Toward the east, it appears in eastern Nigeria, including the Niger River delta, and near the Niger-Benue confluence.

Ditransitive linkage was not found among any of the Mande and Senufo groups of Mali, north of the central block, or in Guinea-Bissau and Gambia, west of the central block. It was also lacking in southwestern Nigeria, where neither Yoruba nor any upland Edoid language exhibited ditransitive linkage.

Table 9: Linkage types aligned according to language group

	V ₁	V ₂ -V ₁	V ₂ -OBL
Kwa (8)	BA, AK, GA, EW FB, LO, TA, AV	BA, AK, GA, EW FB, LO, TA, AV	
Gur (2)	DA, KA	DA, KA	
Atlantic (2)	JB, DF		
Dogon (4)	BN, DD, NJ, YS		
Kru (1)	VA		
Mande (2)			MA, BB
Senufo (1)			SU
Jukunoid (1)	YU		
Ijoid (1)	IJ	IJ	
Delta Cross (2)	OB, KA	OB, KA	
Igboid (1)	IG	IG	
Nupoid (1)	EB	EB	
Yoruboid (1)		YR	YR
Edoid (4)	DE		EM, BI, ES, DE
# of groups	11	7	4

Verb-verb linkage is found in 7 of 14 groups, three fewer than ditransitive linkage. Verb-verb dominates in the central block of nations including eastern Ivory Coast, Ghana, Togo, Burkina Faso, and the Republic of Benin. It fails to occur to the west and northwest of this block. To its east, verb-verb linkage appears not only in the Niger Delta but in southwestern Nigeria with Yoruba. Verb-verb linkage, however, is not found among the Edoid languages of southwestern Nigeria nor the Jukunoid languages spoken in the Nigerian middle belt as it nears the Cameroonian highlands.

The last of the linkage types, verb-oblique, is found in only 4 of 14 groups. These are Mande and Senufo, north and west of the central block, as well as Yoruba and Edoid of southwestern Nigeria, directly east of the central block.

4.2 Linkage type combinations

Our next point of analysis concerns linkage combinations within and across language groups. Table 10 provides an overall impression of language groups and their members that couple linkage types or that maintain a single linkage type. There are three patterns where linkage types couple: ditransitive plus verb-verb (D-VV); verb-verb plus verb-oblique (VV-VOBL); and ditransitive plus verb-oblique (D-VOBL). By far the most widely distributed of these linkage couples is D-VV, i.e., ditransitive with verb-verb.

Table 10: Linkage coupling according to language group

	$V_1 + V_2$ - V_1	V_2 $V_1 + V_2$ -OBL	$V_1 + V_2$ -OBL
Kwa	BA, KA, GA, EN FG, LO, TA, AV		
Gur	DA, KA		
Atlantic			
Dogon			
Kru			
Mande			
Senufo			
Jukunoid			
Ijoid	IJ		
Delta Cross	OB, KA		
Igboid	IG		
Nupoid	EB		
Yoruboid		YR	
Edoid			DE
# of groups	6	1	1

D-VV coupling occurs in the greatest number of language groups. It is found in 6 of the 14. It is, again, the central block of nation states that constitute one area where D-VV is exclusively found. The Kwa and Gur language groups, encompassing the Bandama-Tano-Volta (BTV) watershed define this area. Another area rich in D-VV coupling is the Niger Delta, encompassing Delta Cross and Ijoid languages as well as Igboid. Outside the Niger Delta, it is only Nupoid in our survey that shows D-VV coupling; it is spoken near the Niger-Benue River confluence.

VV-VOBL coupling occurs in only one language group. Yoruba is the single language in our sample that combines verb-verb and verb-oblique linkage predications. D-VOBL coupling is also very limited in our sample. It appears in only one language group, viz. Edoid, and only in one of its four languages: Degema. As mentioned earlier, Degema is spoken on an island in the Niger Delta, an area where language groups tend to exhibit at least ditransitive linkage. There are 7 groups that fail to exhibit linkage coupling altogether or do so extremely sparingly, as shown in Table 11.

Table 11: Language group members failing to couple linkage types

	V ₁	V ₂ V ₁	V ₁ OBL
Kwa			
Gur			
Atlantic	JB, DF		
Dogon	BN, DD, NJ, YS		
Kru	VA		
Mande			MA, BB
Senufo			SU
Jukunoid	YU		
Ijoid			
Delta Cross			
Igboid			
Nupoid			
Yoruboid			
Edoid			EM, BI, ES
# of groups	4	0	3

Non-coupling groups include Atlantic, Dogon, Kru, Mande, Senufo, Jukunoid, and most of Edoid except Degema of the Niger Delta. None of these non-coupling language groups appears within the BTV watershed. Atlantic is far to the west in Senegal, and Kru is found in western Ivory Coast. Dogon is spoken to the north and immediate west of the BTV area in Mali and possibly Burkino Faso. Mande also occurs to the north and immediately west of the BTV area in Mali but also in Guinea-Bissau. Nearly all of Edoid is spoken west of the Niger River in southwestern Nigeria. Jukunoid appears in the Nigerian middle belt near the Cameroonian highlands.

