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## Chapter 15

### Ditransitives in Mian

*Sebastian Fedden*

#### 1. Introduction

Mian has three underived ditransitive verbs *-ub<sup>h</sup>-<sup>1</sup>*, *-ka-*, and a zero root, all of which can be used for three-participant events and be roughly translated as ‘give’. The first part of the paper is devoted to argument marking and alignment patterns in ditransitive verbs. Mian ditransitives show typologically rare triple agreement, i.e. they index not only the subject but also the theme and the recipient with a prefix and a suffix, respectively. The second part deals with constituent order in ditransitive clauses, behavioural properties of the object arguments of ditransitives in comparison to the object of mono-transitive clauses and the extension of recipients to cover other meanings, such as benefactives and experiencers. The third and final part is a historical account of how Mian might have ended up having triple agreement.

Mian is a Papuan language of the Ok family (Healey 1964), which itself is part of the larger Trans New Guinea (TNG) family (cf. Pawley 2005; Ross 2005; Wurm 1982). Mian is spoken in Telefomin district of Sandaun province in Papua New Guinea. The Eastern dialect of Mian (Fedden 2007) has about 1,500 speakers. Mian speakers up into their mid-seventies also speak the Papua New Guinea-variety of Neo-Melanesian Pidgin, Tok Pisin, and some of the older men (about 50 years and older) also speak or at least understand the neighbouring, closely related Ok language Telefol. All Mian data presented in this paper were obtained by me during a total of eleven months in the field. Examples from the spontaneous corpus are listed with a source reference. Examples without a source reference have been elicited. Mian is a word-tone language with five distinct tonal melodies, which contrast within the domain of the phonological word (Donohue 1997). The absence of morphological case marking on core arguments is compensated for by extensive cross-referencing on verbs. Verbs are morphologically complex with an aspectual stem distinction for about two thirds of the verbal vocabu-

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<sup>1</sup>Mian has stem accented and off-stem accented verbs and *-ub<sup>h</sup>-* ‘give’ is an example of the latter. For these verbs, the tonal melody attaches to the syllable immediately to the right of the stem. That is why I write the tone diacritic after the stem.

lary. For these verbs, formally distinct perfective and imperfective stems are available.<sup>2</sup> Apart from a gender system, there is a second nominal classification system in which prefixes of verbs of object handling or movement classify one argument according to semantic characteristics of the referent, namely biological sex, form, and function. Mian has nominative-accusative syntax and is typical for a TNG language in that it makes frequent use of serial verb constructions and clause chaining (Foley 1986, 2000). The unmarked constituent order is SOV.

## 2. Morphosyntactic properties of ditransitives

### 2.1. Argument marking in intransitives and transitives

In this section I discuss the argument indexing patterns in intransitive and mono-transitive clauses to give the reader an idea of how argument marking operates in Mian. I distinguish three morphologically distinct classes of transitive verbs and relate their flagging and indexing patterns to the ones found in ditransitive verbs.

Argument marking in Mian follows a nominative-accusative pattern. This means that S and A roles are treated in the same way, different from P, i.e. A=S P. This is illustrated for an intransitive verb (1) and a transitive verb (2))<sup>3</sup>:

- (1) *yōle on-s-**io**=be*  
 well go.PFV-RPST-**2/3PL.AN.SBJ**=DECL  
 ‘Well, they went.’ [Pig story, 020]
- (2) *yōle éil=e a-nâ-s-**ib**=e?*  
 well pig=SG.M **3SG.M.O**-kill.PFV-RPST-**2/3PL.AN.SBJ**=Q  
 ‘Well, did they kill the pig?’ [Mianmin and Telefomin history, 113]

The cross-referencing suffixes *-io* and *-ib* in these examples are phonologically and positionally conditioned allomorphs of the category ‘2/3 plural animate subject’. Mian is head-marking at the level of the clause (Nichols 1996). There is no morphological case or adpositional marking for core grammatical relations. Instead, all subjects are obligatorily indexed on the verb by a pronominal agreement suffix, independent of whether they are subjects of an intransitive or a transitive clause, whereas objects are marked by a pronominal or a classificatory prefix for some verbs and not at all for other verbs. I take up the issue of object marking in the next section on transitive verbs.

<sup>2</sup>The relation between perfective and imperfective stems can be suppletive, e.g. *baa* ‘say (PFV)’ vs. *o* ‘say (IPFV)’, apophonic, e.g. *ifa* ‘serve food (PFV)’ vs. *ifu* ‘serve food (IPFV)’, or suffixal, e.g. *un* ‘go (PFV)’ vs. *une* ‘go (IPFV)’ and *deila* ‘shave (PFV)’ vs. *dei* ‘shave (IPFV)’. To avoid confusion, I always indicate stem aspect in brackets in the glosses. About one third of verb stems are trans-aspectual, i.e. there is no perfective/imperfective distinction. For these verbs, no stem aspect specification appears in the gloss, e.g. *ki* ‘measure, read’ or *fu* ‘cook’.

<sup>3</sup>To make the glosses easier to follow, I put the cross-referencing affixes and their glosses in boldface.

In having a bound pronominal agreement prefix for the object and a suffix for the subject, Mian conforms to the canonical verbal structure for TNG languages (cf. Foley 2000: 377).

## 2.2. Classes of transitive verbs

In order to understand the indexing patterns in Mian ditransitives, it is necessary to first have a look at object indexing in (mono-)transitive verbs and divide these into three distinct morphological classes:

1. Transitives with a classificatory prefix (henceforth abbreviated CP)
2. Transitives with an object prefix
3. Transitives without object indexing

For all three classes of transitive verbs, animacy of the object is irrelevant. Verbs either always index their object (classes 1 and 2) or never do (class 3) regardless of object animacy value. In this respect, Mian differs from other TNG languages, e.g. Usan (Reesink 1987), which allow object prefixes only if the object is animate.

### 2.2.1. Transitive verbs with a CP

This class of transitive verbs consists of some 50 items, almost exclusively verbs of object handling and manipulation or object movement, such as ‘give’, ‘send’, ‘put’, ‘throw’, ‘get’, and ‘turn’. The CP indexes the object, signals number and classifies the object according to certain salient characteristics of its referent, viz. sex, shape, and function<sup>4</sup>. Example (3) illustrates the use of the transitive verb *-ò* ‘get (PFV)’ with the CP *tob-* which is used for long objects in the singular, for example a single tobacco leaf.

- (3) *nē memâlo fût=e tob-ò-n-i=a*  
 I now tobacco=SG.N1 **3SG.LONG.O**-get.PFV-SS.SEQ-**1SG.SBJ**=MED  
 ‘Now I get the tobacco leaf, and then I ...’ [Rolling smokes, 001]

Table 1 lists the closed class of CPs. The forms in boldface are used for all animates and (at least in third person) for some inanimates, depending on class membership, e.g. *flèt* ‘plate’ is masculine while *két* ‘container’ belongs to the residue class. All other CPs are used with inanimates only.

<sup>4</sup>Note that the CPs also occur with two intransitive verbs, namely ‘fall’ and ‘tumble’, in which case they index, classify and signal the number of the subject. They therefore function on an absolutive basis (Keenan 1984).

Table 1: Classificatory prefixes

	Classificatory prefixes (CPs)	
	Singular	Plural
1	<i>nem-</i>	<i>dol-</i>
2	<i>kem-</i>	
3Masculine (MASC)	<i>dob-</i>	
3Feminine (FEM)	<i>om-</i>	
3Long object (LONG)	<i>tob-</i>	<i>tebel-</i>
3Bundle-like object (BUNDLE)	<i>gol-</i>	<i>gulel-</i>
3Covering object (COVER)	<i>gam-</i>	<i>gemel-</i>
3Residue class (RESID)	<i>ob-</i>	<i>ol-</i>

### 2.2.2. Transitive verbs with an object prefix

This class of transitive verbs comprises exactly five items (counting aspectual stem pairs as one item): *-tem* ‘see (PFV)’/*-teme* ‘see (IPFV)’, *-na* ‘hit, kill (PFV)’/*-e* ‘hit, kill (IPFV)’, *-lô* ‘hit, kill (PFV)’, *-fu* ‘grab (PFV)’, and *-ntama* ‘bite (PFV)’, all of which—with the notable exception of ‘see’—are high on the transitivity scale (Hopper & Thompson 1980). Object prefixes are obligatory and occur both with animate and inanimate objects. They index the object and indicate its person and number and in the third person also its gender. (4) is an example:

- (4) *a-fu-n-ib=to*  
**3SG.M.O-grab.PFV-SEQ-2/3PL.AN.SBJ=MED**  
 ‘They grabbed him, and then ...’ [Sobining story, 013]

The forms of the object cross-referencing prefixes are entirely distinct from the CPs, with the exception of the 1st and 2<sup>nd</sup> singular forms where both CPs and object cross-referencing prefixes have the typical TNG reflexes /n/ and /k/, respectively (Ross 2005: 362Foley 2000: 32). Three sets of object prefixes can be distinguished (see table 2).

