

Bound noun plus verb combinations in Mano¹

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1. Introduction

This paper addresses bounded versus free noun plus verb combinations in Mano, a South Mande language, through a detailed study of phonology, morphology, syntax, and semantics.

Bounded noun plus verb combinations have been studied under many different labels, including “idioms”, “compounding”, “noun incorporation”, “quasi-incorporation”, “pseudo-incorporation”, and “complex predicates”. Studies of idioms often focus on the semantic non-compositionality of N+V combinations (Singer 2011), while studies in compounding focus on the evidence in favor of or against the definition of specific N+V combinations as single words (Scalise & Vogel 2010). As well, studies in noun incorporation typically focus on instances where the compound status of N+V combinations is relatively unproblematic. The issue, then, becomes the underlying process leading to the morphosyntactic bonding of the combination: whether it should be considered a lexical (derivational) or a syntactic process (Sadock 1986; Geenhoven 2002; Haugen 2008; Mithun 1984, 1986). If evidence for the morphosyntactic bond in a particular language is controversial, then the term “quasi-” or “pseudo-incorporation” becomes privileged (Massam 2001; Booij 2010; Borik & Gerhke 2015; Grossman ms.). If incorporation is conferred solely as a result of the loss of an argument status with no additional morphological evidence, then the term “syntactic incorporation” is used (Haig 2002). Several studies, additionally, use the terms “compounding” and “incorporation” interchangeably (Booij 2010). Finally, the term “complex predicates” is often used to cover a variety of issues, including morphology, syntax, and semantics regarding N+V combinations (Haig 2002). For these reasons, I will largely privilege the most neutral term, N+V combination, and only occasionally will use the term

¹ I would like to thank the two anonymous reviewers whose valuable suggestions helped me to restructure my argumentation. I am grateful to Pe Mamy for his patience with our work on the questionnaires and wordlists. Finally, I would like to thank the Fyssen Foundation and William F. Hanks who supported the present research.

“compound” when there are reasons to argue that a specific type of N+V combination does not have all the properties of a free combination including a verb with its direct object NP.

The paper begins with an exposition of basic facts about Mano (Section 2) that is followed by an exploration of different criteria suggested in the literature to distinguish compounding from the free combination of lexemes and their application to the Mano language. The Mano data used for the paper is drawn from the author’s field notes. Section 3 focuses on phonology and morphology, Section 4 on morphosyntax, Section 5 on semantics, and Section 6 on argument structure; Section 7 will offer a conclusion on these topics.

2. Basic facts about Mano and N+V combinations

Mano is a South Mande language spoken by approximately 400,000 people in Guinea and Liberia.

In Mano, tense, aspect, modality, and polarity are expressed primarily in an auxiliary, which also indexes the subject’s person and number. In the examples (1) and (3-5) below, *āà* is a third-person sg. auxiliary of the perfect series. Similarly, *lèé* in example (2), is a third-person sg. auxiliary of the negative series.

- (1) *Kòó āà ló.*
PN 3SG.PRF go
‘Ko has left’.
- (2) *Pèé lèé nū néj.*
PN 3SG.NEG come yet
‘Pe has not come yet’.

The word order is SOV, as in other Mande languages.

- (3) *Kòó āà wì ló.*
PN 3SG.PRF meat buy
‘Ko has bought some meat’.

Mano is a zero-subject language.

- (4) *Āà ló.*
3SG.PRF go
‘(S)he has left’.

There is no passive or other detransitivizing morphology; intransitive constructions, where the verb does not bear additional morphology, can be used in anticausative and even passive functions (passive lability).

- (5) *Wì āà ló.*
meat 3SG.PRF buy

‘The meat was bought’.

A typical N+V combination in Mano would be the following: *gbóó* is a noun meaning ‘sobbing’. Together with the light verb *bō* ‘implement’, it forms the complex verb *gbóó bō* ‘sob’.

- (6) \bar{E} *gbóó* *bō*.
 3SG.PST **sobbing** **implement**
 ‘(S)he sobbed’.

In the combination *yí bō*, *yí* means ‘interior’, but the overall combination means ‘explain, to tell (a story)’, selecting a direct object.

- (7) \bar{E} *pīà* *yí* *bō*.
 3SG.PST story **interior** **implement**
 ‘(S)he told a story’.²

3. Phonological and morphological criteria

Several types of criteria are suggested in the literature that can distinguish compounds from free lexeme combinations (Lieber & Štekauer 2009; Aikhenvald 2007): (1) phonological, (2) morphological, (3) morphosyntactic, and (4) semantic. In the ensuing section, I will specifically review phonological and morphological criteria; morphosyntax and semantics will be reviewed in the subsequent sections.

3.1. Phonological criteria

Phonology and the notion of prosodic words are often evoked as criteria for delimiting words, including N+V compounds. In the Manding group of the Mande family, compounding (including N+V compounding) is often accompanied by the rules of tonal compactness where a certain tonal pattern encompasses a combination of words, often neutralizing the lexical tone of the right constituent. In the Mandinka example (8a), *jìò*, the definite form of the noun *jíí* ‘water’, does not form a compound with the verb *bòŋ* ‘pour’, therefore, the latter maintains its lexical tone. In (8b), by contrast, *jíí-bóŋ* ‘water-pour’ is a compound characterized by tonal compactness as the verb changes its lexical tone to high.

² In this paper, I analyze only the N+V combinations where the nominal part directly precedes the verb; however, there exists a large class of N+V idiomatic expressions where the noun and the verb are separated by an auxiliary. For the sake of simplicity, these constructions will not be analyzed in this paper:

\dot{A} \check{f} $\bar{a}\grave{a}$ $d\bar{o}$.
 3SG tiredness 3SG.PRF stop

‘He has had a rest’ (literal translation: ‘his tiredness has stopped’).