Overall, we find that the propensity for D-VV coupling is extremely strong in our sample. This propensity, however, does not correlate with a contiguous land mass. Rather, there appear to be two major areas of D-VV coupling in West Africa. One is the BTV watershed that includes southeastern Ivory Coast, Ghana, Togo, Burkina Faso, and the Republic of Benin, where Kwa and Gur languages are spoken. The other is the Niger Delta, where Ijoid, Delta Cross, and Igbo languages converge.

Between these two major zones of D-VV coupling is western Nigeria, homeland of the Yoruba. It is perhaps not surprising that, in this location, Yoruba coupling would be unique in our sample. Yoruba VV-VOBL coupling employs one multi-element linkage type found to its east and one to its west. To its immediate west is the verb-verb linkage of Kwa and Gur. To its immediate east is the verb-oblique linkage of upland Edoid. Yoruba VV-VOBL combines these.

Two more convergence zones can be gleaned from Table 11, although not from linkage coupling. Instead, these two areas show verb-oblique linkage, exclusively so or nearly so. One of these areal zones is immediately north and west of the BTV watershed. This is where the Mande and Senufo languages are spoken. A second area where verb-oblique dominates is immediately west of the Niger River where one finds the bulk of Edoid and Yoruba. Interestingly, the languages in these two areas, although similar with respect to linkage types, are dissimilar with respect to the order of basic constituents within a clause. Mande and Senufo are SOV, while Edoid and Yoruba are SVO. What we should make of this is not yet clear, but it seems relevant to the overall distribution of areal linguistic patterns in West Africa.

Finally, we note that verb-verb is the only linkage type that is not exclusive to a single language group in our sample. It consistently couples with another linkage type, primarily ditransitive but also verb-oblique. Verb-verb appears to be a linkage type whose dependency requires further attention, especially when dependency is not a characteristic of ditransitive or verb-oblique linkage.

To start, we suggest that this dependency may be related to a sometimes-noted function for verb-verb linkage in our survey. Although inconsistently identified, the meaning relationship between the distinct forms D and VV appears to correlate, at least in some languages, with distinct functions. That is, VV expresses object transfer, while D signals object transfer with possession change. Both linkage types have in common a V_1 verb 'give'. Such a relationship is not unlike predication pairs in Edoid where there also exists a verb that is common to predications that are functionally distinct with respect to a feature of tertiary aspect (Desclés & Guentchéva 2012).² For example, common to Emai predications (42a)

²Tertiary aspect is a term used to identify aspectual values beyond viewpoint aspect and Aktionsart.

and (42b) is the verb *khuae* ‘raise.’ Predication (42a) means that the direct object of *khuae* simply changes its position in a vertical manner. The extent of positional change is not coded linguistically. In contrast, predication (42b), where *khuae* is preceded by its erstwhile direct object and by verb *nwu* ‘carry/take’, signals that position change has occurred and that it has achieved its maximum extent, e.g., ‘up to arm’s length’. No further positional change is possible.

(42) Emai (Schaefer & Egbokhare 2017: 732)

- a. Òjè khúáé ólì ùkòdò.
 Oje:PRX PST:raise:PFV the pot
 ‘Oje has raised the pot.’
- b. Òjè nwú ólì ùkòdò khúáé.
 Oje:PRX PST:carry:PFV the pot raise
 ‘Oje has raised the pot up to arm’s length.’

By analogy, it may be that in our survey of West Africa that D and VV relate via a feature in which D denotes maximal transfer, i.e., possession/ownership change, while VV expresses simple transfer that is non-maximal. It seems possible that the various languages in this survey showing both D and VV predications exploit a feature of tertiary aspect that allows one to profile possession or transfer. More detailed studies within Niger-Congo will be required to determine whether this might be the case.

4.3 Adjacency of linkage elements

Our final point of analysis concerns a possible adjacency relationship between NP_R (recipient, R in Table 12) and one or another predication element, V₁, V₂, or OBL. There are five adjacency possibilities in our sample where either a verb or an oblique marker can stand adjacent to a recipient argument. The five are V₁ NP_R for ditransitive linkage, V₁ NP_R or V₂ NP_R for verb-verb linkage, and OBL NP_R or V₁ NP_R for verb-oblique linkage. In Table 12, each is presented to allow for mirror image occurrence of recipient across SVO and SOV languages. We consider recipient rather than theme since animate entities have been central to the comparison of three argument predications (Gruber 1992) and their typology (Kittilä 2006, Margetts & Austin 2007).