The object prefixes are somewhat irregular in that one verb, ‘hit, kill’, selects forms with a slightly different phonological shape. While most of these five verbs take the same set of prefixes, *-na* ‘hit, kill (PFV)’, has phonological variants for two of the prefixes. The verb *-e* ‘hit, kill (IPFV)’ only has C-prefixes without a vowel and a form *(h)a-e* which contracts to *(h)a-* ‘hit him (IPFV)’. Compare *(h)a-b-e=be* [3SG.M.O.hit.IPFV-IPFV-3SG.M.SBJ=DECL] ‘He’s hitting him’ with *k-e-b-e=be* [2SG.O-hit.IPFV-IPFV-3SG.M.SBJ=DECL] ‘He’s hitting you’.

Table 2: Object cross-referencing prefixes

	Object prefixes	Object prefixes for na^ 'hit, kill (PFV)'	Object prefixes for -e 'hit, kill (IPFV)'
1SG	<i>na-</i>	<i>na-</i>	<i>n-</i>
2SG	<i>ka-</i>	<i>ka-</i>	<i>k-</i>
3SG M	<i>a-</i>	<i>a-</i>	<i>(h)a-e</i> [ <i>&gt;</i> ] <i>(h)a-</i>
3SG F	<i>wa-</i>	<i>wa- ~ u-</i>	<i>w-</i>
PL AN	<i>ya-</i>	<i>ya- ~ i-</i>	<i>y-</i>

### 2.2.3. Transitive verbs without object indexing

All other transitive verbs do not have any morphological object marking regardless of whether there is an overt object NP in the clause or not. Mian is strongly zero-anaphoric and NP arguments are often elided, but all object NPs which do appear with these verbs pattern exactly like the object NPs of morphologically marked transitive verbs in terms of their syntactic behaviour and differ from any type of NP used with intransitive verbs.

If an object NP is present, this object is never indexed on the verb. This is illustrated for animate patient-like objects like *no* 'marsupial' in (5), more patient-like inanimate objects, like *fofolam* 'initiation house' in (6), and more theme-like inanimate objects like *amisaalo* 'the door' in (7):

- (5) *til=i no=i bu-bi-n-ib=a*  
 dog=PL.AN marsupial=PL.AN hunt-AUX.IPFV-SEQ-2/3PL.AN.SBJ=MED  
 'The dogs were hunting marsupials, and then ...' [The flood, 005]
- (6) *fofolam gaala-omâb-io=be*  
 initiation\_house.N2 tear\_down-IRR.PL.AN.SBJ-2/3PL.AN.SBJ=DECL  
 'They would tear down the initiation house.'
- (7) *amisaal=o dou-n-e=be*  
 door=N2 close-REAL-3SG.M.SBJ=DECL  
 'He closed the door.'

### 2.3. Flagging and indexing patterns in the ditransitive verb -ub^- 'give (pfv)'

The clearest case of an underived ditransitive verb in Mian is -ub^- 'give (PFV)'. This verb belongs to the class of verbs which obligatorily cross-reference and classify the theme-object with a CP, and it is defective in that it only has a perfective stem. It also

takes a suffix that cross-references the recipient argument and another suffix for the subject. Thus, the verb *-ub<sup>^</sup>*- ‘give (PFV)’ is an example of triple agreement, i.e. the indexing of subject, theme, and recipient by affixes on the verb, a typologically rare phenomenon both in Papuan languages and worldwide (Foley 2000: 378).

An example of *-ub<sup>^</sup>*- ‘give (PFV)’ is provided in (8):

- (8) *nē naka=e éil=o om-ub<sup>^</sup>-a-n-i=be*  
 I man=SG.M pig=SG.F 3SG.FEM.O-give.PFV-3SG.M.R.PFV-REAL-1SG.SBJ=DECL  
 ‘I gave the sow to the man.’

The verb *-ub<sup>^</sup>*- ‘give (PFV)’ shows neutral flagging. As in mono-transitive clauses, none of the overt argument NPs *nē* ‘I’, *naka=e* ‘the man’, or *éil=o* ‘the sow’ in example (8) are marked for their syntactic role within the clause, i.e. T=P=R. The NPs *naka=e* ‘the man’ and *éil=o* ‘the sow’ function as two direct objects.

With respect to indexing, the situation is different. Here we find indirective alignment, i.e. the theme is indexed in the same way as the patient in a transitive clause, namely by a prefix on the verb, while the recipient is encoded with a suffix, i.e. T=P=R. The set of recipient suffixes is summarized in table 3. For ease of exposition, I here only list the forms occurring with *-ub<sup>^</sup>*- ‘give (PFV)’. Note that there is one tense, namely *-bH* ‘Non-hodiernal past’, in which can but do not have to be augmented with /n<sup>5</sup>.

Table 3: Recipient cross-referencing suffixes for *-ub<sup>^</sup>*- ‘give (PFV)’

Recipient suffixes	
1SG	<i>-ne(n)</i>
2SG	<i>-ke(n)</i>
3SG M	<i>-a(n)</i>
3SG F	<i>-o(n)</i>
PL AN	<i>-e(n)</i>

<sup>5</sup>This is taken up in section 3 below. An example is:

- i *monî=o om-ub<sup>^</sup>-an-bH-i=be*  
 OR *om-ub<sup>^</sup>-a-bH-i=be*  
 money=n2 3SG.FEM.O-give.PFV-3SG.M.R.PFV-NHODPST-1SG.SBJ=DECL  
 ‘I gave money to him (but not today).’

As Mian is strongly zero-anaphoric, NPs tend to be elided in discourse if referent identity can easily be retrieved or is obvious from the context or from general speaker knowledge. Thus, any of the free NPs in example (8) *nē* ‘I’, *naka=e* ‘the man’, *éil=o* ‘the sow’ can be elided. All logically possible combinations of NP elision are syntactically allowed here until one arrives at the following minimal utterance:

- (9) *om-ub^-a-n-i=be*  
**3SG.FEM.O-give.PFV-3SG.M.R.PFV-REAL-1SG.SBJ=DECL**  
 ‘I gave it (of the FEM class) to him.’

Of course, NP elision causes propositions to be semantically less specific but it neither changes the alignment patterns nor does it render the utterance ungrammatical or less acceptable.

Figures 1 and 2 summarize the alignment patterns for *-ub^-* ‘give (PFV)’, which are neutral for flagging and indirective for indexing.

Figure 1: Neutral flagging

Role	Encoding (flagging)
P, T, R	No marking

Figure 2: Indirective indexing

Role	Encoding (indexing)
T (as P)	Marked with object prefix
R	Marked with recipient suffix

#### 2.4. Serialization with *-ub^-* ‘give (pfv)’

In the preceding section, I have dealt with the basic morphosyntax and the alignment patterns of the ditransitive verb *-ub^-* ‘give (PFV)’. This verb will continue to play an important part in the discussion of other ditransitives in Mian because it is productively used in a compound serial verb construction with another verb stem as a valency-increasing device with an applicative-like function. The use of ‘give’ as a valency-increasing device is attested in a number of TNG languages, for example Kewa (Franklin 1971; Reesink 2010++), Menya (Whitehead 2004), and Tairora (Vincent 1973).

In Mian, most intransitive and transitive verbs can be serialized with *-ub^-* ‘give (PFV)’ in order to introduce another participant into the argument structure of the verb



through the recipient suffix on the ‘give’-verb. This type of serialization is used in the perfective only. The spectrum of semantic roles that can be mapped onto this additional argument is quite wide and includes not only recipients but also benefactives, possessors, and goals of ballistic motion, depending on the semantics of the verb serialized with ‘give’. I return to this point in section 2.3 below.

The use of *-ub<sup>^</sup>-* ‘give (PFV)’ in a serialization with an intransitive and a transitive verb is illustrated in examples (10) and (11), respectively. The phonological shape of ‘give’ in a serialization depends on the preceding segmental context. It is realized as /ub/ after consonants and /b/ after vowels.

- (10) *un-ub<sup>^</sup>-ke-n-amab-i=be*  
 go.PFV-give.PFV-2SG.R.PFV-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL  
 ‘I will go for you.’
- (11) *naka=e dob-suana-(u)b<sup>^</sup>-o-n-ebo=be*  
 man=SG.M 3SG.MASC.O-hate.PFV-give.PFV-3SG.F.R.PFV-REAL-2SG.SBJ=DECL  
 ‘You hate the man for her (sake).’