(8a) *À yé jí-ò bòŋ.*
 he AUX water-DEF pour
 ‘He poured the water’.

(8b) *À yé dândàŋ-ò jíí-bóŋ.*
 he AUX garden-DEF **water-pour**
 ‘He watered the garden’ (Creissels & Jatta 1981: 35).

In Mano, the rules of tonal compactness do not apply: there are no supralexic tonal patterns present in the language.

3.2. Morphological criteria

Several morphological processes can accompany compounding, including the loss of nominal inflection as in the example (8b) above. As well, the placement of verbal morphemes can serve as a criterion. In the example (9a) from Kusaiean, Micronesian, the perfect marker *-læ* is suffixed to the verbal stem and, thus, placed before the direct object. In (9b), the object is part of a compound, so the marker follows the nominal stem:

(9a) *Nga ɔl-læ nuknuk ε.*
 1SG wash-PRF clothes DEF
 ‘I washed the clothes’.

(9b) *Nga owo nuknuk-læ.*
 1SG **wash clothes-PRF**
 ‘I clothes-washed’ (Sugita 1973).

In the Kla-Dan language, Mande, the position of the causative prefix *lé-* distinguishes free NP+V combinations. In example (10), it precedes the verbal stem from compounds, and in example (11), it precedes the nominal part.

(10) *Yùùfáàlè yàà zɔ́ɔ́ lé-dàà-ká.*
 P.N. 3SG.EXI>3SG younger.sibling PRF-learn-INF
 ‘Yufale teaches his younger brother/sister’ (Makeeva 2012: 145).

(11) *Dùr bĩ̀ dò yà à lé-gúú-lièé bɔ̀ lí*
 sorcery person:CS one 3SG.PRF 3SG **CAUS-interior-turn** mouse child
gúú.
 in

‘A magician transformed him into a mouse’ (Makeeva 2012: 173).

A more interesting morphological criterion in Kla-Dan is verbal reduplication. In Kla-Dan, verbs can undergo reduplication, thus acquiring the distributive meaning. In NP+V combinations, like in example (12), it is only the verb that undergoes

reduplication. Though in some N+V combinations, it is either the N or V separately, or the whole N+V combination, that may undergo reduplication, as in example (13).

- (12a) *ŋ̃6ǎ dũ yà l̃ kpó.*
 1SG.POSS cow 3SG.PRF child give.birth

‘My cow delivered’.

- (12b) *ŋ̃6ǎ dũ yà l̃ kpókpó.*
 1SG cow 3SG.PRF child give.birth~DISTR

‘My cow delivered several times’ (Makeeva 2012: 156).

- (13a) *B̃ yà zò b̃ tòtǎǎ l̃ ká.*
 person 3SG.PRF **heart wake.up** story PL with

‘A person recalled several stories’.

- (13b) *B̃ l̃ wà zò-b̃-b̃ ~ zò-b̃-zò-b̃ ~ zò-zò-b̃*
 person PL 3PL.PRF **heart-wake.up~DISTR**

tòtǎǎ l̃ ká.

story PL with

‘Every person recalled several stories each’ (Makeeva 2012: 172).

Transitive and intransitive morphology can serve as evidence for compounding. In the Kusaiean example (13) above, two verbal stems for ‘wash’ are used: transitive *ɔ* and intransitive *owó*. The intransitive stem is used when the noun is part of a N+V compound while the transitive stem is used when the direct object is expressed by a full noun phrase with definite marking.

Case manipulation is an additional criterion to be considered. In the example (14a) below from Chukchee, Chukotko-Kamchatkan, the verb is transitive and has two arguments: the agent in ergative and the theme in the absolutive case. In (14b), the object is part of a compound, the verb becomes intransitive, and there is only one argument, which is in the absolutive case.

- (14a) *Tumg-e n-antəwat-ən kupre-n.*
 friend-ERG 3PL.ERG-set-3SG.ABS.AOR net-ABS

‘The friends set the net’.

- (14b) *Tumg-ət kupr-antəwat-gʷat.*
 friend-ABS.PL **net-set-3PL.ABS.AOR**

‘The friends were net-setting’ (Comrie 1978; Foley 2007: 437).

In Mano, the placement of verbal morphemes does not serve as a criterion distinguishing compounds from free NP+V combinations. Verbal reduplication is not attested; all verbal inflectional affixes are suffixed. Further, they are not sensitive to

the presence of a nominal complement. In fact, there is no transitive or intransitive morphology.

To conclude, there is no phonological or straightforward morphological evidence of bounded N+V combinations in Mano.

4. Morphosyntax of N+V combinations

Three additional morphosyntactic criteria are suggested in the literature on compounding: the No Phrase Constraint; the Lexical Integrity Hypothesis; and the extent to which nouns and verbs are separable.

4.1. No Phrase Constraint

According to the No Phrase Constraint, word formation rules cannot take syntactically complex units as input (Botha 1981). Therefore, it is expected that compounds should not be formed from syntactic phrases, such as the English **story and legend telling*. Yet compounds with syntactically complex constituents are documented across languages, including in English, *berry and mushroom picking*. In Kapampangan, Austronesian, incorporated nominal components of the N+V combinations do not have case marking and are not indexed on the verb, which in turn is not marked for transitivity, in contrast with the free NP + V combinations. Instead, the incorporated nominals are linked to the verb by the linker =ng.³ In the example below, the first token of the linker =ng links the verb and a coordinated construction, *tahadang mani at letsi plan* ‘peanut brittle and milk flan’. The coordinate structure is being incorporated in violation of the No Phrase Constraint:

- (15) *Gawa = la = ng tahada = ng mani at letsi plan.*
 will.make=3PL.ABS=LK brittle=LK peanut and milk flan
 ‘They’ll make peanut brittle and milk flan’ (Mithun 2010: 45).