A review of Table 12 reveals that not all adjacency conditions are realized in our sample. Of course, not all languages in our sample exploit each of the linkage types verb-oblique, verb-verb, and ditransitive. Nonetheless, within each linkage type, one can assess cross-linguistic tendencies for recipient placement.

Under ditransitive linkage, V_1 NP_R / NP_R V_1 adjacency is found in 11 of 14 language groups. It occurs in the two major areal zones we have previously identified within West Africa: the BTV watershed and the Niger Delta. In fact, all of eastern Nigeria including the Niger-Benue confluence zone and the middle belt extending from there to the Cameroonian highlands shows V_1 NP_R / NP_R V_1 adjacency.

There are two areas where ditransitive V_1 NP_R adjacency does not appear. One is the area between the BTV Watershed and eastern Nigeria demarcated by the river Niger. Essentially this is western Nigeria; it includes Yoruba and the greater part of Edoid. The second area is north and immediately west of the central block; it includes Guinea-Bissau, The Gambia, Mali, and their Mande and Senufo languages.

Each of these areas where ditransitive is not exploited has its own adjacency conditions. In the area north and immediately west of the BTV Watershed, the Mande and Senufo languages show alternating adjacency conditions for recipient. They exhibit verb-oblique NP_R V_1 adjacency or verb-oblique NP_R OBL adjacency. In western Nigeria there are three adjacency conditions for recipient. Yoruba relies on verb-verb V_1 NP_R adjacency and verb-oblique V_1 NP_R. Edoid, in contrast, exploits only verb-oblique OBL NP_R adjacency.

Highlighting these two areas draws attention to adjacency conditions that are infrequent in Table 12. The verb-oblique V_1 NP_R adjacency is limited to Yoruba. It represents the only group in our sample of 14 that employs this adjacency condition in addition to verb-verb V_1 NP_R adjacency. The other less frequent condition is OBL NP_R and its mirror image NP_R OBL; they occur, respectively, among the Edoid of western Nigeria and the Mande and Senufo groups north and west of the BTV Watershed.

Interestingly, the only possible adjacency condition that failed to occur in our sample was verb-verb V_2 NP_R. Recipient is never adjacent to V_2 position in a verb-verb linkage. It will be important to determine whether this is true of all languages in West Africa. Whatever the case, verb-verb V_2 NP_R absence will require future attention.

5 Conclusion

We have surveyed 'give' predications that express possession change among 14 West African language groups. We sought to identify linkage types for theme and recipient arguments. Two primary areal zones emerged where linkage types couple for adjacent groups. One is the BTV watershed; the other is the Niger Delta. In these two areas, linkage types for 'give' couple.

Table 12: Adjacency of ‘give’ and recipient (R) in each linkage type according to group, regardless of basic constituent order

	DITR	V-V ₁	V ₂ -V ₁	V-OBL	V ₁ -OBL
	V ₁ R	V ₁ R	V ₂ R	OBL R	V ₁ R
	R V ₁ SOV	R V ₁ SOV	R V ₂ SOV	R OBL _{SOV}	R V ₁ SOV
Kwa	BA, AK, GA, EW	BA, AK, GA, EW			
	FG, LO, TA, AV	FG, LO, TA, AV			
Gur	DA, KA	DA, KA			
Atlantic	JB, DF	JB, DF			
Dogon _{SOV}	BN, DD, NJ, YS				
Kru _{SOV} /SOV	VA				
Mande _{SOV}					
Senufo _{SOV}				MA, BB	MA, BB
Jukunoid	YU			SU	SU
Ijoid _{SOV}	IJ	IJ			
Delta Cross	OB, KA	OB, KA			
Igboid	IG	IG			
Nupoid	EB	EB			
Yoruboid		YR			YR
Edoid	DE			EM, BL, ES, DE	
# of groups	11	8	0	3	3

The strength of these two zones is suggested by two atypical linkage patterns in our sample. In the BTV watershed, ditransitive and verb-verb linkage are typical. In the area immediately east of the BTV, Yoruba shows verb-verb linkage. It is the only language in our sample that exhibits the coupling of verb-verb linkage and verb-oblique linkage. Recall that verb-oblique characterizes Edoid even further to the east than Yoruba. The other atypical linkage is shown by Degema, an Edoid language spoken on an island in the Niger Delta. In the Delta zone, ditransitive linkage and verb-verb linkage are typical. Degema exhibits ditransitive linkage. It also couples ditransitive with verb-oblique linkage, which characterizes the remainder of Edoid. No other language in our sample exhibits a coupling of linkage types ditransitive and verb-oblique.

