

## INDIRECT OBJECT AND BENEFACTIVE PREDICATIONS IN CHADIC: A TYPOLOGICAL SKETCH

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The aim of the present study is to propose, for the first time, a typology of the forms and functions related to the indirect object and benefactive predications in Chadic languages. Some languages have grammaticalized only the indirect object predication; others have grammaticalized the indirect object and the benefactive predication; and still other languages have not grammaticalized either of the predications, leaving the relevant semantic relations to be inferred from the coding of other predications. In the sample selected there are no languages that have grammaticalized the benefactive but not the indirect object predication. The study also demonstrates the consequences of the grammaticalization of indirect object and benefactive predications: A predication whose verb inherently indicates the presence of an indirect object or benefactive complement requires fewer formal means than a predication whose verb does not inherently imply the presence of an indirect object or benefactive complement. This generalization does not apply to a language that has not grammaticalized either type of predication. The theoretical approach in the present study differs significantly from the usual discussions of related phenomena subsumed under the terms of ‘ditransitive’, ‘three argument verbs’, and ‘datives’.

### 1. Hypotheses

The following hypotheses are proposed in the present study:

- (1) Some Chadic languages have grammaticalized<sup>1</sup> only indirect object predication.
- (2) Some Chadic languages have grammaticalized both benefactive and indirect object predication.

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<sup>1</sup> The term ‘grammaticalized’ in the present study means ‘incorporated in the grammatical system’ regardless of the source that gave rise to the form (see Frajzyngier 2010a and b, 2011).

- (3) Some Chadic languages have not grammaticalized either the indirect object predication or the benefactive predication. The relevant semantic inferences are drawn from the coding of other predications..
- (4) The syntactic properties of individual verbs are not aprioristically given but depend on the types of predications incorporated in the grammatical system of the given language.

The existence of a given predication is proved in the present study by demonstrating that there exists a set formal means, in complementary distribution with one another, that code the proposed semantic function, and that these means are not deployed as a set to code another predication in the language.

The following open questions remain to be addressed in a future study:

- (1) Are there languages that have grammaticalized only the benefactive predication and not an indirect object predication?
- (2) Can one find a causal relationship between the availability of the coding means and the existence of the given predication?

The rest of the paper is organized as follows. I first introduce the terms in order to ensure the clear distinction between the fundamental categories “benefactive argument” and “benefactive predication” and “indirect object” and “indirect object predication”. I then illustrate various coding means first for the benefactive and indirect object predications and then for indirect object predications only. The study ends with a summary and the implications of the study for linguistic theory.

## **2. Terms and formal means**

The aim of the present section is to define the terms and to characterize the formal means encountered in the languages examined.

**2.1 Indirect object.** Here is the proposed definition of indirect object. The argument C is indirectly affected when A acts (on B) and thus affects C. Note that the scheme represents just the semantic relations rather than linear order or other formal means. The relationships A, B, and C are relationships within a proposition and not in some type of external reality. Note that in this scheme, the direct object B is optional: The coding of indirect affectedness does not have to involve a direct object. Even an intransitive verb may have an indirect object, as illustrated in the present study. Therefore, the construction involved cannot be characterized in any way as representing a three-participant event (see Margetts and Austin 2007). The number of participants in the event, and indeed the very notion of the “event” has no bearing on the issue at hand. The referential scope (meaning) of “indirect object” only partially overlaps with the referential scope of the benefactive construction (ditransitive) in English.

The term indirect object predication refers to the means of coding the indirect object within the grammatical system of a given language. A language has an indirect object predication when it has formal means that codes such a function and that distinguishes it from other functions (Frajzyngier and Mycielski 1997). The indirect object predication can be realized through one or more formal means within the same language. If the indirect object predication has been grammaticalized, the set of formal means used to code the indirect object predication will be distinct from the set of formal means used to code other predications in the language.

The category indirect object is different from much narrower grammatical categories such as recipient, an argument that receives an object; benefactive, an argument for whose benefit the event is performed; malefactive, an argument for whose detriment the event is performed; etc. The function of the indirectly affected argument may subsume all of these real-world relations and many others.

**2.2 Benefactive.** The benefactive argument represents one who receives an object or for whose benefit the event was performed. Hence, the relationship and the function of benefactive is much narrower than the function of the indirect object which can represent the benefactive, malefactive, and host of other real world relationships that the listener can infer from the meaning of the verb, the situation described, and even the situation of the conversation.

Benefactive predication refers to a set of constructions coding the benefactive argument and only the benefactive argument. In a language that has grammaticalized the function of benefactive predication, this set of constructions is different from constructions coding all other predications in the language.

**2.3 The formal means.** The following formal means are used in Chadic languages in the coding of both benefactive and indirect object functions:

- Inherently benefactive verbs. These are verbs that have the beneficiary as one of their arguments. Inherently benefactive verbs occur only in languages that have grammaticalized the benefactive predication. In many languages, inherently benefactive verbs include equivalents of the verb ‘to give’. Given the social interaction among humans, one can reasonably expect the existence of such a verb in many if not all languages. This fact alone, however, does not imply that equivalents of the verb ‘to give’ are inherently benefactive. As demonstrated later for Pero and Mupun, the syntactic properties of the equivalents of the verb ‘to give’ in some languages do not differ from syntactic properties of other verbs.
- Linear order. Linear order is a coding means only when a particular linear order codes one specific function (Frajzyngier 2011). In Hausa it is the position after the verb ‘to give’ that marks the indirect object:

- (1) yaa            b̄aa Audù kudfii  
 3M:COMPL give Audu money  
 ‘He gave Audu money.’ (Hausa)

Cf. nonsensical expression with the reverse order of the two noun phrases after the verb:

- (2) \*yaa            b̄aa kudfii Audù  
 3M: COMPL give money Audu  
 for ‘He gave Audu money.’ (Hausa)

- Pronominal object suffixes added to the verb and undistinguished for semantic roles. That means that there is no distinction between the direct and indirect object pronouns.
- Indirect object pronouns that are distinct from direct object pronouns. This means is quite rare in Chadic languages, having been reported only in Hausa (West), Hdi (Central) and a few East Chadic languages.
- Pre-pronominal markers, which include the marking of the goal extension (Frajzyngier 1982, 2005)
- Additional argument marking on the verb (Frajzyngier 1985)
- Prepositions, with no specific semantic function, that precede nominal or pronominal arguments. The gloss TO in the example from Wandala given below is just a conventional glossing rather than the description of the function:

- (3) tàlvángàl̀̀ksè d̀̀gíyà nó nó nó ǹ̀zù̀̀àciná̀̀rè

tà        lv-á-n            g̀̀ l̀̀ksè    d̀̀gíyà nó nó nó    ǹ̀zú    ǹ̀    cin-á-̀̀rè  
 3PL    say-GO-3SG    TO chief    COMP    PRES 3X    what    1EXCLhear-GO-1EXCL  
 á-m        h̀̀d-á        f-á-̀̀rè  
 PRED-IN    belly-GEN    field-GEN-1EXCL

‘They said to the Sultan, “Here is what we heard in our field.”’ (Wandala, Frajzyngier 2012)

- Dedicated benefactive prepositions, i.e. prepositions that code only the benefactive argument, whether nominal or pronominal.
- The addition of preposition to pronouns may result in fusion of the preposition with the pronoun, thus giving rise to a separate set of indirect object pronouns. This is what appears to have happened in Hausa (cf. Frajzyngier 2002). For an alternative view, see Newman 1983, 2000.