In parallel to Kapampangan, in Mano, components of N+V combinations, even highly idiomatical ones, can be coordinated. So *gbóó* and *yí*, in examples (6) and (7), can as well be coordinated; therefore, the verb can form a combination with a complex nominal structure:⁴

- (16) *Ē p̄l̄à yí wà gbóó ō bō.*
 3SG.PST story interior and sobbing 3PL Implement
 ‘(S)he explained a story and sobbed’.

³In Kapampangan, constituents of a phrase are typically linked by the enclitic =ng. In example (15), the second token of the enclitic =ng forms a nominal compound *tahadang mani* ‘peanut brittle’.

⁴When direct objects are coordinated, they are usually followed by a dummy 3PL pronoun *ō*.

- (17) \bar{O} *gbìnìlà wà gèlè* \bar{o} $g\bar{o}$.
 3PL.PRET **hiding and war** 3PL fight
 ‘They hid and started a war’.

In rare cases, however, the coordination is not accepted:

- (18) **Là sàā wà à fī wāā jē*.
 3SG.POSS **work and 3SG tiredness** 3PL.PRF finish

Intended meaning: ‘His work was done and he was tired’ (literal translation: ‘his work and his tiredness finished’).

Typically, the coordination is not accepted when one of the N+V combinations also governs some obligatory post-verbal element. As such, the coordinated structure requires that this element be shared by both combinations while it semantically belongs only to one. It may be this conflict that leads to the ungrammaticality of the following example:

- (19) * \bar{I} \bar{i} *fāá wà* \bar{i} *kò wàà kpòò yí*.
 2SG.PRET **2SG force and 2SG hand** enter box in

Intended meaning: ‘You took the courage and put your hand in the box’.

Indeed, the expression ‘take the courage in the box’ does not make much sense, which is why the sentence was ruled out as ungrammatical.

4.2 Lexical Integrity Hypothesis

According to the Lexical Integrity Hypothesis, parts of words cannot serve as referents for subsequent pronouns (Bresnan & Mchombo 1995). Thus, in English, one cannot say **I went berry-picking and picked a lot of them*. However, in Kapampangan, a linked nominal can serve as the antecedent of a pronominal.

- (20) *Kuma = la = ng mitsa, sindian = de*.
 get=3PL.ABS=LK **wick** ignite=3PL/3SG
 ‘They will get a wick and ignite it’ (Mithun 2010: 48).

In the example above, the noun *mitsa* ‘wick’ is incorporated, which is indicated by the presence of the linker =*ng* on the verb; however, this noun also serves as the antecedent to the third-person pronominal clitic =*de* on the verb *sindian* ‘to ignite’.

In Mano, the nominal part of a N+V combination can be pronominalized, which is a violation of the Lexical Integrity Hypothesis. In example (21a), *gbóó* ‘sobbing’ serves as the antecedent for the pronoun in example (21b), and this pronoun is incorporated in the portmanteau form of the auxiliary:

- (21a) \bar{E} *gbóó* $b\bar{o}\bar{o}$?
 3SG.PST sobbing implement.Q

‘Did she sob?’ (literal translation: ‘did she implement sobbing?’)

(21b) *Ìṣṣ, ā bō.*
 yes 3SG.PST>3SG **implement**

‘Yes, she did’ (literal translation: ‘yes, she implemented it’).

Other examples of combinations where this criterion worked include: *báà bō* ‘slander’, *bàlà sí* ‘run’.

The only N+V combination where the criterion did not work among my samples was *fíé kē* ‘be lazy’.

4.3. (Non)-continuity of the combination

A final piece of evidence suggesting the morphosyntactic bond between the components of the N+V combination is the elements’ abilities to separate. In Dutch, nouns can be incorporated into N+V compounds, and the characteristic feature of such nouns is the loss of definiteness marking. In the *aan het* infinitive constructions, however, nominal and verbal parts can optionally be separated. Such is the case for the N+V combination *piano spelen* ‘to play the piano’:

(22) *Jan is [piano aan het spel-en/aan het piano spel-en]*
 John is [**piano** at the **play-INF**/at the **piano play-INF**]
 ‘John is playing the piano’ (Booij 2010: 100).

In Mano, parts of the N+V combination are systematically detachable. In example (23), *gbóó* is relativized, extraposed to the left, as always happens in relativization (Khachaturyan 2014), and indexed in the portmanteau form of the 3SG auxiliary *ā*.

(23) *Gbóó ā bō ā ē kē bùò.*
sobbing.FOC 2SG.PST>3SG **implement** TOP 3SG.PST be big
 ‘The sobbing that she implemented was big’.

The same extraposition may happen in more idiomatic expressions, such as *yí bō* ‘explain’, as in example (24b). The relative clause in example (24) semantically functions like a complex clause with a cause-and-effect relation between the parts. In all the examples I tested, the extraposition was accepted.

(24a) *Pìà lé ā yí bō ā...*
 story FOC 3SG.PRF>3SG **interior** **implement** TOP

(24b) *Pìà yí lé ā bō ā...*
 story **interior** FOC 3SG.PRF>3SG **implement** TOP

‘Since she (already) explained this story (I have nothing to add)’ (literal translation: ‘the story that she explained’).

