

## Noun Phrase Conjunction in Amis<sup>\*</sup>

Joy Wu

*National Taiwan Normal University*

This paper investigates noun phrase conjunction (NP conjunction) in Amis, and in particular the composition of the two conjunctors *atu* and *aci*, and two types of NP construction that differ in terms of the case marking of the second conjunct. The following findings are proposed. First, the conjunctor *atu*, instead of being treated as a composite of two units (i.e. a general linker *a* and a case marker *tu* as reported in earlier studies such as Tsai & Zeng 1997 and E. Liu 2003) is argued to contain only one unit that functions as a single conjunct. The same analysis is also proposed for *aci*, though the *-ci* still carries the function of a personal proper noun marker. Second, whether the second conjunct is case-marked or not indicates different degrees of tightness between the two conjuncts. This syntax-semantics interface in the NP conjunction of Amis is analyzed within the framework of Role and Reference Grammar (RRG). It is shown that these two types of NP conjunction exemplify two nexus types at the NP-juncture: NP cosubordination and NP coordination. I conclude this paper by further discussing how the case marking of the second conjunct interacts with the semantics (e.g. noun types and semantic roles) of this conjunct.

Key words: noun phrase conjunction, Amis, Role and Reference Grammar (RRG)

### 1. Introduction

This paper discusses noun phrase conjunction (hereafter, NP conjunction) in Amis. The data examined in this paper are mainly collected from Haian Amis, which belongs to the Central dialect based on Tsuchida's (1988) classification. Some examples collected from Falangaw Amis, a Southern dialect, will also be mentioned at the end of the paper

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for comparison. NP conjunction in Amis, exemplified in (1), is manifested through the markers *atu* or *aci*<sup>1</sup> that appear between two conjuncts:<sup>2</sup>

- (1) a. Ma-kaen n-i aki *k-u* *futing* *atu* *hmay*.  
 UV-eat GEN-NCM Aki NOM-NCM fish CONJ rice  
 ‘The fish and rice were eaten by Aki.’
- b. Mi-tala kaku *ci* *aki-an* *aci* *panay-an*.  
 AV-wait 1S.NOM NCM Aki-DAT CONJ.NCM Panay-DAT  
 ‘I am waiting for Aki and Panay.’

Although such examples have been discussed in earlier studies (e.g. Tsai & Zeng 1997, and E. Liu 2003), an in-depth investigation is still lacking and thus some issues still remain unclear. For example, the composition of the conjunctors *atu* and *aci* calls for more research. Furthermore, it seems that Amis allows more than one structure to encode its NP conjunction. Such structures differ in terms of the case marking of the second conjunct. For example, in (1a) the second conjunct appears case-unmarked while in (1b) the second conjunct is case-marked. However, the semantic differences among these structures and their functional loads have not been thoroughly discussed.<sup>3</sup> The functional domains of these two structural types will be addressed within the framework of Role and Reference Grammar (RRG, Van Valin & LaPolla 1997, Van Valin 2005) and

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<sup>1</sup> These two markers will be referred to as *conjunctors* throughout the discussion.

<sup>2</sup> The phonetic symbols used in the transcription follow the IPA system, with the following exceptions: /e/ stands for schwa [ə], /d/ for voiceless lateral [t̪], /ʔ/ for glottal stop [ʔ], /q/ for epiglottis stop [q̠], and /ng/ for /ŋ/.

Abbreviations and symbols used in this paper are as follows: < >: infix; 1/2/3S: first/second/third person singular; 1/2/3P: first/second/third person plural; AV: Actor Voice; CAU: Causative; CONJ: Conjunct; DAT: Dative Case; FAC: Factual Marker; GEN: Genitive Case; LA: Locative Applicative; LNK: Linker; NV: Neutral Voice; NCM: Noun Class Marker; NOM: Nominative Case; POSS: Possessive; PREP: Preposition; RED: Reduplication; UV: Undergoer Voice.

<sup>3</sup> These differences were first mentioned in a conference paper by Teng (1997), but they have not been further explored since then.

will draw especially on its discussion on the juncture-nexus (i.e. linkage) types of complex NPs. I shall show that these two structures signify two different nexus types at the NP juncture: NP coordination and NP cosubordination. However, these two structural types are not always acceptable. The case-marking of the second conjunct seems to be related to the semantic features such as noun types and semantic roles of this conjunct. This relation will also be explored in the paper.

This paper is organized as follows. Section 2 offers a brief introduction to Amis noun phrase structures. Section 3 presents my analysis of the conjunctors. I shall first provide an overview of the previous treatment of *atu* and *aci* in §3.1, and my re-assessment of the two conjunctors is given in §3.2, in which I shall argue that *a-* and *-tu* in *atu* should not be considered as two separated units (i.e. a linker and a case marker) as suggested in earlier studies; instead, *atu* should be treated as a single conjunctor. I shall also argue for the same analysis for *aci*, though *-ci* still retains its noun class marking function. In §4, I discuss the structural variations illustrated in (1) and how these variations correlate with the semantic tightness of the two conjuncts in NP conjunction. This issue will be approached under the framework of RRG. In §5, I examine the relation between the semantic features and the case-marking of the second conjunct. Section 6 concludes the paper.