- Inflectional marking on the verb. This may include tonal changes or affixation of segments. Most interestingly, in some languages, the inflectional means may involve the use of an object pronoun to code the indirect object role of the preceding pronoun as illustrated below in the section dedicated to Wandala.
- Inflectional coding on the noun (East Dangla).

In what follows I describe the individual coding means and demonstrate the existence of the two types of predications, benefactive and indirect object, as well as the absence of either of these predications in some languages. A few languages have grammaticalized both the indirect object predication and the benefactive predication; some languages have grammaticalized only the indirect object predication; and there are also languages that have not grammaticalized either the indirect object predication or the benefactive predication. There appears to be no Chadic language that has grammaticalized only the malefactive predication.

### 3. Benefactive predication and indirect object predication: Gidar

Gidar (Central Chadic) is the only language in the present sample that has grammaticalized the indirect object and the benefactive as two distinct predications. In Gidar, the subject is coded by the position before the verb and the object by the position following the verb, resulting in SVO order. The definiteness of the object is coded by a pronominal marker on the verb, whether or not the object is also marked for definiteness through determiners. The verb may also have the goal-orientation marker *-a*, indicating that the proposition has a goal. The language has a dedicated benefactive preposition, i.e. a preposition that codes no function other than the benefactive.

Gidar does not have a morphologically separate class of indirect object pronouns. The evidence for the existence of the benefactive predication is provided by the interaction of the inherent properties of verb and the grammatical means to code the benefactive predication.

**3.1 Benefactive predication.** Gidar has grammaticalized a benefactive predication whose marking depends on whether the predicate is inherently benefactive or not. If the verb is inherently benefactive, the benefactive argument follows the verb and the object (the thing given) follows the benefactive. With verbs that are not inherently benefactive, the direct object follows the verb and the benefactive must be marked by additional means. The verb *psá* ‘give’ is inherently benefactive, and the pronominal benefactive is marked by object suffixes to the verb:

- (4) á-psé-n/t/m            lúà  
 IMPER-give-3M/F/1PL    meat  
 ‘Give him/her/us meat!’

á-psí-t            lúà  
 IMPER-give-3PL    meat  
 ‘Give them meat!’ (for a full description of Gidar see Frajzyngier 2008)

If the verb is not inherently benefactive, the benefactive function of pronominal arguments is coded by the preposition *sə̀*. The indirect object phrase, i.e. the preposition and its pronominal complement, is incorporated into the verbal piece, as evidenced by the position of the perfective marker *-k* after the benefactive phrase. The nominal direct object follows the verbal complex:

- (5) à-lbà            sə̀-wá/tá/nó-k            wáfiyà  
 3M-buy            DAT-1SG/3F/3M-PRF    cow  
 ‘He bought a cow for me/her/him.’

The evidence that the marker *sə̀* codes the benefactive argument is provided by the fact that it is used to code the real world beneficiaries of the event:

- (6) mà-m            tə̀-mbát-ək            á            gágám ókày            sá-m            ə̀zəmá  
 mother-1PL    3F-go-PRF            PREP    Gagam search    DAT-1PL    to eat  
 ‘Our mother went to Gagam to look for something for us to eat.’

- (7) à-zó-n-k            ə̀-bbó            sá-n            zí-tì  
 3M-come:TOT-PL-PRF    INF-help:TOT    dat-3m    body-3pl  
 ‘They came to help each other.’ (Lam dialect)

- (8) tə̀-tilik            sə̀-tá-k            ləmá-tà  
 3F-pierce            DAT-3F-PRF    ear-3F  
 ‘She<sub>i</sub> pierced her<sub>j</sub> ears.’

When there is no beneficiary, the preposition is not used even if the verb is the same and it is followed by nominal object:

- (9) tə̀-tilik-í-k            ləmá-tà  
 3F-pierce-3M-PRF    ear-3F  
 ‘She<sub>i</sub> pierced her<sub>i</sub> ears.’

If the definiteness of the direct object is coded on the verb by a direct object pronoun, the benefactive phrase, i.e. the preposition and its complement, follows the direct object:

- (10) wá-n plá-n wàhì ná-w sù-kó  
 fut-1sg leave-3m bovine gen-1sgdat-2sg  
 ‘I will leave you my cow.’ (‘bovine’ is masculine in Gidar)

- (11) wá-n plá-t krè-k ná-w sù-kó  
 FUT-1SG leave-3F dog-F GEN-1SG DAT-2SG  
 ‘I will leave you my puppy’

The evidence for the incorporation of the benefactive phrase within the verbal piece is provided by the fact that the plurality of the subject is coded twice, once after the main verb and the second time after the benefactive pronoun:

- (12) à-lbàhá-n sà-wá/mó-nò-k wàlfyà  
 3m-buy:go-pl dat-1sg/1pl-pl-prf cow  
 ‘They bought a cow for me/us.’

The presence of the two markers of the plurality of the subject suggests that the benefactive phrase grammaticalized from a serial verb construction where the second verb was *psə* ‘give’, which became a preposition and eventually was reduced to *sə*. Grammaticalization often involves phonological reduction, and in this case it would have involved the reduction of the initial consonant *p*.

A nominal argument in the benefactive function with an inherently benefactive verb is coded twice: (1) on the main verb, through a pronominal object coding the gender and number of the benefactive, and (2) by the preposition *sə*, which must be followed by a pronoun coding the gender and number of the benefactive. This construction is followed by the nominal argument referring to the benefactive. The direct object, if any, follows the verb and precedes the benefactive phrase:

- (13) a. á-psó-n hú sò-n tizí  
 IMPER-give-3M meat DAT-3M Tizi  
 ‘Give Tizi meat!’
- b. á-psó-t hú sò-t glükú  
 IMPER-give-3F meat DAT-3F married woman  
 ‘Give meat to a/the lady!’

The direct object does not have to occur:

- (14) á-psǎ-n      sǎ-n      dǎfǎ  
 IMPER-give-3M    DAT-3M    man  
 ‘Give (it) to somebody!’ (the use of the noun dǎfǎ ‘man’ codes an unspecified human referent)

The benefactive does not have to be human or animate, as shown in the following example, where it is inanimate:

- (15) mǎlì    dà      zzǎ-ŋ      sǎ      wrá [súrá] á      zà-n      ná      sómbò-y  
 chief    D.PROG    return-3M    PREP    bush      PREP    side-3M    COMP    Sombo-COP  
 á      ddǎf    bíinà    à-dí    sǎ-nǎ-k      óffò    sǎ-n      bíinà  
 PREP    inside    roof    3M-put    DAT-3M-PRF    fire    DAT-3M    roof  
 ‘Upon his return from the bush, the chief, thinking that it was Sombo who was in the roof, set fire to the roof.’

If the benefactive argument consists of a conjoined noun phrase, the pronominal object marker suffixed to the verb is plural:

- (16) é-psí-t      lú      sí-t      mày      kèzá      dè      tizi  
 imper-give-3pl    meat    dat-3pl    ascc.pl    Kiza    ASSC    Tizi  
 ‘Give Kiza and Tizi meat!’

Verbs of saying in Gidar do not inherently imply the presence of the indirect object, as evidenced by the fact that the preposition sǎ precedes the pronoun coding the addressee:

- (17) dǎrbágà-nì wíin    sǎ-t      dǎvǎ-t      má-n      à-tǎŋǎ-k      àpél    sǎ-tǎ  
 after-3M    boy    PREP-3F    belly-3F    mother-3M    3M-start-PRF    talk    DAT-3F  
 ‘During his absence, a boy from inside his mother started to talk to her.’
- (18) à-ná    sǎ-tǎ-k      ná      àmmá ní-gíl      dè      ngáa    dì  
 3M-say    PREP-3F-PRF    COMP    mother SG-leave    ASSC    where    SQ  
 ‘He said to her, “Mother through where should I leave?”’
- (19) tǎ-ná    sǎ-nǎ-k      ná      é-gíl      klà      krií-wà  
 3F-say    PREP-3M-PRF    COMP    IMPER-leave    through    vagina-1SG  
 ‘She said to him, “Leave by my vagina!”’