Ultimately, in Mano, components of the N+V combinations violate the morphosyntactic criterion distinguishing compounds from free combinations of lexemes. Nominal parts can coordinate, in violation of the No Phrase Constraint, and serve as antecedents of pronouns, in violation of the Lexical Integrity Hypothesis. Finally, nominal and verbal components are also systematically detachable in certain contexts.

5. Semantics of N+V combinations

The most common semantic criterion of compounding is of an idiomatic quality. This, however, is a scalar phenomenon as it does not directly split N+V combinations into two groups (Kavka 2009). Consider the following combinations in Mano; their idiomatic nature can be said to increase from top to bottom:

Scheme 1: Idiomaticity in Mano N+V combinations

sàṅ kē <work + do> ‘to work’

sṣṣ dṣ <tooth + put> ‘bite’

sà kē <disdain + do> ‘to disdain’

sà dṣ <disdain + put> ‘to prefer’

líé tó <edge + leave> ‘stop’

zò dṣ <heart + put> ‘trust’

The semantic non-compositionality of the N+V combinations was observed by V. Vydrin (2009) in his study of preverbs in Dan-Gweetaa, another South Mande language. The term “preverb” as I will use it corresponds to the nominal components of N+V combinations. The class of preverbs that Vydrin distinguished includes mainly elements homonymous to nouns with locative semantics and only some other elements in exceptional cases. Crucially, in Dan-Gweetaa, preverbs can be followed by various kinds of determinatives and adjectives whose scope is not limited to the preverb but extends to the whole preverb-verb combination:

(25a) *Gbàtò yà ṣ̄ bā dēbà t̄-kú.*
 P.N. 3SG.PRF 3SG.REFL POSS woman **surface-grasp**
 ‘Gbato helped his wife’.

(25b) *Ē bā dēbà t̄ d̄ ṣ̄ kú.*
 3SG.REFL POSS woman **surface** FOC 3SG.JNT-3SG **grasp.JNT**
 ‘It was helping his wife that he did’.

(25c) *Gbàtò yà ṣ̄ bā dēbà t̄ = d̄ kú.*
 P.N. 3SG.PRF 3SG.REFL POSS woman **surface=PL** **grasp**
 ‘Gbato helped his wife several times’.

(25d) *Gbàtò yà ṣ̄ bā dēbà t̄ bā à kú.*
 P.N. 3SG.PRF 3SG.REFL POSS woman **surface** ART 3SG **grasp**

‘Gbato helped his wife (in the affair and in the manner that were previously discussed)’ (Vydrin 2009: 77-78).

Example (25a) illustrates a typical verb with a “preverb”, which is homonymous to a spatial noun, *tā* ‘surface’, and the semantics of this combination is non-compositional, *tā kú* <surface + take> ‘help’. The verb and preverb are detached in (25b), which serves as an example of focalization with the determinative *dā*. Interestingly, when a preverb is followed by the plural marker *dū*, as in (25c), the scope of the marker encompasses the overall combination. The marker does not index nominal plurality but rather the multiplicative aspect: ‘help multiple times’. Similarly, the article *bā*, as in (25d), does not modify only the preverb but the whole combination, acquiring the meaning ‘provide that help’ or ‘help in that particular affair or in that particular manner’. According to Vydrin, the scope of the preverbal element’s modifiers determines whether a certain element should be considered a preverb.

N. Makeeva carefully studied the possibility for modifiers of N to be inserted into the N+V combinations as well as the semantic scope of these modifiers. Her study was based on material from the Kla-Dan language (Makeeva 2009). She found out that, in Kla-Dan, not all combinations of verbs with preverbal elements allow for the modifiers to be inserted; moreover, the scope of modifiers may vary for the exact same combination.

(26a) *Yà à báálá gð-dð.*
 3SG.PRF 3SG work **head-put**

‘He finished the work’.

(26b) *Yà à báálá gð dʒʒdʒʒ dð.*
 3SG.PRF 3SG work **head difficult put**

‘He finished a difficult part of the work’.

(26c) *Yà à báálá gð kʒʒlʒ dð.*
 3SG.PRF 3SG work **head short put**

‘He quickly finished the work’.

(26a) is a simple example of a verb with a preverb, *gð-dð* <head + put> ‘finish’. In (26b), an adjective *dʒʒdʒʒ* ‘difficult’ follows the preverb *gð*. As well, the adjective preserves its lexical meaning and does not extend over the whole combination. In (26c), however, the adjective *kʒʒlʒ* ‘short’ does take scope encompassing the combination and acquires an adverbial function ‘quickly’.

In Mano, very few modifiers can be used in N+V combinations, and their meaning is relatively unidiomatic. Among the modifiers that combine with the majority of tested verbs, the plural marker *vð* and the adjective *dēē* ‘new’ are notable.

- (27) * \bar{I} ̄ $\bar{p}\bar{i}\bar{a}$ $\bar{b}\bar{e}$ $\bar{y}\bar{i}$ $\bar{v}\bar{d}$ $\bar{b}\bar{o}$.
 1SG.PST story DEM interior PL take.off
 Intended meaning: ‘I told this story several times’.

- (28) \bar{O} \bar{I} ̄ $\bar{l}\bar{e}$ $\bar{v}\bar{d}$ $\bar{t}\bar{a}$.
 3PL.PST 1SG mouth PL close
 ‘They cheated me several times’ (literal translation: ‘they closed my mouth’-PL).

Example (27) illustrates the impossibility for the plural marker to be used with the N+V combination $\bar{y}\bar{i}\bar{b}\bar{o}$ ‘explain, tell (a story)’. In example (28), such usage is possible with the combination $\bar{l}\bar{e}\bar{t}\bar{a}$ ‘cheat’. The marker has scope encompassing the whole construction, and the meaning is ‘several times’, just like in the Dan-Gweetaa example above (25c).