Such serializations with ‘give’ are nuclear or “tight” (cf. Foley & Olson 1985), i.e. the resulting verb complex constitutes one phonological word, e.g. regarding tone assignment and tonal contrast, and both verbs in the serialization have to share the same agent and theme argument. Concomitantly, any object cross-referencing prefix on the second verb in the serialization (in this case ‘give’) is gapped. This is a regular process in all nuclear serializations in Mian and attested with other verbs apart from ‘give’. For instance, *-êb* ‘pick up, take with (PFV)’, which requires cross-referencing of its object with a CP when appearing on its own, as in (12), appears without this prefix as the second element in a nuclear serialization in example (13):

- (12) *alél=oto awók=o om-êt-n-o=to*  
 wife=SG.F.EMPH mother=SG.F 3SG.FEM.O-take\_with.PFV-SEQ-3SG.F.SBJ=MED  
 ‘the wife took the mother, and then...’ [Afoksitgabaam, 030]
- (13) *no=i ya-l(o)-êb*  
 marsupial=PL.AN PL.AN.O-kill.PFV-take\_with.PFV  
*tl-Ø-e=i*  
 come.PFV-REAL-3SG.M.SBJ=PL.AN  
 ‘the marsupials he has killed and brought’ [Crows, 033]

As ‘give’ in Mian is very productively used in nuclear serialization with another verb to increase the valency of the whole verb complex by one, its function is essentially that of an applicative (cf. Foley 2000: 380). Indeed there are three reasons to assume that the form *-(u)b<sup>^</sup>-* is undergoing grammaticalization into an applicative morpheme.

First, there are two phonological processes that the serialized form-(*u*)*b* undergoes which never apply to lexical *-ub<sup>^</sup>-* ‘give (PFV)’: (a) reduction to just *-b<sup>^</sup>-* after a vowel, e.g. *fu-b<sup>^</sup>-a* [cook-give.PFV-3SG.M.O] ‘cook for him’, and (b) realization as *-s* when preceded by the vowel sequences /ei/ and /ai/ and followed by another vowel, e.g. compare *gai-b<sup>^</sup>-ke* [win.PFV-give.PFV-2SG.M.O] ‘win over/against you’ vs. *gai-s<sup>^</sup>-a* [win.PFV-give.PFV-3SG.M.O.PFV] ‘win over/against him’.

Second, some verbs have allostems when they are serialized with ‘give’, e.g. *fa* ‘make a fire’ vs. *fe-b<sup>^</sup>-a* [make\_fire.PFV-give.PFV-3SG.M.O.PFV] ‘make a fire for him’ and *ol-êb* [PL.RESID.O-pick\_up.PFV] ‘take them’ vs. *ol-êi-b<sup>^</sup>-ke* [PL.RESID.O-pick\_up.PFV-give.PFV-2SG.O.PFV] ‘take them from you’. Such stem changes do not occur in other nuclear serializations in the language.

Third, there is considerable semantic change from lexical *-ub<sup>^</sup>-* ‘give (PFV)’ to the semantically much more general meaning of *-(u)b<sup>^</sup>-* as a valency-increasing device, which can for instance introduce benefactives and possessors, which not necessarily have to be recipients<sup>6</sup>.

Healey (1965: 28) analyzes an applicative suffix *-b* for the closely related Ok language Telefol, which is employed to introduce a recipient argument. This suffix only appears in the perfective aspect (called ‘punctiliar’ by Healey) and is very likely related to Mian *-ub<sup>^</sup>-* ‘give (PFV)’, which is perfective-only as well. The following example illustrates ‘give’ in Telefol. The example appeared unsegmented in Healey (1965: 13). The segmentation and glossing presented here are from Reesink (in prep.; based on pers. comm. with A. Healey):

- (14) *niyó kaábák maak tanúm bē-mí*  
 I      axe      one      man      3SG.M.that-POS  
*kö-Ø-b-Ø-m-í*  
**3SG.F.O-give.PUNCT-BEN.PUNCT-3SG.BEN-CONT-1SG.SBJ.IMM.PAST**  
 ‘I gave the man an axe.’

Here, ‘give’ is analyzed as a zero root followed by an applicative *-b*, followed by the recipient suffix. Rather than assuming a zero root ‘give’ for Telefol, I would like to suggest an alternative analysis in which ‘give’ is *-b-* (and possibly *-Vb* after a consonant) which would be cognate with Mian *-ub<sup>^</sup>-* ‘give (PFV)’. The following example provides my re-segmentation and re-glossing for the verb form in (14):

- (15) *kö-(V)b-Ø-m-í*  
**3SG.F.O-give.PFV-3SG.R-CONT-1SG.SBJ.IMM.PST**  
 ‘I gave it to him.’

<sup>6</sup>Note that in Hokkien Chinese, for example, the morpheme *b<sup>5</sup>* ‘give’ can extend its meaning “to a “true” benefactive, where the beneficiary does not need to be a RECIPIENT of anything passed” (Newman 1996: 220).

As in Mian, Telefol ‘give’ is used with an applicative-like function in tight serializations with other verb stems to introduce a further participant into the argument structure of the verb serialized with ‘give’, as in (16) (from Healey 1965: 12, my glosses—SF):

- (16) *beéyó mán itá*  
 3SG.M.THAT boy 3SG.M.FOC  
*ang-kó-b-nee-l-á*  
 3SG.M.O-hit.PFV-give.PFV-1SG.R-PFV-3SG.M.SBJ.IMM.PST  
 ‘He hit the boy for me.’

Thus, the morphosyntactic structure of ‘give’ would be exactly parallel in Mian and Telefol. Both languages have triple agreement and show indirective indexing for ‘give’ and allow serialization with ‘give’ in a quasi-applicative function.

Looking further afield at TNG languages from the Madang area one finds evidence which could support my analysis for ‘give’ as a quasi-applicative in Mian. It has been observed in the literature that in several languages of the Madang subgroup (for example, Usan, Bargam, Waskia, and Amele) ‘give’ is a phonologically minimal or even a zero root (Comrie 2003; Roberts 1998).

Roberts (1998: 1) points out that there is no overt ‘give’ morpheme in Amele. As the languages of the Madang subgroup all require indexing of person and number of the recipient, it seems as if ‘give’ in these languages was suppletive in that its phonological realization depended on the person and number of the recipient (Roberts 1998: 25f.), e.g. Amele *it-ec* ‘to give to me’, *ib-ec* ‘to give to you’, *ut-ec* ‘to give to him’ (where *-ec* marks infinitives).

Reesink (in prep.) suggests a reanalysis of the Amele data which matches the Mian facts well. Rather than assuming that ‘give’ in Amele is a zero morpheme which has been replaced by the various recipient affixes, he argues for the reverse process, namely that the minimal verb ‘give’ is compounded with other stems in order to indicate the recipient. He identifies *i-* ( $\sim$  *u-* in 3SG) as the minimal root for ‘give’<sup>7</sup>. Compare the following two examples from Amele (morpheme segmentation mine—SF):

- (17) *ceb i-t-ag-a!*  
 betelnut give-1SG.IO-2SG.SBJ-IMP  
 ‘Give me betelnut!’ (Roberts 1998: 1)
- (18) *me je sanij-i-t-ag-a!*  
 good talk read-give-1SG.IO-2SG.SBJ-IMP

<sup>7</sup>In the free verb ‘give’, *i-*  $\sim$  *u-* does not occur in 2/3dual and 2/3pl, while it does show up when ‘give’ is attached to another verb. Compare *al-ec* (*\*i-al-ec*) ‘to give to you/them (dual)’ with *siw-i-al-ec* [share-give-2/3dual-inf] ‘share for you/them (dual)’ and *ad-ec* (*\*i-ad-ec*) ‘to give to you/them (plural)’ with *siw-i-ad-ec* [share-give-2/3pl-inf] ‘share for you/them (plural)’. Reesink proposes incidental elision of /i/ in the free verb ‘give’ preceding /a/.

‘Read the Scriptures to me!’ (Roberts 1998: 23)

Reesink’s reanalysis of Amele ‘give’, which can probably be extended to other languages of the Madang subgroup (Reesink 2010++), is in perfect alignment with the facts on ‘give’ and ‘give’-serializations in Mian which I have presented above. It is a recurrent pattern in TNG languages that they use serializations with ‘give’ to express recipient or benefactive arguments (Foley 1986, 2000; Reesink 2010++).