The evidence for the existence of the benefactive predication in Gidar is provided by the complementarity of the coding means. If the verb is inherently benefactive, the coding of the benefactive argument has a different form from that used with an inherently non-benefactive verb.

**3.2 Indirect object predication.** The indirect object predication, unlike the benefactive predication, is coded by object suffixes to the verb without the preposition *sə̀*. The addition of these object suffixes does not depend on the inherent properties of the verb. Clauses with such pronominal coding may have nominal objects as well. In the following example, the indirectly affected argument is marked by the pronominal suffix:

(20) à-ḥá-nə̀-nə̀-k            glà    ná-wísnè  
 3M-break-3SG-PL-PRF    house    gen-someone  
 ‘They burned his house.’

(21) à-nḡù-wá-k            ḡèngé ná-wà  
 3M-break-1SG-PRF    stick    GEN-1SG  
 ‘He broke my walking stick (to my detriment).’

The coding of the indirect object on the verb is an independent coding means, i.e. it is not a manifestation of some mechanical agreement system, as evidenced by the fact that the nominal indirect object does not have to be overtly coded. The following example does not contain indirect object predication (the object pronoun on the verb codes the definiteness of the nominal object):

(22) a. à-nḡà-ná-k            ḡèngé ná-wà  
 3M-break:GO-3M-PRF    stick    GEN-1SG  
 ‘He broke my walking stick.’

b. tizí    á            ḡə̀wá-k            bàrdàw    ná            zə̀rmbà  
 Tizi    3SG    break-PRF    hoe            GEN    Zurmba  
 ‘Tizi broke the hoe of Zurmba.’

The fundamental difference between the indirect object predication and the benefactive predication in Gidar is that while the indirect object pronoun may be added to all verbs, without any additional marking, the benefactive pronoun must be preceded by the benefactive preposition *sə̀* when it is added to an inherently non-benefactive verb.

Interestingly, among speakers of Gidar who have been in extensive contact with other languages, the distinction between the indirect object predication and the benefactive

predication becomes neutralized. This process appears to have run its full course in Lele, discussed in the next section.

#### 4. The indirect object predication from the benefactive predication: Lele

Lele (East Chadic) has grammaticalized only the indirect object predication. The evidence for this grammaticalization is provided by the fact that there are two different constructions to code the indirect object predication, depending on the inherent properties of verbs. The interest of Lele is that the indirect object predication in this language appears to have been grammaticalized from the erstwhile benefactive predication.

The following information about Lele may be useful for understanding the discussion (for a full description of Lele, see Frajzyngier 2001): Nominal subjects and first- and second-person subject pronouns precede the verb. The third-person pronominal subject follows the verb. Nominal objects also follow the verb. The first- or second-person pronominal objects follow the verb, and the third-person pronominal subject follows the object pronouns. Thus the order of the verbal piece is: verb-object pronoun-subject pronoun. There is no specialized set of indirect object pronouns. The indirect object function may be marked by inherent properties of the predicate, combined with configuration, or by the preposition *bé*, a dedicated indirect object marker.

When the indirect object is marked by configuration alone, it occupies the position after the verb. The direct object follows the indirect object without any additional coding. The coding of two arguments following the verb, without any preposition, is allowed only if the meaning of the verb involves an activity for the benefit or the detriment of the human argument. Coding of the indirect object with the preposition occurs only when the inherent meaning of the verb does not involve the benefit or the detriment of the human argument. There is thus a complementarity between the two means of coding the indirect object.

**4.1 Inherent indirect object verbs.** The indirect object predication with a verb that inherently calls for an indirect object has the form Verb NP NP, where the first NP is the direct object and the second NP is the indirect object. Hence, the indirect object function with such verbs is marked by the position after the direct object. The only inherently indirect object predicate is the verb *bè* ‘give’:

- (23) *bè*      *dí*      *làli*      *cànigé*  
       gave 3M    money    Canige  
       ‘He gave Canige money.’

Reversing the order of noun phrases produces a nonsensical construction:

- (24) \*bè dí cà̀nìgé là̀lì  
 gave 3M Canige money  
 for ‘He gave Canige money.’

Object pronouns added to the verb *bé* ‘give’ receive the indirect object interpretation:

- (25) bé-ŋ dí là̀lì  
 gave-1SG 3M money  
 ‘He gave me money.’

The first-person subject pronoun precedes the verb:

- (26) ŋ bé-y là̀lì  
 1SG give-3M money  
 ‘I gave him money.’

The argument structure of the verb *be* ‘give’ is unique.

**4.2 Coding the indirect object of inherently non-indirect object verbs.** Coding the indirect object of a verb that does not inherently call for an indirect object requires the preposition *bé*<sup>2</sup>. The preposition *bé* most likely derives from the verb *bè* ‘to give’. It is a dedicated indirect object preposition and does not have a locative or associative function. The indirect object phrase must follow the direct object verb:

- (27) sí̀ŋdè wé~y wò bé toron-do  
 Sinde cook mush DAT daughter-3F  
 ‘Sinde cooked mush for her daughter’

Even though the indirect object is marked by the preposition *bé*, the order indirect object – direct object is not allowed:

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<sup>2</sup> In Garrigues-Cresswell with Weibegué 1981 (referred to as G-C & W 1981) the tone on this preposition is sometimes high, sometimes low, and sometimes high-low in the same syntactic environments and in the same tenses. In the present work, the preposition is always represented with the high tone except in the material quoted from G-C & W 1981.

- (28) \*sɪ̀ndè wé~y bé toron-do wò  
 Sɪnde cook DAT daughter-3F mush  
 for ‘Sɪnde cooked mush for her daughter’

The pronominal indirect object with an inherently non-indirect object verb is marked by the preposition *bé* preceding the pronoun. The mid front vowel of the preposition *be* is raised to *i* or *u* if the following suffix has a high front or a high back vowel, respectively. The forms for all persons are as follows:

- |      |          |        |                 |
|------|----------|--------|-----------------|
| (29) | Singular | Plural |                 |
|      | 1        | bé-ŋ   | 1DU.INCL bé-ngá |
|      | 2M       | bí-gí  | 1PL.EXCL bí-ní  |
|      | 2F       | bé-mé  | 2PL bú-ngú      |
|      | 3M       | bé-y   | 3PL bé-gé       |
|      | 3F       | bú-dú  |                 |

With pronominal indirect objects, two linear orders are possible: Subject Verb Indirect object Direct object or Subject Verb Direct object Indirect object:

- (29) a. kul bé-ŋ kañya lè  
 buy:IMP DAT-1SG thing eat  
 ‘Buy me some food!’
- b. kul kañya lè bé-ŋ  
 buy:IMP thing eat DAT-1SG  
 ‘Buy me some food!’
- (30) a. kul bé-y gùná  
 buy:IMP DAT-3SG peanuts  
 ‘Buy him some peanuts!’
- b. kul gùná bé-y  
 buy:IMP peanuts DAT-3SG  
 ‘Buy him some peanuts!’

The verbs *dèr* ‘tell’ and *yàá* ‘say’ are not inherently indirect object verbs: They do not behave like the verb ‘give’, and the indirect object must be marked by the preposition *bé*:

- (31) dèr dí bé-ŋ gúnyè  
 tell 3M DAT-1SG story  
 ‘He told me a story.’