## 2. Noun phrase structures in Amis

This section briefly introduces the grammar of NP structures in Amis, especially the case marking system and the pronominal systems. The so-called case markers in Amis are actually composed of two parts: a case marker, shown in Table 1 and a noun class marker, given in Table 2.<sup>4</sup>

**Table 1:** Haian Amis case markers<sup>5</sup>

Nouns	Case Markers		
	Nominative	Genitive	Dative
Common Nouns	<i>k-</i>	<i>n-</i>	<i>t-</i>
Personal Proper Nouns	Ø		<i>-an</i>

<sup>4</sup> This analysis is a slight revision based on D. Liu (1999). Huang (1995) was the first to propose the further decomposition of case markers into case markers and noun class markers.

<sup>5</sup> Notice that in the analysis of the case marking system adopted in this paper, the nominative case for personal proper nouns is covert; in other words, the forms *ci* and *ca* are functionally ambiguous. They may be analyzed as a case marker plus a noun class marker, or they may act as a noun class marker only.

**Table 2:** Haian Amis noun class markers<sup>6</sup>

Nouns	Noun Class Markers		
Common Nouns	<i>u</i> <sup>7</sup>		
Personal Proper Nouns	<i>c-</i>	Singular	<i>-i</i>
		Plural	<i>-a</i>

The composite of two markers are presented in Table 3.<sup>8</sup>

**Table 3:** Composites of case markers and noun class markers (Wu 2006:79)

Case		Nominative	Genitive	Dative
Nouns				
Common Nouns		<i>k-u</i>	<i>n-u</i>	<i>t-u</i>
Personal Proper Nouns	Singular	<i>Ø-ci</i>	<i>n-i</i>	<i>ci ... -an</i>
	Plural	<i>Ø-ca</i>	<i>n-a</i>	<i>ca ... -an</i>

Case distinctions are also found in the pronominal systems in Amis. Table 4 shows the personal pronouns in Haian Amis.<sup>9</sup>

<sup>6</sup> Notice that the singularity/plurality of the noun classifiers is not specified in the glosses.

<sup>7</sup> Unlike other noun class markers listed in the table, *u* can appear independently when the noun phrase shows up in clause-initial position. For example:

U        singsi    aku        Ø-ci        panay.  
 NCM   teacher 1S.GEN   NOM-NCM   Panay  
 ‘Panay is my teacher.’

That is why it is recorded as *u* in the table instead of *-u*, as suggested by the reviewers. This marker has been treated as a “neutral case marker” in Huang (1995:226).

<sup>8</sup> The forms in Tables 1-3 and Table 5 are also found in Falangaw Amis. While Haian speakers tend to treat the kinship terms as personal proper nouns, Falangaw speakers treat them as common nouns. Furthermore, the consonant *c* corresponds to *s* in Falangaw Amis.

<sup>9</sup> The bold-face parts in the tables indicate the case-marking elements that are also found in the case markers for nouns.

**Table 4:** Haian Amis pronominal system<sup>10</sup>

Number	Person	Nominative	Genitive	Dative	Possessive Pronominal Noun	
Singular	1 <sup>st</sup>	<i>kaku</i>	<i>aku</i>	<i>takuwanan</i>	<i>maku</i>	
	2 <sup>nd</sup>	<i>kisu</i>	<i>isu</i>	<i>tisuwanan</i>	<i>misu</i>	
	3 <sup>rd</sup>	<i>cingra</i>	<i>nira</i>	<i>cingranan</i>	<i>nira</i>	
Plural	1 <sup>st</sup>	Inclusive (including the listener)	<i>kita</i>	<i>ita</i>	<i>kitanan</i>	<i>mita</i>
		Exclusive (excluding the listener)	<i>kami</i>	<i>niyam</i>	<i>kamiyanan</i>	<i>niyam</i>
	2 <sup>nd</sup>		<i>kamu</i>	<i>namu</i>	<i>tamuanan</i>	<i>namu</i>
	3 <sup>rd</sup>		<i>cangra</i>	<i>nangra</i>	<i>cangraan</i>	<i>nangra</i>

Case distinctions are also shown in the demonstrative pronouns as displayed in Table 5:

**Table 5:** Haian Amis demonstrative pronouns<sup>11</sup>

		Nominative	Genitive	Dative	Gloss
Proximal		<i>k-u-ni</i>	<i>n-u-ni</i>	<i>t-u-ni/t-u-ni-an</i>	‘this’
Distal	Visible	<i>k-u-ra</i>	<i>n-u-ra</i>	<i>t-u-ra/t-u-ra-an</i>	‘that’
	Invisible	<i>k-u-ya</i>	<i>n-u-ya</i>	<i>t-u-ya/t-u-ya-an</i>	‘that’

In a noun phrase that contains a modifier, a linker *a* optionally, though preferred, appears between the modifier and the head as shown in (2):

- (2) a. *miming-ay* (a) *siri*  
 little-FAC LNK goat  
 ‘little goat’
- b. Kaen-en k-u-ni *futing* (a) *dateng!*  
 eat-UV NOM-NCM-this fish LNK vegetable/dish  
 ‘Eat this fish dish!’

As we will see in §3.1, this linker has been treated as a part of *atu* and *aci* by E. Liu (2003).

<sup>10</sup> The biggest difference in personal pronouns in the two dialects lies in the third person set. While Haian Amis uses *cingra*, *cingraan*, *cangra*, and *cangraan*, Falangaw Amis utilizes the case marker for common nouns plus the third person possessive pronoun *mira* (i.e. *ku mira* and *tu mira*).