N+V combinations in Mano manifest various degrees of semantic integration of the components: certain combinations are semantically non-compositional and nominal components may have modifiers with a scope encompassing the whole combination.

6. Argument assignment in N+V combinations

This section introduces syntactico-semantic criteria distinguishing N+V compounds and free NP+V combinations based on the way in which the external argument is assigned.

6.1. Argument sharing vs non-sharing

Typically, N+V compounds analyzed in the literature are intransitive. We have seen that intransitive morphology and such cases serve as evidence promoting the compound status of the combination. Below an additional example from Tongan (Oceanic) is provided for consideration. In (29a), the construction is transitive: the direct object, *kavá* ‘kava’, is marked by the absolutive case while the subject, *Sione* ‘John’, is marked by the ergative case. In the case of incorporation, as in (29b), the noun *kavá* ‘kava’ is unmarked for any case while the subject is marked by the absolutive case, which demonstrates the intransitive status of the construction.

- (29a) *Na’e Inu ‘a e kavá ‘é Sione.*
 PST drink ABS CONN kava ERG John
 ‘John drank the kava’.

- (29b) *Na’e inu kavá ‘a Sione.*
 PST drink kava ABS John
 ‘John kava-drunk’ (Churchward 1953; Mithun 1984: 851).

In certain cases, however, the N+V combinations can license their own arguments. This process is known as the manipulation of case in noun incorporation where the incorporated noun loses its argument status while the oblique argument is advanced

into the case position, having been vacated by the incorporated noun (Mithun 1984). The example below illustrates this process in Kurmanjî Kurdish (Indo-European):

- (30) *Ew-î ez gelek bi xweşî qebûl kir-im[...]*
 3SG-OBL 1SG much with pleasure acceptance do:PST-1SG

‘He accepted/welcome me (into his home) with great pleasure [...]’ (Haig 2002: 26).

In the preceding example, the N+V combination *qebûl kirim* governs a first person sg. direct object that is indexed in the agreement suffix *-im*.

Sometimes, the external argument of Kurdish N+V combinations can be interpreted as a possessor of the noun.

- (31) *Wî zanî-bû ku dê pîrik-a wî*
 3SG:OBL know:PST-PPF COMP FUT grandmother-LK:F 3SG:OBL
alîkari-ya wî bi-k-e.
help-LK:F 3SG:OBL IRR:do:PRES-3SG

‘He knew that his grandmother would help him’ (literal translation: ‘do his help’) (Haig 2002: 30).

In this previous example, the second *wî*, marked by bold characters, is a possessor of the noun *alîkariya* ‘help’ and is connected to the noun via the linking morpheme *-ya*. For this reason, *wî* cannot be considered a direct object of the N+V combination, a designation contrasting with example (30).

In the extant literature, several approaches have been suggested to analyze the syntactic relationship of the N+V combination and the external argument. One approach is to assign valency to the combination; it is the combination as a whole that licenses additional arguments and, in the case of additional direct objects, becomes transitive. This is the case for classical incorporating languages and is illustrated by examples (9) and (14). The argument sharing approach suggests that both the verb and the noun within the N+V combination assign arguments: the verb assigns the noun while the noun assigns the external arguments, as in example (31) (Jackendoff 1974; Mohanan 1997). The latter approach, however, raises important concerns. In particular, no clear criteria have been articulated to determine what nouns assign external arguments and what nouns are properly incorporated, in which case the external arguments are assigned by the N+V combination. Moreover, a uniform analysis for either of these terms may not apply to any particular language. As a result, in Kurdish the situation is clearly mixed; the argument sharing can be supported with certain non-incorporated N+V combinations, while in cases of noun incorporation, the external argument is assigned by the combination itself (Haig 2002).

In what follows, I will analyze the relationship between the valency properties of nouns and verbs as parts of the N+V combination and the valency properties of the combinations themselves. I will show that, in Mano, just like in Kurdish, the argument sharing approach fails in certain N+V combinations and that, in these cases, the external argument must be assigned only by the combination itself. These combinations should be considered more syntactically and semantically bound than those combinations where the external argument is assigned by the combination's nominal component.

6.2. Nominal valency and the transitivity of the N+V combination

All transitive verbs in Mano are always accompanied by a direct object, whether it is a full noun phrase, a pronoun, or a dummy noun, such as *pē* 'thing'.

(32a) *Ē à sí.*
3SG.PST 3SG take

'He took it'.

(32b) *Ē wì sí.*
3SG.PST animal take

'He took the animal'.

All verbs occurring in N+V combinations can be used independently of the noun in a transitive construction. Even when used as part of the N+V combination, verbs retain their valency properties; this becomes especially clear when the nominal part is pronominalized. Consider example (17) repeated below:

(33a) *Ē gbóó bōō?*
3SG.PST sobbing implement.Q

'Did she sob?' (literal translation: 'did she implement sobbing?')

(33b) *Īĵ, ā bō.*
yes 3SG.PST>3SG implement

'Yes, she did'. (literal translation: 'yes, she implemented it')

Nouns in Mano are typically divided into two syntactic classes: alienably possessed (free-standing) nouns and inalienably possessed (relational) nouns. The latter class includes prototypical, inalienably possessed nouns, such as body parts (*zò* 'heart'), kinship terms (*dāā* 'father'), spatial terms (*yí* 'interior') (on the semantics of inalienable possession, see Nichols 1988), as well as names of physical or abstract properties (*pónó* 'taste', *tònō* 'benefit', *fāṅá* 'strength', *lòò* 'love [to someone]', etc.). Inalienably possessed or relational nouns are usually accompanied by their arguments, though there are some exceptions (Khachaturyan 2015: 76-80). Thus, the noun *kī* 'skin' can be used with or without the possessive argument.