Both orders of arguments are allowed after a verb of saying, even if one of the arguments is a ‘heavy noun phrase’, e.g. a noun phrase modified by a relative clause:

- (32) a. yàá dí bé-ŋ kolo-ŋ go éywa  
 say 3M DAT-1SG word-DEF REF sweet  
 ‘He told me an interesting thing.’
- b. yàá dí kolo-ŋ go éywa bé-ŋ  
 say 3M word-DEF REF sweet DAT-1SG  
 ‘He told me an interesting thing.’
- (33) a. Ng yáà bé mè ná kirè-i.  
 1SG tell:FUT DAT 2F ASSC way-3M  
 ‘I will tell you the way out of it’ (G-C & W 1981: 2-3)
- b. yàá bèè bayndi ðě  
 tell:IMP DAT person NEG  
 ‘Do not tell anybody!’ (G-C & W 1981: 2-3)

**4.3 The functions of indirect object predication in Lele.** The form *bé* has fully grammaticalized as the marker of an argument that is indirectly affected, whether positively, adversely, or in some other way:

- (34) a. lòr gé bé-ŋ kàsà  
 burn 3PL DAT-1SG corn  
 ‘They burned my corn.’
- b. tigrí gé bé-ŋ gâr-we  
 kill:PL 3PL DAT-1SG dog-PL  
 ‘They killed my dogs.’
- c. ŋ pádè cà-y bóré bé-y  
 1SG grill:FUT head-3M cut:FUT DAT-3M  
 ‘I will get him’, lit. ‘I will grill his head, cut it off him.’

The object of the clause with the adversely affected indirect object does not have to be a possession of the indirect object:

- (35) ùdrí      gé      bé-ŋ      ga      jé      karà      kè-gè  
 take away 3PL    DAT-1SG    throwing   knife   people GEN-3PL  
 ‘they took away for me the throwing knives of the people’

Given the origin of the indirect object marker *bè* in Lele, it appears that the grammaticalization in Lele went from the marker of the benefactive predication to the marker of the indirect object, a process that is in the beginning stages in Gidar.

The important fact about Lele is that the verb ‘to give’ gave rise to the indirect object marker. It is thus entirely possible that at one time Lele had the benefactive predication only. The function of the marker of the benefactive eventually broadened and it became the marker of the indirect object predication.

## 5. The indirect object coding on the verb: Mina

Mina (Central Chadic) has grammaticalized indirect object predication and has not grammaticalized the benefactive predication.

**5.1 Pronominal indirect object.** The common coding means for the nominal and pronominal indirect object in Mina are pronominal object suffixes on the verb. These suffixes are always preceded by the goal-oriented marker *á* which undergoes predictable vowel harmony rules. An important and relevant fact for the issue of indirect object pronouns is that the third-person singular direct object, whether human or not, is not marked by a suffix to the verb. The importance of this fact is that this pronoun, when actually used, designates the third person indirect object pronoun, as described later in this section.

- (36) a. s̀̀      k̀̀      vl-á-h      z̀̀  
 1SG    INF    give-go-2SG    EE  
 ‘I gave it to you.’ (for a full description of Mina see Frajzyngier et al. 2005)
- b. s̀̀      k̀̀      ḍěf-é-h      z̀̀  
 1SG    INF    show-go-2SG    EE  
 ‘I have shown him to you.’ (the change from *a* to *e* on the goal marker is a product of vowel harmony)

Except for the third-person singular, there is no distinction between the direct and the indirect object pronouns. The third-person singular indirect object is overtly marked by the suffix *-ŋù*, realized as *ŋ* in phrase-internal position. This pronoun must be used each time

there is a third-person indirect pronominal object, whether singular or plural. The third-person indirect object pronoun is unmarked for number. The pronoun is glossed here as 3SG in order to indicate the pronominal nature of the suffix, rather than to indicate its number value:

- (37) a. kǎ̀ mǎ̀l-á-ŋ zà  
 INF catch-GO-3SG EE  
 ‘He caught it for him.’
- b. í dǎ̀b-á-ŋù  
 3SG ask-GO-3SG  
 ‘They asked for him.’

The nominal direct object, if any, follows the verb with the indirect object suffix:

- (38) a. mǎ̀mǎ̀ŋ vl-á-ŋ wú rà  
 mother give-GO-3SG milk D.HAB  
 ‘Her mother is nursing her.’ (lit. her mother is giving her milk)
- b. ʒǎ̀ŋ í ʒǎ̀ŋ hid-yî ndǎ̀ bǎ̀t í  
 send 3PL send man-PL go get 3PL  
 bǎ̀t-á-ŋ kǎ̀dǎ̀m wǎ̀cín dà í dà-há-w  
 get-GO-3SG calabash DEM bring 3PL bring-GO-3SG  
 ‘They sent people and they went and got the calabash for him and brought it.’

The overt coding of the third-person indirect object, as opposed to the absence of the third-person direct object, is sufficient to distinguish between third-person direct and indirect pronominal objects. The third-person plural indirect object is coded by the third-person singular *ŋù* followed by the third-person plural pronoun *tá*, *tǎ̀tǎ̀*, or *tǎ̀tǎ̀ŋ* (in phrase-final position):

- (40) kwáykwáy dǎ̀b í wǎ̀ŋ sùlúdsùlúf  
 hyena ask 3PL sleep two-two  
 wǎ̀ mǎ̀ dǎ̀l-á-ŋ tǎ̀tǎ̀ mí  
 but what happen-GO-3SG 3PL what  
 ‘Hyena asked, “They sleep two by two, but what happened to them?”’

The second-person indirect object is coded by the suffix *h* in phrase-internal position:

- (39) à      zá      sè nd-á      kè tár-á-h      á      pát      tàr      nàŋ  
 3SG      COMP      1SG go-go      INF ask-go-2SG PRED      tomorrow      common work      1SG  
 ‘He said, “I came to ask you for help. Tomorrow is my work day.”’

The second-person plural indirect object must have the second-person singular coded on the verb and the second-person plural as an independent pronoun:

- (40) í      dǎb-á-h      hinérŋ  
 3SG      ask-go-2SG 2PL  
 ‘They ask you.’

The distinction between the direct and indirect object functions for pronominal arguments is marked only for the third person. The third-person direct object pronoun is not overtly marked, while the third-person indirect object is marked by the third-person suffix.

**5.2 Nominal indirect object.** The structure of the clause with a nominal indirect object has the form Verb-á-ŋ object (pred) *n* Noun. The verb codes the presence of an indirect object through the suffix *ŋ*. The preposition *n* also marks the locative complement when the noun phrase is not inherently locative. The obligatory coding of the indirect object predication in Mina correlates with the absence of a dedicated indirect object preposition. The directionality of causation remains to be established. The construction in Mina is not locative, in that it does not have the locative predicator *á*, a characteristic of locative predication when the verb is not inherently locative (Frajzyngier et al 2005). Hence, indirect object predication is formally different from all other predications in Mina:

- (41) a. mbí      fót      kèdǎm      d-àh      á      dà-hà-ŋ      kó      nè      báý  
 ANAPH take calabash bring-GO 3SGbring-GO-3SG PREP PREP chief  
 ‘He took the calabash and brought it back to the chief.’
- b. báhámàn      là      á      lúw-á-ŋ      nè      ǰámbáy      náka      wà  
 Bahaman say 3SG say-GO-3SG PREP stick REM DEM  
 ‘Bahaman spoke to the stick.’