<sup>11</sup> The two deitic expressions *ra* and *ya* can be used alone when they appear in clause-initial position, but the deitic form *-ni* cannot be used independently.

### 3. Analysis of the conjunctors

#### 3.1 Overview of earlier research

This section provides an overview of the analysis of the conjunctors in two earlier works that discuss Amis NP conjunction: Tsai & Zeng (1997) and E. Liu (2003). Tsai & Zeng (1997:299) analyze *aci* and *atu* as *a + ci* and *a + tu*; *a* is glossed as ‘and’, *ci* as a nominative case marker, and *tu*, an accusative case marker. While *a* and *ci* are written as two free morphemes in their transcription (e.g. (3a)), *atu* is transcribed as either *atu* (e.g. (3a)) or *a tu*; the latter transcription of *atu* is used when the second conjunct is preceded by a demonstrative (e.g. (3b-c)). Some examples are given in (3).<sup>12</sup>

- (3) Tsai & Zeng (1997:299-300) (My glosses, free translation, and emphasis)
- a. Sakaira **no rinamay atu fodo'** anini, oyaan  
 so.exist seven.star and Venus today that  
 malikakaay **ci Rinamay a ci Fodo** sa.  
 brother Rinamay and Fodo so.said  
 ‘It is said that the Northern star and Venus were what the Rinamay and Fodo brothers turned into.’
- b. O maku **kuni a eto a tura 'axenan.**  
 mine this table and that chair  
 ‘This table and that chair are mine.’
- c. Iraay **ku takingkingay a tura tadakolongay** itokotokosan.  
 exist water.buffalo and that yellow.buffalo on.the.mountain  
 ‘There are water buffalos and yellow buffalos on the mountain.’

Like Tsai & Zeng (1997), E. Liu (2003) also treats *aci* and *atu* as a combination of two free morphemes. However, E. Liu (2003) consistently maintains the two free-morpheme transcription in her work. Some examples are given below:

- (4) E. Liu (2003:51) (My glosses and emphasis)
- a. Mala-widang-ay **ci aki \*(a) ci panay.**  
 become-friend-FAC NOM aki CONJ NOM panay  
 ‘Aki and Panay are friends.’

<sup>12</sup> Following the suggestions given by one of the reviewers, I have amended the orthography and transcription of these two studies to the system adopted in this paper.

- b. Pa-ka-k<um>aen    aku    ci    aki    **tu**    **titi**    **\*(a)**  
 CAU-KA-<AV>eat 1S.GEN NOM aki DAT pork CONJ  
**tu**    **pa'eh.**  
 DAT wine  
 'Aki was caused (forced/urged) by me to eat pork and drink wine.'
- c. Mala-widang-ay    **kaku**    **\*(a)**    **cingra.**  
 become-friend-FAC 1S.NOM CONJ 3S.NOM  
 'He and I are friends.'

In (4), we can see that *a* and *ci* and *a* and *tu* are treated as two free morphemes and *ci* and *tu* are glossed as a nominative case marker and an accusative case marker respectively in E. Liu's analysis. In addition, E. Liu (2003) mentions that "the conjunctive *a* 'and' not only conjoins two NPs in their conjunction and modification constructions but also connects two VPs in their modification constructions" (E. Liu 2003:v).<sup>13</sup> NP modification construction in the above quote refers to the examples like those in (2) while the examples of VP modification constructions are given below:

- (5) E. Liu (2003:65-66) (My glosses and emphasis)
- a. **Hacikay**    ci    aki    **(a)**    **c<um>ikay.**  
 fast    Nom    aki    A    <AV>run  
 'Aki runs very fast.'
- b. **Harakat**    **(a)**    **c<um>ikay**    ci    aki.  
 fast    A    <AV>run    NOM    Aki  
 'Aki runs very fast.'

The sentences in (5) show that *a* connects two verbs in the so-called VP modification construction<sup>14</sup> in E. Liu (2003). Notice that *a* is optional (though preferred) in such NP and VP modification constructions.

Based on the above overview, we find that both studies treat the two conjunctors as combinations of *a* and a case marker. While Tsai & Zeng (1997) do not further comment on the functions of *a*, E. Liu (2003) seems to treat it as a general linker that can conjoin two NPs or two VPs in other constructions.

<sup>13</sup> It is not clear if Tsai & Zeng (1997) also analyze *a* in the same way, as *a* is left unglossed when appearing between two VPs and between the modifier and the modifyee; e.g. (3b).

<sup>14</sup> This construction has been treated as a type of serial verb construction in Wu (1995:40).

### 3.2 Re-assessment of the conjunctors

In this section, I shall offer an analysis for the conjunctors that differs from the proposal made in Tsai & Zeng (1997) and E. Liu (2003). I shall argue that *atu* should be treated as a single conjunctor instead of being a combination of a general linker plus a case marker or a noun class marker. However, the same analysis is not applicable to *aci* as the *-ci* in *aci* still retains its noun class marking function, though its case marking function has been lost.