## 2.5. The ditransitive verbs ‘send’, ‘show’, and ‘tell’

Verbs like ‘send’, ‘show’, and ‘tell’, which are often ditransitive cross-linguistically, involve serializations with *-ub<sup>^</sup>*- ‘give (PFV)’ in the perfective. The ditransitive verb *-fu-(u)b* ‘send to (PFV)’<sup>8</sup> indexes the theme with a CP. The recipient argument is marked by a suffix on the ‘give’-morpheme serialized with the main verb. Consider example (19):

- (19) *ō*     *baa-n-o=a*                                     *futâan=o*  
 she say.PFV-SEQ-3SG.F.SBJ=MED letter=N2  
*om-fu-(u)b<sup>^</sup>-a-n-amab-i=bo*  
 3SG.FEM.O-send.PFV-give.PFV-2SG.R.PFV-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=QUOT  
*ge*             *baa-n-o=be*  
 SAY.PFV say.PFV-REAL-3SG.F.SBJ=DECL  
 ‘She said she would send a letter to him.’ (Lit. ‘She said: “I will send a letter to him” ’)

While both *-ub<sup>^</sup>*- ‘give (PFV)’ and *-fu-(u)b*- ‘send to (PFV)’ index the theme with a CP, the two ditransitive verbs of mental transfer *ale-(u)b*- ‘show to (PFV)’ and *baa-(u)b*- ‘say to (PFV)’, do not index the theme. Yet, as for ‘send’, the recipient argument, or in this case the recipient-like argument, is introduced by a serialization with ‘give’, as in (20):

- (20) *kasak=e*                                     *ale-(u)b<sup>^</sup>-e-Ø-ib-bio=ta*  
 kasak\_ritual=SG.N1 show-give.PFV-PL.AN.R.PFV-DS.SEQ-2/3PL.AN.SBJ-GPST=MED  
 ‘they had shown us the Kasak (ritual), and then someone else...’ [Kasak ritual, 001]

Although *baa-(u)b*- ‘say to (PFV)’ most often occurs in a quotative construction with a sentential complement representing some discourse, as in example (19) above, it is possible to use this verb with a direct object NP, as in (21):

<sup>8</sup>The verb *fu* can also refer to certain physical afflictions, such as shortness of breath, affecting a person. In this sense, the object suffix of serialized ‘give’ represents the experiencer, as in the following example *māmo om-fu-t<sup>^</sup>-ne-n-o=be* [breath\_shortness sg.fem.o-send.pfv-give.pfv-1sg.o-real-expl.sbj= decl] ‘I got shortness of breath’.

- (21) *awém=o yē baa-(u)b^-e-n-ib=a*  
 taboo=N2 there say.PFV-give.PFV-PL.AN.R.PFV-SEQ-2/3PL.AN.SBJ=MED  
 ‘there they told them the taboos, and then ...’ [Kasak ritual, 026]

At this point a word about the derivational status of the ditransitive verbs introduced so far is in order. The clearest example of an underived ditransitive verb in Mian is provided by *-ub^-* ‘give (PFV)’, which encodes the theme with a set of prefixes and the recipient and the agent by two different sets of suffixes.

The derivation status of *-fu-(u)b-* ‘send to (PFV)’ and *ale-(u)b-* ‘show to (PFV)’ is less clear though. Although the recipient role of the former is introduced by serialization with ‘give’, which suggests derivation from a simpler transitive base, such a transitive base does not exist. Hence, an utterance like (22) is ungrammatical regardless of whether the recipient is expressed with a free NP (in this case the pronoun *nē* ‘me’):

- (22) \**futaan=o (nē) om-fu-n-e=be*  
 letter=N2 (me) SG.FEM.O-send.PFV-REAL-3SG.M.SBJ=DECL  
 ‘he sent (me) a letter’

In the case of *-fu-(u)b-* ‘send to (PFV)’, we are dealing with a lexicalized verb serialization, which is underived at least in contemporary Mian. A similar argument can be made for *ale-(u)b-* ‘show to (PFV)’ which is arguably underived because there is no stem \**ale*.

The verb *baa-(u)b-* ‘say to (PFV)’, on the other hand, is a derived ditransitive verb. The coding possibilities are the same for ‘show to’ and ‘say to’ as they both code the recipient role with the help of the ‘give’-morpheme and do not cross-reference the theme role. The difference, however, is that *baa-(u)b-* ‘say to (PFV)’ has a transitive counterpart *baa* ‘say (PFV)’ which *ale-(u)b-* ‘show to (PFV)’ lacks. Transitive *baa* ‘say (PFV)’ is illustrated with example (23):

- (23) *wengsâng ōlo baa-n-amab-i=be*  
 story this.N2 say.PFV-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL  
 ‘I want to tell this story.’

Figures 3 and 4 summarize the alignment patterns in ditransitive verbs involving serialization with ‘give’ (e.g. ‘say to’) and lexicalized serializations involving ‘give’ (e.g. ‘send to’). They all show neutral flagging and indirective indexing, as does underived *-ub^-* ‘give (PFV)’.

## 2.6. ‘Give’ in the imperfective

I have pointed out above that the verb *-ub^-* ‘give (PFV)’ is perfective only and that it only occurs in serializations in the perfective. The discussion of ‘give’ in Mian is complicated by the fact that it shows aspect suppletion in the imperfective, where it is realized as *-ka-*. Consider the following habitual sentence:

Figure 3: Neutral flagging

Role	Encoding (flagging)
P, T, R	No marking

Figure 4: Indirective indexing

Role	Encoding (indexing)
T (as P)	Marked with object prefix or not marked (depending on verb)
R	Marked with recipient suffix in a tight serialization with $-(u)b^{\wedge}$ - ‘give’

- (24)  $\bar{i}$      *blatik=o*  
they plastic\_bag=N2  
*dol-ka-ye-bina-b-io=be*  
**PL.FEM.O-give.IPFV-PL.AN.R.IPFV-AUX.HAB-IPFV-2/3PL.AN.SBJ=DECL**  
‘They (habitually) give (a few) vomit bags to us (i.e. on the missionary plane).’

The set of recipient cross-referencing suffixes for  $-ka-$  ‘give (IPFV)’ is summarized in table 4. For ease of comparison, I repeat the recipient forms in the perfective in the table.

Table 4: Recipient cross-referencing suffixes for  $-ka-$  ‘give (IPFV)’ and  $-ub^{\wedge}$ - ‘give (PFV)’

	Recipient suffixes for $-ka-$ ‘give (IPFV)’	Recipient suffixes for $-ub^{\wedge}$ - ‘give (PFV)’
1SG	$-ne$	$-ne(n)$
2SG	$-ke$	$-ke(n)$
3SG M	$-ha$	$-a(n)$
3SG F	$-we$	$-o(n)$
PL AN	$-ye$	$-e(n)$

Table 4: Recipient cross-referencing suffixes for  $-ka-$  ‘give (IPFV)’ and  $-ub^{\wedge}$ - ‘give (PFV)’ While verbs always require serialization with  $-ub^{\wedge}$ - ‘give (PFV)’ in the perfective, they have to be inflected directly for a recipient object in the imperfective with a form from the  $ka$ -paradigm, rather than being serialized with  $-ka-$  followed by the recipient suffix, as in (25):

- (25) *biém=o imen=o fu-ye-b-o=be*  
 mum=SG.F taro=PL.N1 cook-PL.AN.R.IPFV-IPFV-3SG.F.SBJ=DECL  
 ‘Mum is cooking taro for us.’

The imperfective root /ka/ might have some historical relation to the proto-Engan (TNG) verbal beneficiary suffix *\*-ka*. This form could be cognate with the third person recipient stem *kálaa* ‘give to him/her/them’ in Kewa (Franklin 1971) and has possible reflexes in other TNG ‘give’ verbs (Reesink 2010++).

While perfective *-ub<sup>h</sup>*- ‘give (PFV)’ is an underived ditransitive verb in contemporary Mian, obligatorily indexing both theme and recipient, *-ka*- ‘give (IPFV)’ is apparently derived from the (mono-)transitive verb *-ka* ‘put’<sup>9</sup>, which only indexes the theme with a CP but does not have a recipient suffix:

- (26) *imen=e ob-ka-bina-b-i=be*  
 taro=SG.N1 SG.RESID.O-put-AUX.HAB-IPFV-1SG.SBJ=DECL  
 ‘I (habitually) put (down) a taro.’

It is my conjecture that historically imperfective *-ka*- ‘give (IPFV)’ was derived from *-ka* ‘put (IPFV)’ in lieu of an imperfective stem for the defective verb *textstextit-ub<sup>h</sup>*- ‘give (PFV)’.

## 2.7. The ditransitive zero root

Above we have seen that Amele can be reanalyzed as having tight serializations with *i- ~ u-* ‘give’, which are structurally very similar to the Mian forms, instead of assuming that ‘give’ is a zero root in Amele or suppletive with respect to person and number of the recipient. In this section, I suggest that Mian indeed has a perfective-only verb  $\emptyset^h$  with a very general meaning ‘transfer’, which is interpreted as ‘take’ when it only indexes the theme (with a CP) and as ‘give’ when both theme and recipient are indexed (with CP and recipient suffix, respectively). This verb is interesting phonologically because it is segmentally zero, yet all word forms based on this root have a LHL tonal

<sup>9</sup>The suffix *-ka* is also operative as a stem aspect changing suffix. For about ten verbs, this suffix is employed to derive the imperfective from the perfective stem. Compare:

- (ii) *ē as=e fa-n-e=be*  
 he fire=SG.N1 make\_fire.PFV-REAL-3SG.M.SBJ=DECL  
 ‘He made a fire.’
- (iii) *ē as=e fa-ka-b-e=be*  
 he fire=SG.N1 make\_fire-IPFV/?put-IPFV-3SG.M.SBJ=DECL  
 ‘He is making a fire.’