The end-of-event marker *za* follows the direct object but precedes the indirect object:

- (42) kó      bèr-é-ŋ      kəkàs      zə      nè      bitsi  
 INF sell-GO-3SG beans EE PREP Bitsi  
 ‘He sold beans to Bitsi.’

The third-person indirect object marked by *ŋ* cannot be coreferential with the subject.

When the indirect object is marked by the suffix to the verb, the body-part noun may not be followed by the possessive pronoun:

(43) ká ti-y-á-k m̀̀c̀̀ék̀̀ẁ̀èr zà  
 INF look-EP-GO-1SG knee EE  
 ‘He examined my knee.’

(44) ká ti-y-á-k m̀̀c̀̀ék̀̀ẁ̀èr \*nán zà  
 INF look-EP-GO-1SG knee 1SG EE  
 ‘He examined my knee.’

**5.3 Interaction between the indirect and direct pronominal object coding.** If the first or second person is the direct object and the third person is the pronominal indirect object, the first or second person pronoun is suffixed to the verb and the third-person indirect object is marked by the locative preposition *ǹ̀*. The use of the preposition allows the listener to identify the role of the object pronoun suffixed to the verb as that of the direct object:

(45) s̀̀ vl-á-h ǹ̀ mbéŋ  
 1SG give-go-2SG PREP 3SG  
 ‘I give you to him.’

The addition of the third-person pronominal direct object to a verb with an indirect object depends on the referential status of the direct object. The deictic direct object is marked by the form *ẁ̀c̀̀ín* ‘this’ following the verb:

(46) mbí m̀̀ bèr-é-k ẁ̀c̀̀ín  
 3SG REL sell-GO-1SGDEM  
 ‘It is he who sold this one to me.’

The deduced marker *tá* in the position following the verb codes the third-person direct object:

(47) a. s̀̀ vl-á-h táŋ  
 1SG give-go-2SG DED  
 ‘I give it/him/her to you.’

(48) b. s̀̀ d̀̀éf-é-h táŋ  
 1SG introduce-GO-2SG DED  
 ‘I am showing it to you’.

**5.4 The scope of indirect predication in Mina.** The indirect object can be added to any verb, regardless of whether the verb is inherently malefactive, benefactive, or neither. The indirect object predication indicates that the argument coded as the indirect object is indirectly affected by the event, without specifying the nature of affectedness. Here is an example with the auxiliary verb *pláh* ‘do a lot’ followed by the goal marker and the third-person singular pronoun:

- (49) í            pláh-àŋ            làwày nò            bíci  
           3PL do a lot-GO-3SG whip    PREP    Bici  
           ‘They whipped Bici a lot.’

If a body part is the direct object, the person whose body part is involved is marked as indirect object. Again, the affectedness could be benefactive, malefactive, or neither:

- (50) a. hidì wèhìŋ á zá ván á n kó dā á gèr kó nd-á-k  
           man DEM 3SG COMP rain 3SG PREP INF fall 3SG want INF touch-GO-1SG  
           kòsám skù  
           body NEG  
           ‘This man said, "Rain, when it falls, will not touch me.”’

- (51) b. zàvàn-yíi zá fàd-á ná tàlàn kó gí  
           guinea fowl-PL COMP shave-GO 1PL head POS please  
           ‘The guinea fowl said, "Shave our heads, please.”’ (POS -point of view of the subject)

séy à ndí fàd-á-ŋ tò tàlàn fàd fàd fàd  
           so (H.) 3SG HAB shave-GO-3SG 3PL head shave shave shave  
           ‘So, she shaved and shaved and shaved their heads.’

There are two instantiations of the indirect object construction in the following example. The first one codes a presumably benefactive event (finding oneself a wife) and the second codes a malefactive event (to pinch one’s heart):

- (52) wàl ǵím mò r skú kò gám kà kó gr-á-h pár  
           woman hear mouth D.HAB NEG INF chase POS INF search-GO-2SG another  
           ngàm á ngáts-á-h nóf rà  
           because 3SG pinch-GO-2SG heart D.HAB  
           ‘The woman who does not obey should be chased away. You have to find yourself another, because this one pinches your heart.’

Here are examples of the malefactive interpretation of the indirect object predication:

- (53) a. í kó ɓl-á-nòk páy kà  
 3PL INF cut-GO-1PL.INCL tree POS  
 ‘They cut a tree on us.’
- b. í kó ɓl-á-nà páy kà  
 3PL INF cut-1PL.EXCL tree POS  
 ‘They cut a tree on us.’

The indirect object predication differs from the direct object predication in that, for the indirect object predication, the verb must always have an object pronoun suffix, even if there is a nominal object in the clause. The indirect object predication does not include evaluation of the type of affectedness of the argument.

## 6. Indirect predication through tone and third person pronoun: Hdi

Hdi (Central Chadic) is a verb-initial language. The construction with the nominal subject and nominal or independent pronominal object has the form V S *tá* O. The noun following the preposition *tá* may be a direct or an indirect object. Hdi does not have a distinct benefactive predication.

**6.1 Distinguishing between direct and indirect object through the tonal changes.** One class of verbs, which includes inherently intransitive and inherently transitive verbs, marks the presence of an indirect object through high tone on the verb:

- (54) a. l-íxà-lá  
 go-1SG-go  
 ‘Go for me!’ (and not ‘he made me go’)
- b. pɔ́-íxà-pɔ́ǎ  
 leave-1SG-leave  
 ‘He left it for me.’

The direct object function is marked by low tone:

- (55) pɔ́-íxà-pɔ̀ǎ  
 leave-1SG-leave  
 ‘I was abandoned.’, ‘He left me.’

**6.2 Indirect object marking through suffixation.** Similarly to Mina, the third-person direct object is not overtly marked on the verb:

- (56) skwá-skwà  
 buy-buy  
 ‘He bought [it].’

The addition of the demonstrative *ná* to the verb codes the third-person singular indirect object pronoun:

- (57) a. dà-**ná**-dà      tá dāfá  
 cook-DEM-cook OBJ food  
 ‘She cooked for him.’
- b. skwá-**ná**-skwà  
 buy-DEM-buy  
 ‘He/she bought [it] for him.’

A nominal argument is marked for the indirect object function by the unspecified third-person pronoun *n* added to the verb and through the object-coding preposition *tá* preceding the noun. The distinction between the nominal direct object and the nominal indirect object is marked by the relative order of the two prepositional phrases. The first prepositional phrase represents the direct object and the second prepositional phrase represents the indirect object:

- (58) vlá-n-vlá mbítsá tá kóbù tá mbáká  
 give-3-give Mbitsa OBJ money OBJ Mbaka  
 ‘Mbitsa gave money to Baka’

The unspecified third-person pronoun does not code the number of the recipient:

- (59) vlá-n-vl-íyù tá kùzún tá gù-xà  
 give-3-give-1SG OBJ fresh leaves OBJ goat-PL  
 ‘I gave him leaves for the goats’

The evidence that the marker *n* is pronominal is provided by the fact that (a) it occurs in the position where other pronouns occur, and (b) it cannot occur if there are other pronouns:

- (60) ɓlá-ghà-p-ɓlá tá dzvú  
 break-2SG-OUT-break OBJ hand  
 ‘he broke your hand’ lit. ‘he broke to you hand’

**6.3 The functions of the indirect object in Hdi.** The indirect object in Hdi indicates indirect affectedness, whether benefactive, malefactive, or unspecified with respect to ethical evaluation. All preceding examples illustrate the benefactive function. Here is an illustration of the malefactive function:

(61) ɓl-í-dí-p-ɓlá                      tá      dzvú  
 break-AWAY-1SG-OUT-break    OBJ    hand  
 ‘he broke my hand’ lit. ‘he broke me the hand’

(62) ɓlá-ghà-p-ɓlá                      tá      ùdzú  
 break-2SG-OUT-break    OBJ    stick  
 ‘he broke your stick’ lit. ‘he broke you the stick’

Compare direct affectedness, coded by the low tone on the verb:

(63) ɓlà-ghá-p-ɓlà  
 break-2SG-OUT-break  
 ‘he broke you’

The use of the unspecified third person object marker *n* to code the indirect object pronoun is similar to the use of the third person object pronoun in Mina, and partially overlaps with the use of the marker *n* in Pero, discussed later in this study.