- (34) *Kī̄ wē lē wī̄ kī̄ ká.*
 skin DEM 3SG.EXI animal skin with
 ‘This skin is an animal skin’.

The arguments of inalienably possessed nouns are encoded by the basic set of pronouns or by a full noun phrase adjacent to the head noun. Alienable possessed nouns do not take arguments but can be modified by possessor adjuncts, which are encoded by a special set of possessive pronouns. See examples (35) and (36), contrasting alienably and inalienably possessed nouns:

- (35a) *à kpákāá*
 3SG leg
 ‘his leg’ (the noun ‘leg’ is relational, i.e. normally takes an argument.)
- (35b) *wī̄ kpákāá*
 animal leg
 ‘animal leg’
- (36a) *là ká*
 3SG.POSS house
 ‘his house’ (the noun ‘house’ does not normally take an argument.)
- (36b) *Pèé là ká*
 PN 3SG.POSS House
 ‘Pe’s house’

Significantly, inalienable possessors are marked the same way as direct objects: compare (32a) and (35a), also (32b) and (35b). In view of this striking similarity between the accusative and the genitive position, N+V combinations, like the following examples, can be analyzed in two ways:

- (37) *Ē pī̄à yí bō.*
 3SG.PST story interior implement
 NP_{DO} [N V]_V
 [N_{poss} N_{rel}]_{DO} V
 ‘(S)he told a story’.

These combinations can be analyzed either as a “transitive,” as I call it, combination *yí bō* ‘explain’, which selects *pī̄à* ‘story’ as its direct object, or as a simple transitive verb, *bō* ‘leave’, having as its direct object *pī̄à yí*, an inalienably possessed noun *yí* ‘interior,’ which is preceded by its possessor, *pī̄à* ‘story’. In the transitive case, the argument *pī̄à* ‘story’ can be said to be assigned by the whole combination, *yí bō* ‘explain’. The simple transitive analysis is an example of argument sharing. In what

follows, I am suggesting arguments specifically in favor of one or the other interpretation.

6.2.1. A mismatch between the transitivity of the combination and the valency of the noun⁵

In the majority of cases, if the nominal item in the combination is an inalienably possessed noun, then the combination itself is “transitive”. This is the case for *yí* ‘interior, inal’ and *yí bō* ‘explain, tr’. The combination can also be “reflexive”, if the possessor of the noun is co-referential to the subject. This is the case in example (38): *wēlē* ‘face’ is an inalienably possessed noun, and the combination *wēlē yèlè* ‘be enraged’ selects a “direct object” co-referential to the subject.

(38) *Lē ē wēlē yèlè-pèlè.*
 3SG.EXI 3SG.REFL face attach-INF

‘He is enraged’. (literal translation: he is attaching his own face)

If the nominal item is alienably possessed, then the combination is “intransitive”. This is the case for *gbóó* ‘sobbing, al’ and *gbóó bō* ‘sob, intr’. See more matching examples in Table 1:

Table 1: Matching nominal valency and transitivity

<i>líé tó</i>	terminate	edge + leave	inal.	tr.
<i>sùū káá</i>	exterminate	type + pour	inal.	tr.
<i>wēlē yèlè</i>	be enraged	face + attach	inal.	refl.
<i>wúú káá</i>	breathe out	breath + pour	inal.	refl.
<i>wóó káá</i>	bark	barking + pour	al.	intr.
<i>yáá kē</i>	be sick	illness + do	al.	intr.
<i>yìé bōo</i>	weave	cotton + implement	al.	intr.
<i>yélè kē</i>	be ashamed	shame + do	al.	intr.

When the nominal valency matches with transitivity, both analysis, argument sharing, and argument licensing by the combination are equally plausible. Sometimes, however, the valency of the noun and of the combination do not match.

⁵ In her study of “preverbs” in Guro, O. Kusnetsova made a similar observation that the “preverbs” that derive from inalienably possessed nouns may lose their valency characteristics. Thus, in Guro, the preverb *bē*, derived from the inalienably possessed noun *bē* ‘hand’, and it does not require a possessor when it occurs in the combination *bē jē* <hand beat> ‘clap the hands’:

(i) *Bèlè lū bē é jě bōlē sā lā.*
 girl PL hand FOC beat.PFV moon beam at

‘The girls are clapping their hands in the moon light’ (Kuznetsova 2013: 78).

Léé ‘leaf’, as a significant part of a plant, is inalienably possessed.

(39a) *yílí léé*
 tree leaf
 ‘leaf of a tree’

(39b) *à léé*
 3SG leaf
 ‘its leaf’

The combination *léé bō* ‘unveil’ is intransitive, though, and the semantic theme of the complex verb is expressed by a postpositional phrase.

(40) *Ē léé bō kàā là.*
 3SG.PST leaf implement theft on
 ‘She unveiled the theft’.

Vǔǔ ‘wasp’ is an alienably possessed noun; however, the combination *vǔǔ bō* ‘get rid of’ is transitive:

(41a) *wà vǔǔ*
 3PL.POSS wasp
 ‘their wasp’

(41b) *Kāā ō vǔǔ bō kō mǎ.*
 1PL.PRF 3PL wasp take.off 1PL on
 ‘We got rid of them’.

Similar, non-matching examples are presented in Table 2:

Table 2: Non-matching nominal valency and transitivity

<i>kǎ vō</i>	dominate	hand + send	inal.	intr.
<i>nèè kē</i>	cure	medicine + do	al.	tr.
<i>náá kpó</i>	curse	sin + put	al.	tr.
<i>lǒó dō</i>	trade	trade + put	al.	tr.