#### 3.2.1 Analysis of *atu*

There are some observations suggesting that *atu* should be treated as a single unit instead of a combination of two units. To begin with, it is not clear whether the *a-* in *atu* is the same *a* found in NP modification construction and VP modification construction. This doubt is based on two reasons. First, the *a-* in *atu* is not optional, unlike the *a* found in NP and VP modification constructions. Second, while *a* connects a modifier and its modifyee when appearing between two NPs in an NP modification construction, there is no such semantic relation between the two NPs connected by *atu*. Compare (6a), repeated from (2b), with (6b):

- (6) a. Kaen-en k-u-ni                      *futing* (a)      *dateng*!  
          eat-UV    NOM-NCM-this    fish    LNK    dish  
          ‘Eat this fish dish!’
- b. Kaen-en k-u-ni                      *futing* *atu*      *dateng*!  
          eat-UV    NOM-NCM-this    fish    CONJ    vegetable  
          ‘Eat this fish and vegetable (i.e. one dish)!’

The crucial difference between the two sentences lies in the interpretation of the word *dateng*, which means either ‘vegetable’ or ‘dish’. In (6a), it is rendered as ‘dish’, which is specified by *futing* ‘fish’, while in (6b), it is interpreted as ‘vegetable’, which is combined with *futing* ‘fish’ in a single dish. The contrast shows that the modifier-modifyee relation does not exist when two nouns are conjoined by *atu*. Hence, semantically as well as syntactically speaking, the *a-* in *atu* should not be treated as the same *a* found in NP and VP modification constructions.

The best piece of evidence for treating *atu* as a single conjunctor comes from the functions of *tu-* in *atu*. If *tu* were an independent form, we would expect that it should serve as a dative case marker for common nouns, as we have mentioned in §2. However, the following examples challenge this hypothesis. First, the sentences in (7a-b) show

that *atu* can appear before a personal proper noun, which means that the noun class marking function of *tu* no longer exists in *atu*.

- (7) a. Mi-tala kaku ci aki-an **atu** ci panay-an.  
 AV-wait 1S.NOM NCM Aki-DAT CONJ NCM Panay-DAT  
 ‘I am waiting for Aki and Panay.’
- b. Ma-ulah kaku t-u wawa *n-i* ofad **atu**  
 AV-like 1S.NOM DAT-NCM child GEN-NCM Ofad CONJ  
*n-i lakaw.*  
 GEN-NCM Lakaw  
 ‘I like Ofad’s and Lakaw’s children.’ (Ofad and Lakaw are not husband and wife.)

The examples in (7a-b) also indicate that the *-tu* in *atu* does not perform the case marking function as the case of the second conjunct is marked by *-an* in *ci panay-an* and *ni* for *ni lakaw*.<sup>15</sup> The loss of the case marking function of *tu* is also exemplified in (7c):

- (7) c. Ma-kaen n-i aki *k-u* futing **atu** hmay.  
 UV-eat GEN-NCM Aki NOM-NCM fish CONJ rice  
 ‘Aki ate the fish and rice.’

Although *atu* is followed by a bare noun in (7c), the case of this NP should be nominative like the first conjunct, not dative. Therefore, we know that the *-tu* in *atu* is not the case marker of the second conjunct.

From the above, we can conclude that neither *a* nor *tu* still maintains their original functions as a general linker or a case/noun class marker. Instead, *atu* seems to serve as a single conjunct in an NP conjunction construction.

### 3.2.2 Analysis of *aci*

The analysis proposed for *atu* in the previous section is not applicable to *aci*. Unlike *atu*, which can be followed by either common nouns or personal proper nouns,

<sup>15</sup> One can of course treat examples such as (7a-b) as double case marking. However, such a structure is not found in my data though the combination of *tu* + *-an* has been reported in Huang (1995:223). Nevertheless, the combination of *tu* + *ni* (i.e. a dative case + a genitive case) has never been attested in my survey and earlier research on Amis.

*aci* can only precede the latter. This property shows that the *-ci* in *aci* still retains its noun class marking function.

- (8) a. \*Ma-kaen *n-i* *aki* *k-u* *futing* *aci* *hmay*.  
 UV-eat GEN-NCM Aki NOM-NCM fish CONJ.NCM rice  
 ‘Aki ate the fish and rice.’
- b. Ma-kaen *n-i* *aki* *aci* *panay* *k-u* *futing*.  
 UV-eat GEN-NCM Aki CONJ.NCM Panay NOM-NCM fish  
 ‘Aki and Panay ate the fish.’ (Implication: The speaker is certain that the both Aki and Panay ate the fish, and they ate it at the same time.)
- b'. \*Ma-kaen *n-i* *aki* *atu* *panay* *k-u* *futing*.  
 UV-eat GEN-NCM Aki CONJ Panay NOM-NCM fish  
 ‘Aki and Panay ate the fish.’
- c. Ma-kaen *n-i* *aki* *atu* *ci* *panay* *k-u* *futing*.  
 UV-eat GEN-NCM Aki CONJ NCM Panay NOM-NCM fish  
 ‘Aki and Panay ate the fish.’ (Implication: The speaker is not certain if both Aki and Panay ate the fish. Or they might have eaten it at different times.)
- d. \*Tayra *kaku* *aci* *ci* *dakoc* *i* *posong*.  
 go 1S.NOM CONJ.NCM NCM Dakoc PREP Taitung  
 ‘Dakoc and I go to Taitung.’

As illustrated in (8a), *aci* cannot appear before a common noun. Furthermore, if the second conjunct is a personal proper noun, it can only be preceded by *aci* or *atu ci*, but not \**aci ci* (e.g. (8d)). In other words, the noun class marker for personal proper nouns has to show up, but it can only show up once.