## 7. Kanakuru

Kanakuru has distinct sets of direct and indirect object pronouns. Unlike direct object pronouns, the indirect object pronouns are suffixed to the verb, and, as Newman 1974: 20 states, ‘fuse with the verb to form indivisible verb stems’. Nominal indirect objects are marked by the associative preposition *gən*. The verb ends with the object marker *-n*, which Newman interprets as being a pronoun copy of the moved indirect object. In the present study, the suffix *n* added to the verb is analyzed as a marker of indirect object predication, cognate with similar markers in Central Chadic languages.

(64) nà jɔɓ-ni      jokoi gən      Ngoje  
 1SG wash-3SG cap    ASSC    Ngoje  
 ‘I washed the cap for Ngoje’

Newman states that the object marker on the verb may be omitted but that in majority of cases it is retained. We interpret the object marker on the verb as a marker of the presence of the

indirect object. This marker is necessary, given the fact that the nominal indirect object is coded by the associative preposition rather than by a dedicated indirect object preposition:

- (65) *nà wupə-ni buro gən jewe*  
 1SG sell-OBJ salt ASSC slave  
 ‘I sold salt to a slave’ (Newman 1974: 22)

All examples that Newman gives (most of them elicited) and a few examples in the text he attaches point to the benefactive function rather than the indirect object function, but that may well be an accidental result of the number and variety of data used.

### 8. The indirect object predication in Hausa

The means involved in the coding of the indirect object in Hausa include a set of indirect object pronouns derived through affixation of the prefix *ma* and a preposition *wà* which precedes the nominal arguments. In addition, verbs occurring in clauses with indirect object complements must all have initial high tone and end in a long vowel or the suffix *as/-ar*.

The evidence that Hausa has grammaticalized the indirect object predication is provided by the fact that some verbs are inherently indirect object verbs and others are not. The inherently indirect object verbs indicate that the following complement is the indirect object without any additional markers on either verb or a noun. One such verb is *baa* ‘give’. The first object of this verb is the recipient, and the second object refers to the thing given.

- (66) *yaa baa-ni kudfi*  
 3COMPL give-1SG money  
 ‘He gave me money.’

Other verbs that have similar properties are *biyaa* ‘pay’, *tayàa* ‘offer’ (cf. Newman 2000: 685-686).

For verbs that do not inherently imply the presence of an indirect object, the indirect object complement must be marked by some additional means. These means are the preposition *wà* preceding the nominal argument and the prefix *ma-* preceding the pronominal argument. The addition of the latter has resulted in a distinct set of indirect object pronouns:

- (67) *tafi ka gaya wa yaran nan,*  
 go 2SG tell PREP boy:DEF DEM  
 ‘Go and tell that boy.’ (Bargery 1951:1070)

With respect to pronominal markers, Newman 1982 and 2000: 279 proposes that the indirect object marker *ma* is derived from an earlier absolute possessive construction of the type *mini*, *makà*, presumably coding independent possessive forms. It is possible, as suggested in

Frajzyngier 2002, that the prefix *ma* is derived from the locative directional preposition. Bargery 1951 gives the following example from the then Gold Coast, now Ghana, Hausa:

- (68) yaa            tafi da        shi ma        sarki  
       3M:COMPL go ASSC 3M PREP chief  
       ‘He went with him to the chief.’ (Bargery 1951: 733)

This example may illustrate an innovation in the periphery of the language, but it may also illustrate a retention of an older function. The conservative nature of linguistic peripheries has been documented for many languages.

Newman (1982, 2000) and all other studies of Hausa agree that the dative predication codes the indirect object and that the action could be benefactive or malefactive for the indirect object. Here are two examples illustrating the adverse effect on the indirect object:

- (69) a. yaa            sookàa        mini        ràakumii  
       3M:COMPL stab        DAT:1SG camel  
       ‘He stabbed my camel.’
- b. yaa            sookàa        wà        ràakumii wuk’aa  
       3M:COMPL stab        DAT camel knife  
       ‘He thrust a knife into a camel.’ (Frajzyngier and Munkaila 2004)

## 9. East Dangla

East Dangla (data, morpheme separation and glosses from Erin Shay, p.c.) is interesting in that its system of coding the indirect object differs in one important respect from that of West and Central languages. In addition to the different sets of indirect and direct object pronouns, East Dangla marks the nominal indirect object through a so-called ‘oblique’ suffix on the nominal indirect object. East Dangla also codes the presence of an indirect object on the verb or, more interestingly, on the subject of the clause.

Indirect object pronouns can be added to any verb, transitive or intransitive:

- (70) báa        èk        às-tí            nàs        ŋaa        ób-in-tí,        tyà poot<sup>Y</sup>-ga.  
       TEMP DEM come.PRF-3F.IO 3M.COMP 3M.IRR marry-INF-3F.POSS 3F refuse.PRF-3M.O  
       ‘When one (young man) came wanting to marry her, she refused him.’

The indirect object marker can be added to the subject pronoun that precedes the verb. The nominal indirect object is then marked by the oblique marker:

- (71) èk-dũu dʋamin rákkí tʋàs  
 DEM-NEG old woman one 3F.COMP  
 ‘báa kú élél iml-ín-tí ka Gèedè-èka,  
 TEMP 2PL want.IMPF bring out.VN-INF-3M.POSS DEM Guédé-DEM  
**kú-dʋì** gine rayin ku **àalo-l-ika.**  
 2PL.IRR-3M.IO make.VN trick DEM snake-OBL-DEM  
 ‘Then, one old woman said, ‘If you want Guédé’s freedom, you have to play a  
 trick on the snake.’ (Shay 1999)

The importance of East Dangla is that it is the only language in our sample that has inflectional marking of the indirect object on the noun.

### 10. Indirect object predication through the double object suffix

Wandala (Central Chadic) does not overtly mark the third-person singular direct object pronoun. It does, however, mark the third-person singular indirect object pronoun:

- (72) tà pw-á-n-vá zàrvà á dóm bùhà  
 tà pw-á-n-vá zàrvà á dóm bùhà  
 3PL pour-GO-3SG-APPL sesame PRED go-IN bag  
 ‘They poured sesame for him into a sack’

For other persons and numbers, there is no difference between the direct and indirect object pronouns. Wandala has grammaticalized indirect object predication, as evidenced by the existence of three constructions in complementary distribution. If the verb inherently implies the existence of the indirect object, the indirect object pronoun follows the verb without any additional markers (for a description of Wandala see Frajzyngier 2012):

- (73) àkètá zàrvà jilyá zàrvè ñànnà àvàtrè  
 à kè-t-á zàrvà jily-á zàrvà ñànnà à v-à-tr-tè  
 3SG raise-T-GO sesame sand-GEN sesame DEF 3SG give-3PL-T  
 ‘He raised the sesame, the grain of that sesame, he gave it to them.’