Whether the stem aspect suffix *-ka* is etymologically related to *-ka* ‘put’ or whether the homophony is incidental, remains unclear at this stage of the research.

melody (indicated with the diacritic  $\hat{\cdot}$ ). This suggests that there used to be a non-zero verb root ‘transfer’, which was elided while the tone associated with it remained<sup>10</sup>.

The following examples illustrate  $-\emptyset$  ‘take (PFV)’ without a recipient suffix (transitive), in (27), and  $-\emptyset$ - ‘give (PFV)’ with such a suffix (ditransitive), in (28). Note that these suffixes are formally distinct from the ones used with  $-\text{ub}^{\hat{\cdot}}$ - ‘give (PFV)’ or  $-\text{ka}$ - ‘give (IPFV)’. I will take up this issue in section 3 below.

- (27) *unáng=o om- $\emptyset$ - $\emptyset$ -e=be*<sup>11</sup>  
 woman=N2 3SG.FEM.O-take.PFV-REAL-3SG.M.SBJ=DECL  
 ‘He took a wife.’
- (28) *monî=o om- $\emptyset$ -wen-s-e=a yē*  
 money=N2 3SG.FEM.O-give.PFV-3SG.F.R.PFV-DS.SEQ-3SG.M.SBJ=MED there  
*de $\hat{\cdot}$ -n-o=be*  
 refuse.PFV-REAL-3SG.F.SBJ=DECL  
 ‘He gave her (a coin/bill of) money, (but) there she refused (it).’

The set of recipient cross-referencing suffixes for  $-\emptyset$ - ‘give (PFV)’ is charted in table 5. Paradigms for  $-\text{ka}$ - ‘give (IPFV)’ and  $-\text{ub}^{\hat{\cdot}}$ - ‘give (PFV)’ have been repeated here.

Table 5: Recipient cross-referencing suffixes for all ditransitives

	Recipient suffixes for $-\emptyset$ - ‘give (PFV)’	Recipient suffixes for $-\text{ka}$ - ‘give (IPFV)’	Recipient suffixes for $-\text{ub}^{\hat{\cdot}}$ - ‘give (PFV)’
1SG	<i>-nen</i>	<i>-ne</i>	<i>-ne(n)</i>
2SG	<i>-ken</i>	<i>-ke</i>	<i>-ke(n)</i>
3SG M	<i>-an</i>	<i>-ha</i>	<i>-a(n)</i>
3SG F	<i>-wen</i>	<i>-we</i>	<i>-o(n)</i>
PL AN	<i>-yen</i>	<i>-ye</i>	<i>-e(n)</i>

We now have to deal with the question why both ‘give’ and ‘take’ events should be expressed with the same verb root, in this case  $\emptyset$ . Newman (1996) points out that ‘give’ and ‘take’ events are semantically similar in that they both involve the following: “the movement of a thing, typically involving the hands of a person; the movement is initiated by a person; the thing ends up in the sphere of control of a person” (Newman 1996: 56-7). The main difference is the directionality of the movement of the object given or taken and the fact that ‘give’ is necessarily a three-participant-event (cf. Kittilä 2006), while ‘take’ is not. In that respect it is not entirely outlandish for a language to

<sup>10</sup>Only roots and stems are specified for tone, affixes are unspecified for tone.

<sup>11</sup>The realis suffix  $-n$  is realized as  $-\emptyset$  after a consonant.



use one and the same verb root with a more general meaning of ‘transfer’ for both ‘give’ and ‘take’ events. On instances of formal relatedness between ‘give’ and ‘take’ verbs in Indo-European, see Newman (58 1996).

### 3. Syntactic and semantic properties of ditransitives

#### 3.1. Constituent order in ditransitive clauses

While the unmarked or preferred constituent order in Mian is SOV, only clause-final position of the verb is actually required. Apart from that, free NP-constituents enjoy a more flexible order in the clause. This is syntactically feasible because core grammatical relations are mostly marked on the verb. Ordering within phrases, however, is rigid. The following rules and restrictions apply to clauses with ditransitive verbs proper and ditransitives involving serialization with ‘give’.

In any ditransitive clause, unmarked constituent order (i.e. most frequent in the corpus) is S  $O_R$   $O_T$  V. Both the recipient and the theme occur on the same side of the verb, which of course is not surprising in a language that mandates verb-final position and they occur next to each other, with the recipient-object preceding the theme-object. The unmarked ordering of NPs in a ditransitive clause is illustrated in (29):

- (29) *nē kōbo monî=o*  
 I you money=N2  
*om-ub'-ke-n-amab-i=be*  
**3SG.FEM.O-give.PFV-2SG.R.PFV-AUX.PFV-IRR.NANPL.SBJ-3SG.M.SBJ=DECL**  
 ‘I will give you the (coin/bill of) money.’

The reverse order S  $O_T$   $O_R$  V is attested, though much less frequent. I assume that pragmatic considerations play a major role in determining the order of the recipient-object relative to the theme-object. An example for this alternative constituent order in ditransitive clauses is (30):

- (30) *ī ōlo mak=i*  
 they these other=PL.AN  
*o-Ø'-yen-s-ib=a*  
**3SG.FEM.O-give.PFV-PL.AN.R.PFV-DS.SEQ-2/3PL.AN.SBJ=DECL**  
 ‘they give these (things) to the others (and then someone else...)’  
 [MPIP Reciprocals, 28 (cf. Evans et al., 2004)]

Hence, the generalization that the recipient-object tends to precede the theme-object if there is no flagging (Malchukov et al., 2007), is borne out by the Mian data.

The most important generalization with respect to the position of the subject NP in ditransitive clauses is that it must not appear between the object NPs. Table 6 summarizes the attested constituent orderings in ditransitive clauses in Mian.

Table 6: Attested constituent orderings in ditransitive clauses

S	O <sub>R</sub>	O <sub>T</sub>	V
S	O <sub>T</sub>	O <sub>R</sub>	
O <sub>R</sub>	O <sub>T</sub>	S	
O <sub>T</sub>	O <sub>R</sub>	S	

### 3.2. Behavioural properties

With respect to behavioural properties of ditransitives the question is how recipient and theme act in comparison to the patient argument of a (mono-)transitive verb. The relevant tests for Mian are behaviour under relativization, reciprocalization, and behaviour in constituent questions<sup>12</sup>.

In the following sections, I confine myself to examples involving the underived ditransitive verb *-ub<sup>h</sup>*- ‘give (PFV)’. This is necessary due to shortage of space, but other ditransitive verbs, including the ones derived through serialization with ‘give’, pattern in exactly the same way.

#### 3.2.1. Relativization

Mian has two types of relative clause: (a) a prenominal relative clause, and (b) a head-internal relative clause. Both of these constructions are possible for the relativization of the object of a (mono-) transitive verb. An example for the prenominal relative clause is provided in (31), and an example for a head-internal relative clause in (32):

- (31) [*nē a-tem-Ø-i*]<sub>PrenominalRel-Cl</sub> *naka=e*  
 I 3SG.M.O-see.PFV-REAL-1SG.SBJ man=SG.M  
 ‘the man I have seen’
- (32) [*nakamīn=e no=i asusuna*  
 man=SG.M marsupial=PL.AN two  
*dol-touleb-bi-Ø-e*]<sub>Head-internalRel-Cl</sub> *ēli*  
 PL.AN.O-put\_over\_arm-AUX.IPFV-IPFV-3SG.M.SBJ DEM.PL.AN

<sup>12</sup>Other tests, viz. passive, antipassive, and incorporation, are not applicable to Mian because the language does not make use of them. Reflexivization is not possible either, at least not in ditransitives. Neither transitive nor ditransitive verbs allow any of their argument affixes to be co-referential, but this would be necessary for the expression of reflexive events.

‘these two marsupials which the man is carrying on his arm’ [Mammals and insects]

Prenominal relative clauses are unmarked finite clauses which occupy a prenominal modifier position within the NP. Prenominal relative clauses are unmarked finite clauses which occupy a prenominal modifier position within the NP. For ditransitive verbs, the recipient and the theme argument can be relativized. This is illustrated in examples (33) and (34), respectively:

- (33) [*buk=o om-ub<sup>^</sup>-a-n-amab-i*]<sub>RelCl</sub>  
 book=N2 3SG.FEM.O-give.PFV-3SG.M.R.PFV-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ  
*naka=e*  
 man=SG.M  
 ‘the man to whom I will give the book’

- (34) [*naka=e om-ub<sup>^</sup>-a-n-amab-i*]<sub>RelCl</sub>  
 man=SG.M 3SG.FEM.O-give.PFV-3SG.M.R.PFV-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ  
*buk=o*  
 book=N2  
 ‘the book that I will give to the man’

Head-internal relative clauses, on the other hand, are nominalized finite clauses which function as referring expressions. Like NPs, head-internal relative clauses are followed by an article or a determiner. It is common for relative clauses (and subordinate clauses in general) in Papuan languages to behave morphologically like definite NPs (seeFoley 1986alsoFoley 1991).