The noun class marking function of *-ci* in *aci* suggests that it should be treated as an individual noun class marker. However, I analyze it as a bound morpheme which must co-occur with *a* in NP conjunction for the following reasons. First, although *aci* can mark the noun class, it does not carry the function of marking the nominative case. This is indicated by the second conjunct in (8b), which should bear the genitive case, not the nominative case that *aci* is supposed to carry. Therefore, the function of *-ci* in *aci* is defective. Second, following the same argument that we have proposed for *atu*, the *a-* in *aci* is not the linker found in modification constructions because it does not indicate a modifier-modifiee relation, nor is it optional in an NP conjunction construction.

Hence, in this paper, *aci* is analyzed as a unified conjunct with a noun class marking function.<sup>16 17</sup>

## 4. Two types of NP conjunction

From the above discussion, we can distinguish two types of NP conjunction based on whether the second conjunct is case-marked (e.g. (7a-b)) or not (e.g. (7c)). Nevertheless, the case-marking variations seem to manifest different degrees of tightness between the conjuncts.

### 4.1 Forms and semantics of the two types

Based on the presence/absence of the case marking of the second conjunct, we may schematize two types of Amis NP conjunction in (9):

- (9) Two types of NP conjunction in Amis
- a. Case-marked NP<sub>1</sub> CONJ Case-unmarked NP<sub>2</sub>
  - b. Case-marked NP<sub>1</sub> CONJ Case-marked NP<sub>2</sub>

It is found that these two types are utilized to show different degrees of tightness between the two conjuncts.<sup>18</sup> In general, when the second conjunct is not case-marked, the two conjoined NPs tend to be regarded as one unit; when the second conjunct is case-marked, the two conjoined NPs are more likely to be conceived as two units.

First, these two types can show whether the two conjuncts carry out an action at the same time or not. Consider:

<sup>16</sup> One may argue for a two-free-form analysis for *a* and *ci* because it seemingly better accounts for the data given in Tsai & Zeng (1997) and E. Liu (2003). In these examples, *a* independently appears before *tora* ‘that’ and *cingra* ‘3S.NOM’. However, following this analysis, one has to treat *a* as a linker that is different from the linker found between a modifier and its modifyee as there is no such relation between the two conjuncts in an NP conjunction construction. Furthermore, examples like (3b) and (4c) are not acceptable to my major informant; he uses *atu* in the same contexts (e.g. *atu cingra*).

<sup>17</sup> Tang (2010:7-8) offers a rather interesting and insightful analysis to account for the different behaviors of *atu* and *aci*. She treats *atu* as a lexically formed, unified coordinator and *aci* (analyzed as *a-ci* in her proposal) as a syntactically derived coordinator in which a bound conjunctive prefix *a-* merges with *ci*. While *atu* can take DP/KP arguments or KP non-arguments, *a-ci* only takes DP/KP arguments.

<sup>18</sup> Notice that such manifestation seems to vary among dialects. In Falangaw Amis, this manifestation is not as clear as that observed in Haian Amis.

- (10) a. Ma-palo *aku* *atu* *ci* *aki* cingra.  
 UV-beat 1S.GEN CONJ NCM Aki 3S.NOM  
 ‘Aki and I beat him.’ (Implication: It is certain that the speaker and Aki did beat him, and they beat him at the same time.)
- b. Ma-palo *aku* *atu* *n-i* *aki* cingra.  
 UV-beat 1S.GEN CONJ GEN-NCM Aki 3S.NOM  
 ‘Aki and I beat him.’ (Implication: It is not certain whether the speaker and Aki both beat him. Or the speaker and Aki might have beaten him at different times.)

As seen in (10a), when the second conjunct is not case-marked, it implies that the participants denoted by the two conjoined NPs performed the action at the same time, but when the second conjunct is marked by the genitive case as in (10b), it is not certain whether they both carried out the action, or they have done it at different times. This subtle difference of togetherness indicates whether the two conjuncts are regarded as a unit (i.e. the ‘both’ and ‘at-the-same-time’ reading) or not (i.e. the ‘not both’ and ‘at-different-times’ reading).<sup>19</sup>

Second, the two types also signal whether the two conjoined NPs are placed at the same place or not. For instance:

- (11) a. Kaen-en *k-u-ni* *futing* *atu* *dateng!*  
 eat-UV NOM-NCM-this fish CONJ vegetable  
 ‘Eat this fish and vegetable (i.e. one dish)!’
- b. Kaen-en *k-u-ni* *futing* *atu* *k-u-ni* *dateng!*  
 eat-UV NOM-NCM-this fish CONJ NOM-NCM-this vegetable  
 ‘Eat this fish and this vegetable (i.e. two dishes)!’

In (11a), repeated from (6b), only the first conjunct is case-marked, and the two conjoined nouns denote two kinds of food that are placed in a single dish. In (11b),

<sup>19</sup> Such semantic difference is reminiscent of the discussion mentioned in Abdoulaye (2004). When comparing the difference between English *and* and *with*, Abdoulaye suggests that two participants A and B performing an action, when they are connected by *and* (i.e. *A and B*), might be equally in control of the action but not necessarily simultaneously or in the same place, whereas the structure *A acts with B* entails that A and B are in the same place and their involvement is simultaneous, but it does not suggest that they are equally in control. Although it is not clear to us whether or not the two actor participants in (10b) have the same degree of control over the action, the simultaneity of the action suggests that (10a) is like the *with* sentence in English while (10b) is like the *and* sentence.

where both nouns are case-marked, the two nouns refer to two kinds of food in two dishes.