In these cases, it is the combination that licenses its arguments, and their expression is not motivated by the valency properties of the noun. The argument sharing approach, therefore, cannot be applied in such cases.

6.2.2. Noun’s possessor does not semantically match the combination’s theme

In N+V combinations where semantics is more or less compositional, the two syntactic interpretations from example (37), “NP_{DO} [N V]_V” versus “[N_{POSS} N_{REL}]_{DO} V”, could be considered paraphrases. Thus, in the case of the combination *bólōñ bō* <scratch take.off> ‘scratch’, “*né_{DO} [bólōñ bō]_V*” ‘scratch a child’, this could be a paraphrase of “[*né_{POSS} bólōñ_{REL}]_{DO} bō*” ‘take off a child’s scratch’. This is not the case for

highly idiomatic combinations, so, $p\bar{r}\bar{a}_{\text{DO}}$ [$y\bar{i}$ $b\bar{o}$]_V ‘tell a story’ is not a paraphrase of [$p\bar{r}\bar{a}_{\text{POSS}}$ $y\bar{i}_{\text{REL}}$]_{DO} $b\bar{o}$ ‘take off interior’s story’.

In other cases, where the degree of idiomaticity is low, there may still be a mismatch between the noun’s possessor and the combination’s theme. Consider the following example:

- (42) \bar{I} \hat{a} $s\bar{z}\bar{z}$ $d\bar{o}$.
 2SG.PST 3SG teeth put
 NP_{DO} [N V]
 * $[N_{\text{POSS}}$ $N_{\text{REL}}]$ _{DO} V

‘You bit him’, NOT ‘you put his teeth’.

It is imaginable that ‘put teeth’ could be a paraphrase of ‘bite’, as biting is, in a sense, putting one’s teeth on something. Yet, ‘put his (someone else’s) teeth’ is not a paraphrase of ‘bite him’. Consider other transitive verbs with the same disparity: $k\bar{o}$ $d\bar{i}\bar{e}$ <hand pass> ‘exaggerate with smth’ (to pass someone else’s hand) and $j\bar{n}\bar{e}\bar{e}$ $k\bar{e}$ <eye do> ‘guard’ (to do someone else’s eye). Again, in these cases, the argument is licensed by the combination, so the argument sharing approach does not work.

6.2.3. Circularity of valency assignment

There is a significant number of N+V combinations where the verbal root is preceded by an action-denoting root.⁶ This verbal root functions like a light verb and does not contribute to the semantics of the combination; as well, the nominal part cannot be used independently from the verb in question, like in examples (43b) and (44b).

Some of these combinations are “transitive”:

- (43a) \bar{E} $\eta w\acute{o}$ $y\bar{a}$ $f\bar{e}y\acute{e}$ $z\bar{e}$.
 3SG.PST problem DEM explanation kill

- (43b) $*\bar{E}$ $\eta w\acute{o}$ $y\bar{a}$ $f\bar{e}y\acute{e}$.
 3SG.PST problem DEM explanation

‘He explained this problem in details’.

- (44a) $\bar{I}\bar{j}$ $m\acute{i}\acute{a}$ $y\bar{a}$ $s\grave{a}$ $d\bar{o}$.
 1SG.PST person.PL:FOC DEM disdain put

⁶In her study of verbal morphosyntax in the Guro language, O. Kuznetsova includes into the class of preverbs elements that derive from alienably possessed nouns and combine with desemantized verbs: $y\bar{e}\bar{e}$ - $j\bar{e}$ ‘dream’ ($y\bar{e}\bar{e}$ ‘dream’, $j\bar{e}$ ‘beat’) and $v\bar{i}\bar{e}$ - $w\bar{v}$ ‘lie’ ($v\bar{i}\bar{e}$ ‘lie’, $w\bar{v}$ ‘bear’) (Kuznetsova 2013: 74). It is these nouns, not the verbs, that contribute the most to the semantics of the corresponding combination.

- (44b) **ḡ* *míá* *yā* *sà*.
 1SG.PST person.PL:FOC DEM disdain
 ‘I despised these people’.

Some combinations are intransitive but license a postpositional phrase:

- (45) *Mēnéēkēlé* *ī* *báà* *bō* *ḡ* *móḡwòḡmò?*
 why 1SG.PST abandon implement 1SG because.of
 ‘Why did you abandon me?’

- (46) *Ō* *bàkà* *bō* *ī* *mò*.
 3PL.PST slander implement 2SG on
 ‘They slandered you’.

Table 3 provides more examples of N+V combinations with action-denoting nominals:

Table 3: N+V combinations with action-denoting nominals

combination	meaning	meaning of the light verb	postpositional argument	transitivity
<i>fóló sí kpó</i>	force	put	smb <i>là</i>	intr.
<i>kéí kē</i>	decline	do	smth <i>mò</i>	intr.
<i>bàlà sí</i>	run	take		intr.
<i>lèbō gèē</i>	whisper	say		intr.
<i>ḡwòḡḡwòḡ sí</i>	buzz	take		intr.
<i>sòlō bō</i>	get	implement		it
<i>súò kē</i>	call	do		tr.
<i>vèì zē</i>	neglect	kill		tr.
<i>léà bō</i>	put shame on smb.	implement		tr.

The argument expression appears to be arbitrary and is not licensed by the light verb. If such action-denoting roots were to be considered independent nouns, then there would be no way to assign their valency except by referring to the valency properties of the combination (if the combination is “transitive”, then the nouns are inalienably possessed; but, if the combination is “intransitive”, then the nouns are alienably possessed). The valency of the combination, though, would then depend on the valency of the nominal part. Thus, if we consider that the valency is assigned by the whole combination, then it will allow us to avoid this circularity in valency assignment.