Relativization of the recipient and theme argument with a head-internal relative clause is illustrated in example (35) and (36), respectively:

- (35) [*naka=e buk=o*  
 man=SG.M book=N2  
*om-ub<sup>^</sup>-a-n-amab-i*]<sub>RelCl</sub> *ēle*  
 3SG.FEM.O-give.PFV-3SG.M.R.PFV-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ DEM.SG.M  
 ‘this man to whom I will give the book’

- (36) [*ala=o om-ub<sup>^</sup>-e-Ø-ib-bio*]<sub>RelCl=0</sub>  
 ala\_ritual=N2 3SG.FEM.O-give.PFV-PL.AN.R.PFV-REAL-2/3PL.AN.SBJ-GPST=N2  
 ‘the Ala ritual which they (i.e. the ancestors) gave us’ [Ala ritual, 001]

To summarize, prenominal and head-internal relative clauses show neutral alignment in ditransitive constructions. Both themes and recipients can be relativized.

### 3.2.2. Reciprocalization

In reciprocals, Mian shows the cross-linguistically common secundative pattern, i.e. the recipient stands in a reciprocal relationship with the subject, rather than the theme. Reciprocals in which the reciprocants are subject and theme, as in the English sentence ‘They give each other to the king’, are unattested.

Mian does not have a reciprocal pronoun/anaphor, such as *each other*. Instead there is a dedicated reciprocal suffix *-sese*<sup>13</sup>. An example is given in (37):

- (37) *ī inaminamin=o*  
 they stuff=PL.N1  
*ol-ub<sup>^</sup>-e-sese-bl-Ø-io=be*  
**PL.RESID.O-give.PFV-PL.AN.R.PFV-RECIP-AUX.IPFV-IPFV-2/3PL.AN.SBJ=DECL**  
 ‘They give stuff to each other.’ [MPIP Reciprocals, 34 (cf. Evans et al., 2004)]

### 3.2.3. Constituent questions

For constituent questions, Mian displays neutral alignment. Both themes (38) and recipients (39) can be queried, as can patients of (mono-)transitive verbs (40):

- (38) *buk=o wanêta om-ub<sup>^</sup>-a-n-eb=e?*  
 book=N2 who.SG.M **SG.FEM.O-give.PFV-3SG.M.R.PFV-REAL-2SG.SBJ=Q**  
 ‘To whom did you give the book?’
- (39) *naka=e fâtnamin dol-ub<sup>^</sup>-a-n-eb=e?*<sup>14</sup>  
 man=SG.M what **PL.AN.O-give.PFV-3SG.M.R.PFV-REAL-2SG.SBJ=Q**  
 ‘What did you give to the man?’
- (40) *wanêta a-teme<sup>^</sup>-b-eb=e?*  
 who.SG.M **3SG.M.O-see.IPFV-IPFV-2SG.SBJ=Q**  
 ‘Who were you looking at?’

To sum up this section on behavioural properties, all tests show neutral alignment for Mian, with the exception of reciprocalization, which is secundative.

<sup>13</sup>The reciprocal construction with *-sese* probably originated in a tri-partite clause chaining construction of the template (Fedden in prep): her.o-see-DS-he.sbj || him.o-see-DS-she.sbj || they are (there) → ‘they see each other’, consisting of two medial verbs with the DS.Seq suffix *-s* followed by a subject suffix, fossilized in the 3sg.m, and an existential verb which cross-references the whole set of reciprocants. An alternative way of describing the ‘giving’-event in (37) is *īnaminnamino oyêense oyêense bliobe*. This is what Evans (2004) calls a unified *zigzag* reciprocal and is very similar to what Roberts (1978) and Haiman (1980) describe for the Papuan languages Amele and Hua, respectively.

<sup>14</sup>The use of the CP *dol-* ‘plural animate object’ in this example does not entail that the referent of the object is animate and plural. Rather it is used as a default form in constituent questions about the object, i.e. when the identity of the object referent is unknown and queried.

### 3.3. Semantic spectrum of the recipient suffix

In this section I examine the range of semantic roles that can be mapped onto the recipient suffix. For the basic ditransitives *-ub<sup>^</sup>*- ‘give (PFV)’, *-ka-* ‘give (IPFV)’, and *-Ø<sup>^</sup>*- ‘give (PFV)’, the role mapped onto this suffix is always the recipient, but in ‘give’-serializations and directly inflected forms in the imperfective (cf. section 1.6) the range of possible roles is much larger. Apart from the recipient, e.g. in ‘send to’ or ‘show to’ (cf. section 1.5), one also finds:

- Benefactive/malefactive (e.g. ‘cook for’)
- Goal of verbs of ballistic motion (e.g. ‘throw to’)
- Malefactive source (e.g. ‘steal from’)
- Possessor (e.g. ‘hear my words’)

A very common semantic role of the additional participant is the benefactive, as in example (41) and (42):

(41) *imen=o fu-ke-b-i=be*  
 taro=PL.N1 cook-2SG.R-IPFV-1SG.SBJ=DECL  
 ‘I’m cooking taro for you.’

(42) *éil=e mak=e*  
 pig=SG.M other=SG.M  
*a-na-ub<sup>^</sup>-e-Ø-ib=a*  
 3SG.M.O-kill.PFV-give.PFV-PL.AN.R.PFV-DS.SEQ-2/3PL.AN.SBJ=MED  
 ‘They<sub>l</sub> killed another pig for them<sub>k</sub>, and then they<sub>k</sub> ...’ [Mianmin and Telefomin history, 085]

Depending on the semantic-pragmatic context, a malefactive interpretation may also be possible, so the sentence in (42) could also mean ‘They killed another pig on them, i.e. against their will’. An example for a malefactive whose interpretation as such is not dependent on context is given in (43):

(43) *miantén awél=i yē*  
 Mian\_people father=PL.AN there  
*fote-(u)b<sup>^</sup>-e-Ø-ib=a*  
 rout-give.IPFV-PL.AN.R.PFV-DS.SEQ-2/3PL.AN.SBJ=DECL  
 ‘They (i.e. the Telefomin people) routed the Mianmin fathers there, and then the Mianmin...’ [Mianmin and Telefomin history, 065]

It is quite common for the roles of possessor and benefactive/malefactive to be mapped onto the same argument of the verb, as in the following example:

(44) *ulêta kwéit*  
 who.SG.M sugar\_cane  
*bal(o)-ut<sup>^</sup>-ne-n-e-bio=e?*  
 break\_off.SG.O.PFV-give.PFV-1SG.R.PFV-REAL-3SG.M.SBJ-GPST=Q

‘Who broke off (some of) my sugar cane?’ [Unangkliten story, 017]

A clearer example of a possessor marked with a suffix on the verb *-ub<sup>^</sup>-* ‘give’, which in turn is in a nuclear serialization with another verb, follows suit. Possession can be indicated with an object suffix and an optional possessive pronoun, as in (45):

- (45) (nē) wéng=o went-ut<sup>^</sup>-ne-n-al=e!  
 (my) talk=N2 hear.PFV-give.PFV-1SG.R.PFV-AUX.PFV-2SG.SBJ.HORT=HORT

‘(You should) mark my words!’

While recipients and benefactives/malefactives are obligatorily marked on the verb with a suffix, possessor raising is optional. It is also possible to have a possessive pronoun without the object suffix cross-referencing the possessor:

- (46) nē wéng=o wentê-n-al=e!  
 my talk=N2 hear.PFV-AUX.PFV-2SG.SBJ.HORT=HORT  
 ‘(You should) mark my words!’

The malefactive source is a role associated with verbs like ‘steal’. The verb in the following example (47) is not strictly a mono-lexemic trivalent verb but a serial verb construction in which the subject is only marked on the final verb:

- (47) ī ayók ol-êi-(u)t-ne  
 they secretly PL.RESID.O-pick\_up.PFV-give.PFV-1SG.R.PFV  
 un-Ø-io=be  
 go.PFV-REAL-2/3PL.AN.SBJ=DECL  
 ‘They have stolen things from me.’ (Lit. ‘They have secretly picked up things from me and gone.’)