Third, the two types of NP conjunction also manifest the distinction between common possession and individual possession. Observe:

- (12) a. Mi-takaw    cingra    t-u            payso    *n-u*            wawa  
 AV-steal    3S.Nom    DAT-NCM    money    GEN-NCM    child  
*atu            singsi.*  
 CONJ    teacher  
 ‘He is going to steal **the child and the teacher’s** money.’
- a’. Mi-takaw    cingra    t-u            payso    *n-u*            wawa  
 AV-steal    3S.Nom    DAT-NCM    money    GEN-NCM    child  
*atu            n-u                    singsi.*  
 CONJ    GEN-NCM    teacher  
 ‘He is going to steal **the child’s and the teacher’s** money.’
- b. Ma-ulah    kaku            t-u            wawa    *n-i*            *ofad    atu*  
 AV-like    1S.NOM    DAT-NCM    child    GEN-NCM    Ofad    CONJ  
*ci            lakaw.*  
 NCM    Lakaw  
 ‘I like **Ofad and Lakaw’s** children.’ (Ofad and Lakaw are husband and wife.)
- b’. Ma-ulah    kaku            t-u            wawa    *n-i*            *ofad    atu*  
 AV-like    1S.NOM    DAT-NCM    child    GEN-NCM    Ofad    CONJ  
*n-i                    lakaw.*  
 GEN-NCM    Lakaw  
 ‘I like **Ofad’s and Lakaw’s** children.’ (Ofad and Lakaw are not husband and wife.)

When only the first possessor is marked by the genitive case, the sentence is interpreted as common possession, as shown in (12a) and (12b). When both possessors are marked by the genitive case, the sentence will receive a reading of individual possession, as exemplified in (12a’) and (12b’).

A common feature shared by the examples discussed so far in this section is that the two conjunction types are employed to show different degrees of tightness between the two conjuncts. The structure described in (9a) indicates a tighter relation between the two conjoined NPs, while (9b) is an indicator of a less tight relation between the two conjuncts. In the following subsection, I shall discuss this syntax-semantics interface within Role and Reference Grammar (RRG).

## 4.2 Two nexus types of Amis NP conjunctions: an RRG analysis

In the following, I shall first briefly sketch the framework, focusing on its treatment of complex NPs. Then, I shall present an RRG analysis for NP conjunction in Amis based on Wu's (2001, 2003) RRG analysis of Amis NP structures.

### 4.2.1 The framework

RRG is a functional syntactic theory firstly proposed by Foley & Van Valin (1984), and subsequently developed by Van Valin & LaPolla (1997) and Van Valin (2005). There are three features in the framework regarding the analysis of NP structures. First of all, this theory draws an analogy between the syntactic representation of NP structure and that of clause structure and projects both in a layered-style schema. The second feature is the conception of NP modifiers as operators<sup>20</sup> that modify different layers in Layered Structure of Noun Phrase (LSNP). The NP operators are displayed below:

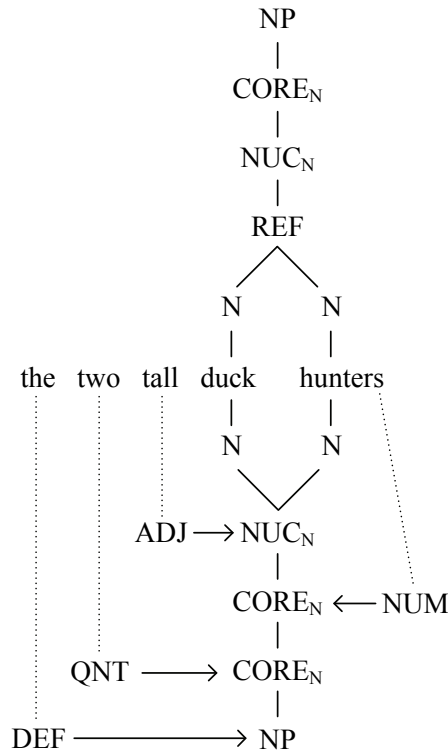
**Table 6:** Operators in the LSNP (Van Valin & LaPolla 1997:56, Van Valin 2005:24)

Syntactic Layers of NP	Operators
Nuclear <sub>N</sub>	Adjective, Noun Modifiers, Nominal Aspect (count-mass distinction, classifier)
CORE <sub>N</sub>	Number, Quantification, Negation
NP	Deitics, Definiteness

As displayed in Table 6, these operators modify different layers of a noun phrase. In fact, the different layers are reflected in the linear order as the NP operators tend to appear before the CORE<sub>N</sub> operators, which tends show up before Nuclear<sub>N</sub> operators. Figure 1 below is an English example that illustrates the projection of the operators (Van Valin & LaPolla 1997:497):

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<sup>20</sup> For clausal structures, operators are grammatical categories such as tense and aspect that modify each layer in the Layered Structure of Clause (LSC).