The nominal indirect object is marked by the preposition *gə̀*, glossed as ‘TO’, which appears to be the most general preposition in Wandala. With the inherently indirect object verb, no other markers of indirect affectedness are required:

- (74) à v-à-k-tá gə̀ žilé  
 3SG give-2SG-T TO husband  
 ‘He gave you to a husband.’

If the verb inherently does not imply the existence of the indirect object, the indirect object function of a pronoun is marked by a third-person singular pronoun that follows the target pronoun:

(75) dàcí tà bà-**trà-n**-bà  
 then 3PL say-3PL-3SG-say  
 ‘they can tell them’

(76) kàǵà-**míy-é-n**-kàǵà  
 count-1INCL-GO-3SG-count  
 ‘count it for us!’

The coding of the indirect third-person singular object requires the use of the third-person singular object pronoun *n*:

(77) á žàǵàdànú gè žílàrà  
 á žàǵàdà-**n**-ú gè žíl-á-rà  
 3SG run-3SG-VENT TO husband-GEN-3SG  
 ‘She will run away from her husband.’

## 11. Indirect object interpretation as an outcome of another predication

The present section describes two cases where the language has not grammaticalized the indirect object predication as distinct from all other predications in the language but where other predications allow for the interpretation of the indirect affectedness. One case is Mupun (West Chadic), where the locative preposition allows for the indirect object interpretation, and the other is Pero (also West Chadic), where the additional argument predication allows for the indirect object interpretation. Given that there is no indirect object predication in these two languages, neither of the languages has the category of inherently indirect object verbs.

**11.1 Indirect object interpretation from the locative preposition: Mupun.** Mupun has not grammaticalized indirect object predication as distinct from all other predications in the language. The language does not have separate sets of direct and indirect object pronouns, there is no dedicated indirect object preposition, and there is no indirect object coding on the verb. A noun or a pronoun preceded by the preposition *n*, identical with the locative preposition, can be interpreted as the indirect object if the locative interpretation is not available, e.g. with the verbs of giving and saying:

- (78) can a tar dɛ pun  
 circumcision COP month REL father  
 fua mbə sin ha n-ji mo se  
 2M FUT give 2M PREP-ancestral spirit PL eat  
 ‘Circumcision is the period when your father will give you to the ancestral spirits for devouring.’

se pun fua sat n-kən fua mo nə  
 then father 2M tell PREP-kin 2M PL COMP  
 ‘Your father will tell your kin that . . .’

- (79) a buon dɛ nji m aŋ jep mo be  
 after REL ancestral spirit PL repair children PL SEQ  
 ‘After the ancestral spirits have resurrected the children

mo mbə sin jep nə mo n-miskoom  
 3PL FUT give children DEF PL PREP-chief  
 they will give the children to the chief.’

The pronominal indirect object is also coded by preposition *n*:

- (80) wu sin takarda n-ha taŋ  
 3M give book PREP-2M read  
 ‘He gave you a book and you read it.’

When the noun phrase is interpreted as indirect object rather than locative, the indirect affectedness may involve benefactive and malefactive effects, as well as any other effect:

- (81) n-pus can nə be kən fua mo mbə siwa mwes  
 PREP-day circumcision DEF SEQkin 2M PL FUT drink wine  
 ‘On the day of circumcision your kin will drink the wine

dɛ puun fua cet n-mo  
 REL father 2M cook PREP-3PL  
 that your father cooked for them.’

Here is an example of the malefactive use:

- (82) taaji yi dam pee n-an  
 stop 2F bother place PREP-1SG  
 ‘Don’t bother me!’

**11.2 Indirect object interpretation from additional argument marking: Pero.** There is no distinction in Pero between direct and indirect object pronouns.<sup>3</sup> With verbs having only one or two consonants (the second type being by far the largest group of verbs in the language), there is no distinction between the direct and indirect object predication when the object is realized by a pronoun. With three-consonant verbs, the direct object is preceded by the vowel *ée*, most likely cognate with the goal marker in many Chadic languages (Frajzyngier 1982, 2005). The indirect object is added directly to the verb. If a disallowed consonant cluster emerges from such an addition, an epenthetic vowel is inserted:

- (83) cókt-ée-cù  
 lift-GO-3PL  
 ‘Lift them!’

cókt-nò  
 lift-1SG  
 ‘Lift it for me!’

dímm-nó  
 beg-1SG  
 ‘Beg for me!’

dímm-ée-nò  
 beg-GO-1SG  
 ‘Beg me.’

témmú-nò  
 ‘Clean it for me!’

témm-ée-nò  
 ‘Clean me.’

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<sup>3</sup> The analysis in this section differs significantly from that in Frajzyngier 1989.

yímmú-nò  
‘Think for me.’

yímm-ée-nò  
‘Think about me.’

When the verb has two pronominal arguments, the first pronoun represents the indirect object and the second the direct object. If the verb is tri-consonantal, or if it has a consonantal extension, the marker *-ee* precedes the object pronouns:

(84) à-mún-t-ée-nò-té-m  
NEG-give-VENT-go-1SG-3F-NEG  
‘He didn’t give it(f) to me.’

Reversing the order of pronouns would give the meaning ‘I was not given to her’.

If a biconsonantal verb has a consonantal extension, the object pronoun is preceded by the vowel *ee*:

(85)	tà-píl-t-ée-nò	cì-tà-wát-tù-ée-nò
	FUT-buy-VENT-go-1SG	2F-FUT-come-VENT-GO-1SG
	‘He/she will buy for me.’	‘You (f) should bring for me.’

(86) cì-kém-ko-ée-nò      kòngóo-nò  
2F.-feed-COMPL-1SG      stomach-1SG  
‘You fed me well.’ lit ‘You filled my stomach.’

**11.3 Additional argument marking and indirect object interpretation.** Pero has a marker added to the verb coding the presence of additional argument in the proposition (not necessarily in the clause). The argument is considered to be additional when its presence exceeds the number of arguments that a given verb occurs with the minimal coding means (Frajzyngier 1985). Thus, for an intransitive verb, the additional argument marker indicates the presence of an object, direct, or indirect, partially overlapping with the functions of the causative predication in many languages:<sup>4</sup>

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<sup>4</sup> As a result of an incorrect analysis of this fact as an instantiation of polysemy, the same marker is glossed in Frajzyngier 1989 sometimes as CAUS (causative) and sometimes as BEN (benefactive).

- (87) má dǔngù-kò àm n-íppò pójè rìyyó-n yà-mínà  
 HYP start-COMPLrain SEQ-catch chicken enter:PL-AD.ARG inside-house  
 ‘When it starts to rain, they catch chickens and put them into the house.’

For a transitive verb, the additional argument marker implies the presence of an argument other than the one expected for a given verb in Pero. The additional argument marker makes no gender or number distinction, although these distinctions exist otherwise in the pronominal system of Pero. The additional argument marker can be added to the verb ‘to give’ as well as to any other verb:

- (88) mà-múmmún-kò-n n-áǎǎ-ínà  
 COND-give:PL-COMPL-AD.ARG SEQ-eat-COMPL-VENT  
 ‘when they were given it they ate’
- (89) bàtúurè n-yé-tù n-wáat-tù múnú-n aníni bélòw  
 European SEQ-call-VENT SEQ-came-VENT give-AD.ARG anini two  
 ‘The European called [him] and when he came he [European] gave him two anini’  
 (European to a chief, mentioned earlier in the narrative)
- (90) mà-kúbú-kò n-ǎiikò mándì n-kér-tù nínyà-mò  
 COND-taste-COMPL SEQ-fetch again SEQ-call-VENT person DEM  
 mù-tà-cádò kúndúl-ì n-múnù-n n-cé  
 REL-FUT-take kundul-DEF SEQ-give-AD.ARG SEQ-drink  
 ‘When he tasted and fetched again, he called this person who was going to acquire the kundul and gave him the drink.’
- (91) n-wálù-n ǒwé  
 SEQ-cook-AD.ARG gruel  
 ‘And the gruel was made for her.’