For verbs of ballistic motion, the goal can be encoded with an object suffix. An example is provided for *-bià* ‘throw (PFV)’:

- (48) memâlo naka=e aful=e ob-ò-n-e=a  
 now man=SG.M ball=SG.N1 SG.RESID.O-get.PFV-SEQ-3SG.M.SBJ=MED  
 unáng=o ob-bià-(u)b<sup>^</sup>-o-n-e=a  
 woman=SG.F 3SG.RESID.O-throw.PFV-give.PFV-3SG.F.R.PFV-SEQ-3SG.M.SBJ=MED  
 ‘Now the man gets the ball and throws it to the woman, and then...’ [Ö. Dahl’s questionnaire, B8 (Dahl 1985)]

The interpretation of an entity as a goal (in this example *unáng* ‘woman’) towards which an event is directed is only possible with verbs of ballistic motion, not with motion verbs in general, thus:

- (49) *un-ub<sup>^</sup>-ke-n-amab-i=be*  
 go.PFV-give.PFV-2SG.R.PFV-AUX.PFV-IRR.NANPL.SBJ-1SG.SBJ=DECL  
 ‘I will go for you.’  
 BUT \*‘I’ll go to you.’

Here, the object suffix *-ke* can only be interpreted as a benefactive, or possibly malefactive (e.g. ‘go against your will’), but not as a goal.

The only other role that can ever be mapped on the suffix is that of the experiencer of an event. This however does not happen with ditransitives. A transitive example is provided in (50):

- (50) *al=o*            *yē*        *tli-a-ub<sup>^</sup>-e-n-o=ta*  
 intestines=N2    there    chew.PFV-give.PFV-PL.AN.O.PFV-SEQ-N2.SBJ=MED  
 ‘they were angry (there) and then...’ (Lit. ‘their intestines were chewing on them’) [Mianmin and Telefomin history, 029]

#### 4. Why does Mian show triple agreement and indirective indexing in ditransitives?

It has been noted by Foley (2000: 379) that Papuan languages with bound pronominal affixes for both subject and object typically show secundative (also termed nominative-dative) alignment, for example in Usan (Reesink 1987), patients and recipients are encoded by a verbal prefix: e.g. *narau ye-s-a* [betelnut 1SG.OBJ-give-3SG.SBJ] ‘he gave me betelnut’ and *ye-su-a* [1SG.OBJ-cut-3SG.SBJ] ‘he cut me’.

We have seen that Mian and also Telefol do not conform to this observed pattern. Both languages show indirective indexing with a prefix for theme and patient and a suffix for the recipient. In the following section, I will propose an account of how this differential behaviour might be explained and at the same time shed some light on the question why Mian has recipient suffixes rather than prefixes in the first place.

Foley (2000: 377) observes that TNG languages typically have an object prefix and a subject suffix. He goes on to show how in geographically widely separate TNG languages the object prefix has become a suffix. In the following I will sketch his argument (cf. Foley 2000: 139, Foley 1986: 377f.). In many TNG languages, object prefixes are restricted to a small number of verbs. In all other cases, inflection for object is only possible by means of an auxiliary bearing the object prefix. The range of such auxiliary verbs typically includes ‘give’, ‘hit’, ‘see’, ‘do’ and ‘put’, which are often also used as independent verbs. The inflected auxiliary is then compounded with the verb stem, yielding the structure:

- (51) V+OBJ-AUX-SBJ

In some languages, verbs can go with more than one auxiliary, so that semantic distinctions are possible (e.g. Dani). In other languages (e.g. Selepet), the auxiliary has undergone some semantic bleaching. Different verbs can still have different auxiliaries, but now the collocation is fixed in that any given verb can only occur with a single one from the set of auxiliaries. In a final stage, all contrasts in the auxiliary are neutralized, auxiliary and object prefix lose their status as separate morphemes and the phonological content of the auxiliary plus object prefix becomes a simple marker of transitivity (as e.g. in Una and Asmat). So eventually, we arrive at the contracted structure:

(52) V-OBJ<sup>15</sup>-SBJ

A good starting point for the following discussion of the role of such auxiliaries in Mian is to examine the various sets of object and recipient affixes employed in Mian transitive and ditransitive verbs. Table 7 is a synopsis of the affix sets.

Table 7: Synopsis of all bound pronominal object and recipient affix sets

	Object prefixes	Object prefixes for 'hit, kill (PFV)'	Object prefixes for '-e hit (IPFV)'	Recipient suffixes for '-ka- give (IPFV)'	Recipient suffixes (aug- mented) for '-Ø ^- give (PFV)'	Recipient suffixes for '-ub ^- 'give (PFV)'
1SG	<i>na-</i>	<i>na-</i>	<i>n-</i>	<i>-ne</i>	<i>-nen</i>	<i>-ne(n)</i>
2SG	<i>ka-</i>	<i>ka-</i>	<i>k-</i>	<i>-ke</i>	<i>-ken</i>	<i>-ke(n)</i>
3SG M	<i>a-</i>	<i>a-</i>	<i>(h)a-e</i> [>(h)a-] <sup>16</sup>	<i>-ha</i>	<i>-an</i>	<i>-a(n)</i>
3SG F	<i>wa-</i>	<i>wa- ~ u-</i>	<i>w-</i>	<i>-we</i>	<i>-wen</i>	<i>-o(n)</i>
PL AN	<i>ya-</i>	<i>ya- ~ i-</i>	<i>y-</i>	<i>-ye</i>	<i>-yen</i>	<i>-e(n)</i>

Not only are all of these sets phonologically very similar, they also show clear reflexes of proto-TNG bound pronominals, namely *\*n-* for 1SG, *\*k-* for 2SG (Foley 2000: 362; Ross 2005: 32). A look at the formal similarities between prefix and suffix forms in Mian makes it immediately obvious that it is worthwhile pursuing Foley's claim for the discussion of Mian ditransitives.

The small number of contemporary Mian verbs that can be inflected for an object directly are: *-tem* 'see (PFV)'/ *-teme* 'see (IPFV)', *-na* 'hit, kill (PFV)'/ *-e* 'hit, kill (IPFV)', *-lô* 'hit, kill (PFV)', *-fu* 'grab (PFV)', and *-ntama* 'bite (PFV)'. Let's assume following

<sup>15</sup>In such a verb structure, the erstwhile auxiliary can still be present phonologically but it lost its semantic contrastiveness entirely.



Foley that historically *ub*^ ‘give (PFV)’ and *ka* ‘put (IPFV)’, had to rely on an auxiliary, which carried the object prefix. It is important to bear in mind that in contemporary Mian both *ub*^ ‘give (PFV)’ and *ka* ‘put (IPFV)’ obligatorily index the theme with CPs, which have forms for all persons and numbers. Therefore it might be somewhat counterintuitive that these verbs should need an auxiliary for object inflection. Let’s assume however, for the time being, that the incorporation of these classificatory morphemes into the verb complex as prefixes is a more recent development and that these forms used to be independent classificatory morphemes immediately preceding the verb-auxiliary complex.

Of special relevance to my argument are the *n*-augmented recipient forms, which one only finds with *-Ø*^ ‘give (PFV)’ (cf. table 7 above). These forms are synchronically suspicious because there is additional phonological material involved, namely /n/, which the other series lack.

I propose that Mian had a historical, transitive verb *\*-n*, possibly meaning ‘give’, which showed secundative indexing similar to Usan, in that its prefix referred to the recipient argument. This analysis gives us the following object-inflected forms (which are all hypothetical, i.e. not attested in present-day Mian, and thus marked \*). I assume that *\*-n* used to be an independent verb with the following object-inflected forms:

## (53) Prefix ‘give’

- |    |             |   |          |                       |
|----|-------------|---|----------|-----------------------|
| a. | <i>*ne-</i> | } | <i>n</i> | ‘give to me’          |
| b. | <i>*ke-</i> |   |          | ‘give to you’         |
| c. | <i>*ba-</i> |   |          | ‘give to him’         |
| d. | <i>*we-</i> |   |          | ‘give to her’         |
| e. | <i>*ye-</i> |   |          | ‘give to us/you/them’ |

Contrast these with *-e* ‘hit (IPFV)’, which is still attested in contemporary Mian. The forms for all patients are given in (54) and an example sentence is provided in (55):

## (54) Prefix ‘hit’

- |    |              |   |          |                   |                            |
|----|--------------|---|----------|-------------------|----------------------------|
| a. | <i>ne-</i>   | } | <i>e</i> | [> <i>(h)a-</i> ] | ‘(be) hitting me’          |
| b. | <i>ke-</i>   |   |          |                   | ‘(be) hitting you’         |
| c. | <i>(h)a-</i> |   |          |                   | ‘(be) hitting him’         |
| d. | <i>we-</i>   |   |          |                   | ‘(be) hitting her’         |
| e. | <i>ye-</i>   |   |          |                   | ‘(be) hitting us/you/them’ |

- (55)  $\bar{e}$  *naka=i* *y-e-b-e=be*  
 he man=PL.AN **PL.AN.O**-hit.IPFV-IPFV-**3SG.M.SBJ**=DECL  
 ‘He’s hitting the men.’