**Figure 1:** An English complex noun phrase

The third feature is about the analysis of complex NPs. Complex NPs are discussed in a way analogous to complex sentences that involve the combination of different layers (termed junctures), including NP,  $CORE_N$ , and  $Nucleus_N$ , with three possible linkage relations (termed nexus): cosubordination, coordination, and subordination. Cosubordination is defined by operator dependence between/among the linked units while subordination is defined by either argument or modifier dependence between/among the junctures. There is no dependence in coordination. For example, the English phrase *the woman and the man* is treated as an example of NP coordination as the two NPs share no dependence relation, but *the three green cars and two red cars* is a case of NP cosubordination as the two NPs share the same determiner, an NP-level operator. The juncture-nexus types of NPs are listed in Table 7 with English examples:

**Table 7:** Junctures and nexuses in complex NPs (Van Valin 2005:221)

Levels of juncture	Nexus type(s)	Example
NP	Coordination	<i>the tall woman and the happy man</i>
	Cosubordination	<i>the tall woman and happy man</i>
	Subordination	<i>Chris, who loves soccer</i>
CORE <sub>N</sub>	Cosubordination	<i>the order from the general to attack the city</i>
	Subordination	<i>the rumor that Fred saw a UFO</i>
Nuclear <sub>N</sub>	Cosubordination	<i>duck hunter; woodchopper</i>
	Subordination	<i>the woman who left the party early</i>

Adopting the RRG framework, Wu (2001) has proposed an analysis for Amis NP structures. In her study, she argues that different types of modifiers (e.g. noun modifiers, adjective-like modifiers, numerals, and demonstratives) should be projected as operators at different levels of LSNP.<sup>21</sup> Her analysis is summarized in Table 8.

**Table 8:** An RRG analysis of prenominal modifiers in Amis (based on Wu 2001, 2003)<sup>22</sup>

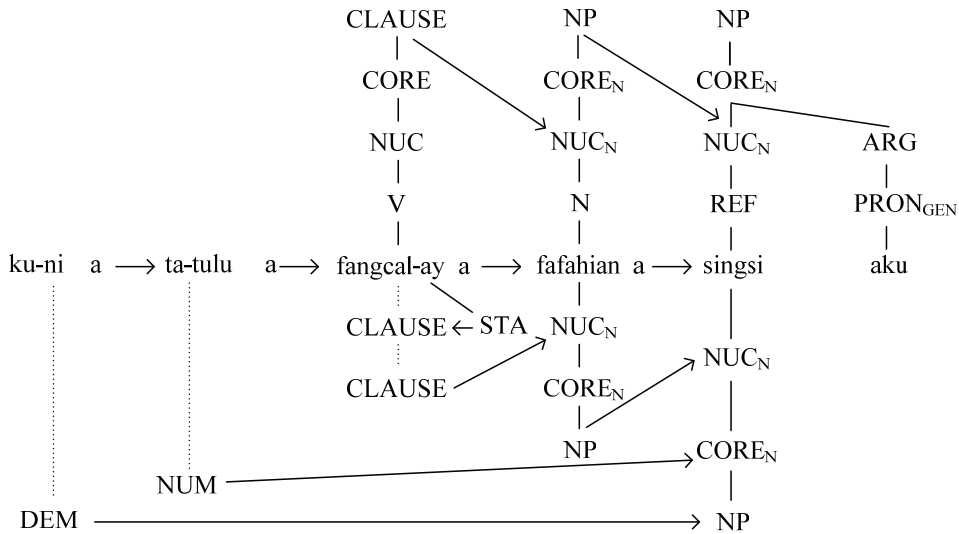
Types of Modifiers	Example	RRG Analysis
Noun Modifiers	<b>fafahiyan</b> (a) singsi [woman LNK teacher] 'female teacher'	NUC <sub>N</sub> operator
Numeral	<b>ta-tulu</b> (a) singsi [RED-three LNK teacher] 'three teachers'	CORE <sub>N</sub> operator
Demonstrative	<b>k-u-ni</b> (a) singsi [NOM-NCM-this LNK teacher] 'this/these teacher/teachers'	NP operator
Adjective-like Clausal Modifier <sup>23</sup>	<b>fangcal-ay</b> (a) singsi [good-FAC LNK teacher] 'good/beautiful teachers'	NUC <sub>N</sub> operator

A tree diagram for {*kuni a tatulu a facangaly a fafahiyan a singsi aku* 'these three beautiful female teachers of mine'} is given in Figure 2 (Wu 2001:65):

<sup>21</sup> The major argument for Wu's (2001) proposal is that these modifiers tend to appear in a fixed order prenominally: demonstrative > numeral > adjective-like > noun. This order reflects the modifying scope of these modifiers.

<sup>22</sup> Although the linker *a* in the examples is optional, it is preferred to show up, especially for senior speakers.

<sup>23</sup> Wu (2001, 2003) distinguishes two types of clausal modifiers in Amis: the adjective-like modifiers and the RC-like modifiers. Though both types are structured like a clause, they are subject to different word order restrictions due to their different modifying scope. See Wu (2001, 2003) for more discussion.



**Figure 2:** The LSNP for ‘these three beautiful female teachers of mine’

In the next section, I shall use different types of modifiers to diagnose the juncture-nexus types of NP conjunction in Amis.

#### 4.2.2 An RRG analysis of Amis NP conjunction

In light of the aforementioned framework, I propose that there are two nexus types displayed in Amis NP conjunction, NP cosubordination and NP coordination. The type that contains a case-unmarked second conjunct is an example of NP cosubordination while the type that has a case-marked second conjunct is an example of NP coordination. The evidence for the proposal that the Amis NP conjunction involves an NP juncture comes from the fact that the two conjuncts can only share NP-level modifiers, but not  $NUC_N$  and  $CORE_N$  modifiers. Consider:

- (13) a. Ira i tini k-u *fafahiyan* a *singsi* atu  
 exist PREP here NOM-NCM woman LNK teacher CONJ  
*mitiliday*.  
 student  
 ‘Here are female teachers and students.’ (The students are not necessarily female.)