If the indirect object is non-referential, the marker *n* does not occur, as is the case in hypothetical mood:

- (92) kái kán mù law kúmà múngbúdè kài kpéemùn tà  
 2M EXIST boy COND adult 2M woman FUT  
 mún-kò ló-mò ká-n-áǎ-ínà  
 give-COMPL meat-DEM 2M-CONJ-eat-COMPL:VENT  
 ‘If you are a child, if you are an adult, or if you are a woman, you will be given this meat for you to eat’

The examples having indirect objects in Pero indicate only action beneficial for the argument, but this is most probably an accidental outcome of the types of data available.

In Pero, the inference of the indirect affectedness of the object is computed from the presence of the additional argument marker and from the presence of pronominal and nominal arguments.

## **12. Summary of findings**

Most of the languages in this small sample have grammaticalized the indirect object predication. One language, Gidar, has grammaticalized both the indirect object and the benefactive predications. Two languages, Pero and Mupun, have not grammaticalized either the indirect object or the benefactive predication, as evidenced by the absence of specific formal characteristics that would distinguish the coding of the indirect object or benefactive from all other predications. No language has grammaticalized a malefactive predication that is distinct from all other predications, although inferences of malefactive effects can be drawn from a combination of various verbs with the indirect object predication. No language has grammaticalized only the benefactive predication, although Lele might have had such a predication in an earlier stage.

The benefactive predication is marked either by the inherently benefactive verb or by the dedicated benefactive preposition.

The coding of indirect object predication on the verb has been observed in West, Central, and East Chadic languages. In all instances the marker of the indirect object has the form *n*, a form cognate with a demonstrative and the third-person object marker. The same form codes an additional argument in Pero. It is entirely legitimate to assume that the indirect object marker did originate as an additional argument marker, since it occurs with verbs that are not inherently benefactive.

In East Dangla only, the noun is marked as indirect object through inflectional means.

**Table 1. Coding means for the indirect object predication in Chadic**

The table is organized in the customary order of branches: West, Central, East, and Masa. 'Prep ded' stands for 'dedicated preposition for the coding of indirect object'

Language	IO verb	GO	Verb codes IO	Additional argument	io pronoun	Prep ded	Prep. other
Hausa	no	with DO and IO	yes	sometimes	yes (derived)	wa	
Pero	no	with DO only		yes	no		Locative
Kanakuru	no	possibly with DO	'fusion with the verb'	yes	yes		Associative
Mupun	no	no		no	no		Locative
Miya		if both DO and IO pronouns occur	a			only for 3M	
Gidar	yes	yes			no	sə̀	
Mina		yes	yes, obligatory with nominal IO	no			Locative
Hdi			High tone for IO				same as DO
Margi	yes	no	no				Locative
Wandala							
Lele						be	
E.Dangla	no	yes	no	no	yes		Locative

### 13. Sources of grammaticalization of indirect object markers

The markers preceding the nominal indirect object are identical with locative prepositions, the associative preposition, or derive from the verb 'to give'. The verb 'give' as a source of indirect object markers is attested in Lele (East Chadic), where the verb 'to give' is *be* and the indirect object preposition is *be*. In Gidar the verb 'to give' is *psə̀* and the benefactive preposition is *sə̀*.

We can identify two sources for the markers involved in the coding of the indirect object function on the verb. The goal-orientation marker, most probably the vowel *a*, is similar to morphemes often analyzed as locative prepositions (Frajzyngier 1985). Frajzyngier and Shay 2003 and Frajzyngier et al. 2005 demonstrate that in some languages the form *a* is actually a locative predicator rather than a preposition. The other marker, the one that indicates the presence of an additional argument in the clause, is derived from a third-person pronoun, as argued in Frajzyngier 1985. We do not know what might be the source of the third marker involved in the coding of the indirect object function, namely, a high tone on the verb, attested in Hdi. In Hdi, high tone clearly has the function of coding goal orientation on prepositions as well as on verbs (cf. Frajzyngier with Shay 2002).

#### **14. Implications**

Even if we assume that all languages are capable of expressing all possible semantic functions, not all languages code the same functions in their grammatical systems. The domain of coding indirect affectedness of an argument, or the coding of beneficial affectedness for some arguments, does not have to be a part of the grammatical system.

The coding of a given domain interacts with the syntactic properties of lexical items. If the given function has been grammaticalized, lexical items, usually verbs, but also nouns for a number of functions, may inherently code this function. If a given function has not been grammaticalized in a given language, the lexical items will not be sensitive to the given function. Thus, in languages where the verb ‘to give’ inherently implies the existence of an indirect object, such objects do not have to be marked, while in languages in which the same verb does not imply the existence of the indirect object, such objects must be overtly marked. The absence of the grammaticalized indirect predication in Pero and Mupun demonstrates that, contrary to widespread claims in the contemporary lexicalist literature (e.g., Levin 1993), the verb does not determine the choice of the arguments or adjuncts. Unless the given predication has been grammaticalized in the language, the verb may not have the properties linked with this predication. Hence, in the present study, the verb ‘to give’ behaves quite differently in languages that have grammaticalized the indirect object predication and in those that have not. The fundamental factor determining the form of the utterance is the grammaticalized meaning (in this case indirect affectedness) combined with the properties of lexical items selected for the utterance.

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### Abbreviations

1	First-person
2	Second-person
3	Third-person
AD.ARG	Additional argument
AFF	Affected
APPL	Applicative
AR	Arabic
ASSC	Associative
AWAY	Verbal extension coding movement away
C	Consonant
C.FOC	Contrastive focus
COL	Collective
COM	Comment marker
COMP	Complementizer
COMPL	Completive
CONJ	Conjunction
D	Dependent
DAT	Dative
DEF	Definite

DEM	Demonstrative
DEST	Destinative
DET	Determiner
EE	End of event
EP	Epenthetic
EX	Existential
EXIST	Existential
EXCL	Exclusive
F	Fula (Fulfulde)
FOC	Focus
FUT	Future
GEN	Genitive
GO	Goal
H	Hausa
HAB	Habitual
HYP	Hypothetical
IMP	Imperative
IMPER	Imperative
IN	Inner space
INCL	Inclusive

INF	Infinitive
INTNS	Intensifier
IRR	Irrealis
M	Masculine
N	Noun; nasal
NEG	Negative
NOM	Nominalizer
NP	Noun phrase
NUM	Numeral
OBJ	Object
OBL	Oblique
ON	Extension 'on'
OPT	Optative
OUT	Extension 'out'
PAST	Past
PB	Phrasal boundary
PL	Plural
POL	Polite
PNCT	Punctual
POS	Point of view of the subject
POSS	Possessive
PRED	Predicator
PREP	Preposition
PRES	Presentative
PRO	Pronoun
PROG	Progressive
PROX	Proximate
Q	Question marker
R1	First member of the reduplicated construction
R2	Second member of the reduplicated construction
RE	
REF	
REFL	Reflexive
REM	Remote
S	Subject

SEQ	Sequential
SG	Singular
T	Target
TEMP	Temporal
TAG	Tag question
TO	Destinative preposition
TOP	Topic marker
VENT	Ventive
VN	Verbal noun

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