If this was the original situation, Mian—like Usan—used to have secundative indexing in ditransitives. Both recipients and patients were encoded by a verbal prefix.

The next step in the argument is that both *\*-n* ‘give’ and *-e* ‘hit’ were used as auxiliaries bearing object prefixes for other verbs, which could not be directly inflected for an object. The semantic distinction between these two auxiliaries was most likely an aspectual one, *\*-n* ‘give’ was used in the perfective and *-e* ‘hit’ in the imperfective. Now it appears peculiar that a verb meaning ‘hit’ should be used as an auxiliary in the imperfective. My assumption might become more plausible though if one remembers that *-e* is the imperfective stem of ‘hit’, and thus its meaning is ‘be hitting’ rather than ‘hit’.

If the auxiliary *-e* ‘hit (IPFV)’ was the bearer of the object prefix in the imperfective, we arrive at the following hypothetical structure:

- (56) \* *ka+n-e-b-e=be*  
 give.IPFV+1SG.O-hit.AUX-IPFV-3SG.M.SBJ=DECL  
 ‘He’s giving to me.’

According to Foley’s proposed prefix-to-suffix scenario in several TNG languages, the sequence *prefix-e* was at some point reanalysed as the recipient suffix, e.g. for the 1st singular *+n-e* became *-ne*. The perfective verb root *ub<sup>^</sup>* ‘give (PFV)’ required the auxiliary *\*-n* to carry the object prefix, yielding the hypothetical verb-auxiliary compound in (57):

- (57) \* *ub+ne-n-n-ebo=be*  
 give+1SG.O-give.AUX-REAL-2SG.SBJ=DECL  
 ‘You gave to me.’

The sequence *prefix-/n/* was at some point reanalysed as the recipient suffix, e.g. for the 1st singular *+ne-n* became *-nen*.

There is a clear reflex of *\*-n* in the recipient forms used with *-Ø<sup>^</sup>*- ‘give (PFV)’, which becomes apparent when it is followed by either *-s* ‘Remote past’ (58) or *-bH* ‘Non-hodiernal past’ (59):

- (58) *monî=o om-Ø<sup>^</sup>-an-s-i=be*  
 money=N2 3SG.FEM.O-give.PFV-3SG.M.R.PFV-RPST-1SG.SBJ=DECL  
 ‘I gave money to him (a long time ago).’
- (59) *monî=o om-Ø<sup>^</sup>-an-bH-i=be*  
 money=N2 3SG.FEM.O-give.PFV-3SG.M.R.PFV-NHODPST-1SG.SBJ=DECL  
 ‘I gave money to him (but not today).’

All other TAM markers either start with */n/* or consist only of */n/*, in which case the final */n/* of the recipient suffix coalesces with the TAM marker.

The suffix forms used with *-ub<sup>h</sup>*- ‘give (PFV)’ differ in some respects from those used with *-Ø<sup>h</sup>*- ‘give (PFV)’. First, the unaugmented series is usually used, i.e. the forms without /n/ *-ne*, *-ke*, etc. For example:

- (60) *moni=o om-ub<sup>h</sup>-a-s-i=be / \*om-ub<sup>h</sup>-an-s-i=be*  
 money=N2 **3SG.FEM.O-give.PFV-3SG.M.R.PFV-RPST-1SG.SBJ=DECL**  
 ‘I gave money to him (a long time ago).’

Before *-bH* ‘Non-hodiernal past’, however, the *n*-augmented forms *-nen*, *-ken*, etc. are also found:

- (61) *moni=o om-ub<sup>h</sup>-an-bH-i=be*  
 OR *om-ub<sup>h</sup>-a-bH-i=be*  
 money=N2 **3SG.FEM.O-give.PFV-3SG.M.R.PFV-NHODPST-1SG.SBJ=DECL**  
 ‘I gave money to him (but not today).’

Although the evidence is limited, I am inclined to interpret this extra /n/ as a reflex of *\*-n* ‘give’, especially because the language does not show word-internal prenasalization.

Second, three of the recipient suffixes of *-ub<sup>h</sup>*- ‘give (PFV)’ involve some morpheme-initial phonological variation. The problematic formatives, which do not conform to the usual CV recipient affix pattern, are the 3SG forms *-a* and *-o*, and the animate plural form *-e*. It is my conjecture that in the process of becoming recipient suffixes, these three forms lost their initial consonant (with some further phonological change in the case of *-o*):

- (62) a. *\*ub-ha* > *ub-a* ‘give to him’  
 b. *\*ub-we* > *ub-o* ‘give to her’  
 c. *\*ub-ye* > *ub-e* ‘give to us/you/them’

The suffixes for 1st and 2<sup>nd</sup> singular, *-ne* and *-ke*, on the other hand, kept /n/ and /k/, respectively. I consider this a plausible scenario because /h/ and the glides /w/ and /y/ would have been more prone to elision than the nasal /n/ or the plosive /k/.

To sum up, with the completion of the reanalysis of the erstwhile prefixes into suffixes, the alignment patterns in Mian ditransitives had changed from secundative to indirective. While the five transitive verbs that could be directly inflected with an object prefix still had this prefix indexing the patient, the ones that required an auxiliary to bear the object prefix now had recipient suffixes.

So far I have assumed that during the process of prefix-to-suffix reanalysis the CPs of present-day Mian were independent classificatory morphemes. We now need an account of how these morphemes were incorporated as (new) prefixes to explain the structure of contemporary forms, such as (63):

- (63) *om-ub<sup>^</sup>-a-n-i=be*  
 3SG.FEM.O-give.PFV-3SG.M.R.PFV-REAL-1SG.SBJ=DECL  
 'I gave it (of the FEM class) to him.'

At this stage of the research the etymology of the CPs remains unclear. The fact that none of the other Ok languages have been reported to have such a series of CPs makes the elucidation of their origin in Mian especially difficult.

However, a system of CPs has been described for the Sepik language Waris by Brown (1981). Seiler (1983) argues that first elements in former verb serializations were reanalyzed as CPs. On a similar phenomenon in the Sepik language Imonda, see Seiler (1985). The etymology of the Waris CPs is still transparent in many cases because the verbal etymons of the CPs continue to be used as independent verbs; e.g.: CP *put-* 'spherical objects, fruit' vs. independent verb *puetv-* 'pick fruit'.

The reanalysis scenario proposed by Seiler is hard to prove for Mian because almost none of the Mian CPs can synchronically be traced back to any lexical category, verb or otherwise<sup>17</sup>. Nonetheless, it seems plausible that the Mian CPs used to be independent classificatory morphemes which immediately preceded the verb and at some point were incorporated into the verb as new prefixes indexing patients in mono-transitives and themes in ditransitives. Once that happened, the change from secundative to indirective indexing was complete.

## 5. Summary and conclusion

Underived ditransitives (*-ub<sup>^</sup>-* 'give (PFV)', *-ka-* 'give (ipfv)', and *-Ø<sup>^</sup>-* 'give (PFV)') show the following morphosyntactic features. They have triple agreement with a prefix for the theme and a suffix for both the subject and the recipient. They show neutral flagging and indirective indexing. As in many other TNG languages, 'give' is used in serializations with other verbs as a valency increasing, applicative-like device to introduce another participant into the argument structure of the verb. In Mian, this only happens in the perfective. In the imperfective, all ditransitive verbs are inflected directly for the recipient.

There are no differences in syntactic behaviour between underived and derived ditransitives. In all syntactic tests except reciprocalization, which has a secundative pattern, the patterns are neutral. Anything one can do with the theme object one can also do with the recipient object. The range of semantic roles which can be mapped onto the recipient suffix in derived ditransitives includes benefactives/malefactives, goals, and possessors.

<sup>17</sup>The only exception is the CP *gam-* for singular covering objects, such as blankets, clothes or floor boards, which might be related to the postpositional clitic *=gam* 'covered with', e.g. *klō=gam* [ring-worm=covered\_with] 'covered with ringworm'.

Triple agreement in Mian is possibly the result of a prefix-to-suffix reanalysis, in which the prefixes of erstwhile auxiliaries, necessary for bearing object inflection, which worked on a secundative basis, were reanalysed as recipient suffixes, leading to triple agreement and indirective indexing in contemporary Mian.

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## Special abbreviations

AN	Animate
DS	Different subject
GPST	General past
IMM	Immediate
LONG	Long class
MAL	Malefactive
MED	Medial
N1	Neuter 1
N2	Neuter 2
NANPL	Non-animate plural
NHODPST	Non-hodiernal past
POSS	Possessor
PQ	Polar question
REAL	Realis
RESID	Residue class
RPST	Remote past
SIM	Simultaneous
SS	Same subject

### Tone:

L	unmarked
H	ā
LH	á
HL	à
LHL	â

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