This analysis of the argument structure in Mano suggests that the argument sharing approach, which assigns the properties of argument licensing to the nominal component, does not apply in certain N+V combinations. In these cases, it is the

combination as a whole that governs the external argument. Such combinations are more syntactically and semantically bound than free NP+V combinations.

7. Conclusion

Compounding in general, and N+V compounding in particular, is notoriously difficult to define since many criteria are in play in crafting such definitions (Lieber & Štekauer 2009; Aikhenvald 2009). None of this criteria indicates that there is a straightforward answer to the question: what should be considered a compound, and what should not? “Compoundhood”, like “wordhood”, is a scalar phenomenon rather than a binary category (Haspelmath 2011). In languages with poor morphology, like Mano, the task is even more difficult. No phonological, morphological, or straightforward syntactic criteria work in favor of the compound interpretation in this language. Many syntactic criteria, such as the No Phrase Constraint, the Lexical Integrity Hypothesis, and the discontinuity of N+V combinations are against the compound interpretation. Nevertheless, semantic criteria, such as idiomaticity and the scope of the modifiers, points to a more semantically bound status of certain N+V combinations. Moreover, the argument structure of certain N+V combinations — namely, the contradiction and the circularity of valency assignment in the nominal component and the combination itself — makes them more semantically and syntactically bound than the corresponding free combination of a direct object NP and a verb. As different criteria are often in contradiction with one another, however, there is no neat division to be held between the class of compounds and the class of free NP+V combinations.

Abbreviations

ABS	absolutive	ERG	ergative	OBL	oblique
al.	alienable	EXI	existential	PL	plural
AOR	aorist	F	feminine	PN	proper noun
ART	article	FOC	focus	POSS	possessive
AUX	auxiliary	FUT	future	PPF	pluperfect
CAUS	causative	JNT	conjoint	PRES	present
COMP	complementizer	inal.	inalienable	PRF	perfect
CONN	connector	INF	infinitive	PST	past
CS	construct state	intr.	intransitive	REFL	reflexive
DEF	definite	IRR	irrealis	SG	singular
DEM	demonstrative	LK	linker	TOP	topic
DISTR	distributive	N	noun	tr.	transitive
DO	direct object	NP	noun phrase	V	verb

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Bound noun plus verb combinations in Mano

This paper addresses noun plus verb combinations in Mano, a South Mande language, and suggests novel syntactic and semantic criteria for distinguishing compounds from the free combinations of noun phrases and verbs. Nominal and verbal components of all N+V combinations in Mano are systematically detachable, and certain N+V combinations contradict the Lexical Integrity Hypothesis and the No Phrase Constraint, all of which are against the definitions of compounding as a formation of “single words”. Nonetheless, the contradiction and circularity of valency assignment in the nominal component and the

combination itself make such combinations more syntactically bound than corresponding free combinations of a NP and a V. These criteria can be considered an argument in favor of defining certain N+V combinations in Mano as compounds, and all these criteria applied together present a complex picture where N+V combinations should be considered, more or less, compound-like with no clear division between free combinations and compounds.

Keywords: Compounding, noun incorporation, valency, possession, mano

Combinaisons liées verbo-nominales en mano

L'article présent analyse les combinaisons verbo-nominales en mano, Mandé-Sud, et introduit des critères syntactiques et sémantiques originaux qui permettent de distinguer les composés verbo-nominaux des combinaisons libres des groupes nominaux et des verbes. Les composantes nominale et verbale des combinaisons verbo-nominales en mano sont systématiquement détachables l'une de l'autre. Ces combinaisons contredisent l'Hypothèse de l'Intégrité Lexicale, ainsi que la Contrainte sur une Phrase Complexe à l'intérieur d'un mot. Ces trois critères sont en opposition avec la définition de la composition en tant que formation des « mots intègres ». Néanmoins, la contradiction et la circularité dans l'affectation de la valence de combinaisons verbo-nominales les rendent plus syntactiquement cohérentes que les combinaisons libres. Elles peuvent être considérées comme arguments en faveur de la définition de certaines combinaisons verbo-nominales en mano en tant que composés. Tous ces critères pris ensemble offrent un tableau complexe où les combinaisons verbo-nominales sont plus ou moins proches des composés mais il n'y a pas de division claire entre la classe des composés et la classe des combinaisons libres.

Mots clés : composition verbale, incorporation nominale, valence, possession, Mano

Связанные сочетания имен и глаголов в манго

В данной статье анализируются глагольно-именные сочетания в языке манго (южные манде) и предлагаются новые семантические и синтаксические критерии, отличающие композиты от свободных сочетаний именных групп с глаголом. Именной и глагольный компоненты глагольно-именных сочетаний систематически отделяются друг от друга в ряде контекстов. Эти сочетания противоречат Гипотезе о Лексической Целостности, а также Ограничению на Составную Группу в составе единой словоформы. Эти три критерия свидетельствуют против того, чтобы считать данные глагольно-именные сочетания композитами. Однако вновь задействованные критерии, а именно цикличность и противоречие в валентностных характеристиках именного компонента и всего глагольно-именного сочетания, свидетельствуют о большей синтаксической связанности данных сочетаний. Эти критерии свидетельствуют в пользу того, чтобы считать данные сочетания композитами. По совокупности примененных критериев следует считать глагольно-именные сочетания более или менее похожими на композиты, однако четкого деления на класс композитов и класс свободных сочетаний добиться не удастся.

Ключевые слова: глагольные композиты, инкорпорация, валентность, посессивность, язык манго