As a final analytic point, an areal subzone evident in our survey is defined not by a linkage type but by an adjacency condition defined by verb and recipient. Relative to ditransitive linkage, Kwa and Gur languages most often restricted argument order to recipient first and theme second. However, two Kwa languages, Ewe and Fongbe, exhibited flexible theme recipient order. They permitted both $NP_R NP_T$ and $NP_T NP_R$ order. What we do not know is if the semantic condition governing possession/non-possession change in Ewe and Fongbe also applies to other languages in Kwa and perhaps Gur.

Although ditransitive ‘give’ and its linkage patterns were central to our analysis, we hesitate to suggest that other trivalent verbs in each of our language groups would exhibit similar behavior. In part, we say this because some languages in our sample, Emai for instance, which manifested verb-oblique linkage exclusively, have trivalent verbs in domains of information transfer, contact, and possession exchange, among others. These domains require cross-linguistic attention (Gruber 1992) if we are to understand ditransitivity in West Africa and its possible role in Niger-Congo and areal studies. We should not assume that ‘give’ is a reliable guide to broad patterning of trivalent predicates. Its atypical syntactic nature as a trivalent verb has been previously noted (Borg & Comrie 1984, Kittilä 2006). It may be, however, that it is precisely this atypical syntactic and semantic nature that allows ‘give’ equivalents to exhibit variable linkage types.

Clearly, there are additional issues, particularly regarding the grammatical realization of theme and recipient, that need to be scrutinized before we can begin to fully account for areal patterns affecting ‘give’ verbs in West Africa. Perhaps most importantly, the restricted language sample serving the present analysis should be augmented to include other languages in West Africa. Meanwhile though, we can broaden our investigation within existing language groups in order to determine the extent of linkage types and possible points of contact

with other genetically related groups. In this paper, we hope to have shown that further inquiry of verbs, their predications, and their linkage types could prove extremely useful to our delineation of areal relations in West Africa, as well as Niger-Congo. These areal relations might then be useful for comparison to genetic relations, which are most often based on lexical features.

Abbreviations and orthographic conventions

Orthographic conventions for languages in this paper derive from their respective sources with this additional note on vowels: orthographic underlines, are often used in sources for half open vowels, as in *o* for [ɔ], but we have chosen to write these with IPA equivalents throughout this chapter. Tone is represented as in the original; if tone is not marked in the original, it is not marked here. Abbreviations used in morphological glosses for grammatical morphemes follow their respective sources.

Abbreviations for the 31 language names in Tables in Section 4 are as follows:

AK Akan	EM Emai	MA Mandinka
AV Avatime	ES Esan	NJ Najamba
BA Baule	EW Ewe	OB Obola
BB Bambara	FG Fongbe	SU Supyire
BI Bini	GA Ga	TA Tafi
BN Bunoge	IB Igbo	VA Vata
DA Dagaare	IJ Ijò	YK Yukuben
DD Dogul Dom	JB Jóola Banjal	YR Yoruba
DE Degema	KN Kana	YS Yorno So
DF Diola-Fogny	KS Kasem	
EB Ebira	LO Logba	

Abbreviations compiled from examples drawn from other sources, some of which do not following Leipzig Glossing conventions:

1, 2, 3	1st, 2nd, 3rd person	CMP	completive aspect
ACC	accusative	COMP	complementizer
ANSG	animate singular	CONT	continuous
APP	applicative	CPL	common plural prefix
AUX, A	auxiliary	D	ditransitive
CL#	class number	DDEMSG	distal demonstrative
CM	class marker		singular

DEF	definite	PL	plural
DEM	demonstrative	POS	positive
DF	definite future	POSS	possessor
FACT	factitive	PREF	prefix
FE	factive enclitic	PRX	proximal
FUT	future	PSM	possessum
GEN	genitive	R	recipient
INC	inceptive	SBJ	subject
LK	linker	SEC	secondative
NARR	narrative auxiliary	SG, S	singular
NEG	negative	SGSCL	singular subject clitic
NP	noun phrase	SM	subject marker
NSP	neutralized subject	SPA	simple past
	prefix	SPECI	specific
OBJ	object	T	theme
OBL	oblique	TAM	tense-aspect-modality
PART	particle	TR	transitive
PAST	past tense	V	verb
PERF, PFV,	perfective		
PF			

Acknowledgments

An initial draft of this paper was prepared while Schaefer spent a semester at the University of Ghana in Legon and its Department of Linguistics. It was stimulated in part by a question about areal studies in West Africa posed by Masha Koptjevskaja-Tamm, and it benefited from encouragement by Samuel Obeng. While we thank these individuals for their inspiration, data presentation and interpretation remain our responsibility.

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