- b. Ira i tini k-u *kuhting-ay* a wacu  
 exist PREP here NOM-NCM black-FAC LNK dog  
*atu pusi.*  
 CONJ cat  
 ‘Here are black dogs and cats.’ (The cats are not necessarily black.)
- c. Ira i tini k-u *tulu* a ‘ayam atu  
 exist PREP here NOM-NCM three LNK teacher CONJ  
*howak.*  
 ducks  
 ‘Here are three chickens and ducks.’ (The number of the ducks is unknown.)
- d. Kaen-en *k-u-ni* futing atu dateng!  
 eat-UV NOM-NCM-this fish CONJ vegetable  
 ‘Eat this fish and vegetable (i.e. one dish)!’
- e. Kaen-en *k-u-ni* futing atu *k-u-ni*  
 eat-UV NOM-NCM-this fish CONJ NOM-NCM-this  
*dateng!*  
 vegetable  
 ‘Eat this fish and this vegetable (i.e. two dishes)!’

As indicated in (13), the two conjuncts need not share the  $NUC_N$  operators such as *fafahiyan* ‘woman’ (e.g. (13a)) and *kuhtingay* ‘black’ (e.g. (13b)), nor need they share the  $CORE_N$  operators such as *tulu* ‘three’ (e.g. (13c)), as the scope of these operators only obligatorily covers the first conjunct. However, they have to share the NP-level operators such as demonstratives as in (13d), repeated from (11a); the scope of this operator obligatorily covers both the first and the second conjunct. This operator-sharing property also proves that the nexus type of examples with a case-unmarked second conjunct like (13d) is cosubordination while the one in (13e), repeated from (11b), is an example of NP coordination, as there is no such operator dependence in (13e). The distinction of nexus types can account for why there display different degrees of tightness between the two conjoined NPs in the two types of NP conjunction.

Although there are two structural types of Amis NP conjunction, their presence is not always acceptable. The restriction seems to be related to the semantics of the second conjunct, which will be examined in the following section.

## 5. Semantic properties and case marking of the second conjunct

As pointed out in the previous discussion, the semantic roles and the noun types of the second conjunct will influence its case marking in NP conjunction. In this section, I shall discuss this issue in terms of three noun types: personal proper noun, common nouns and pronouns, and three kinds of semantic role that these NPs play: possessor, actor, and patient.

### 5.1 Personal proper nouns

It is highly possible for both a case-marked and a case-unmarked second conjunct to appear in the conjunction when the conjuncts are personal proper nouns. When the conjuncts denote possessors, these two types are used to manifest common possession vs. individual possession. The examples below are repeated from (12b-b'):

- (14) a. Ma-ulah    kaku            t-u                    wawa    *n-i*                    *ofad*    *atu*  
 AV-like    1S.NOM    DAT-NCM    child    GEN-NCM    Ofad    CONJ  
*ci*            *lakaw*.  
 NCM    Lakaw  
 'I like **Ofad and Lakaw's** children.' (Ofad and Lakaw are husband and wife.)
- a'. Ma-ulah    kaku            t-u                    wawa    *n-i*                    *ofad*  
 AV-like    1S.NOM    DAT-NCM    child    GEN-NCM    Ofad  
*aci*            *lakaw*.  
 CONJ.NCM    Lakaw  
 'I like **Ofad and Lakaw's** children.' (Ofad and Lakaw are husband and wife.)
- b. Ma-ulah    kaku            t-u                    wawa    *n-i*                    *ofad*    *atu*  
 AV-like    1S.NOM    DAT-NCM    child    GEN-NCM    Ofad    CONJ  
*n-i*            *lakaw*.  
 GEN-NCM    Lakaw  
 'I like **Ofad's and Lakaw's** children.' (Ofad and Lakaw are not husband and wife.)

- b'. \*Ma-ulah    *kaku*        *t-u*            *wawa*    *n-i*            *ofad*  
 AV-like    1S.NOM    DAT-NCM    child    GEN-NCM    Ofad  
*aci*                *n-i*                *lakaw*.  
 CONJ.NCM    GEN-NCM    Lakaw  
 'I like **Ofad's and Lakaw's** children.' (Ofad and Lakaw are not husband and wife.)

Notice that while it is possible for the conjunct *atu* to co-occur with a second conjunct marked by *ci* or *ni*, it is not acceptable for *aci* to appear with *ni* as illustrated in (14b').

Consider the following example in which the personal proper nouns play an actor in the conjunction construction.

- (15) a. Tayra    *kaku*        *atu*         $\emptyset$ -*ci/ci*                *dakoc*    *i*        *posong*.  
 go    1S.NOM    CONJ    NOM-NCM/NCM    Dakoc    PREP    Taitung  
 'Dakoc and I went to Taitung.'
- b. Tayra    *kaku*        *aci*                *dakoc*    *i*        *posong*.  
 go    1S.NOM    CONJ.NCM    Dakoc    PREP    Taitung  
 'Dakoc and I went to Taitung.'
- b'. \*Tayra    *kaku*        *aci*                 $\emptyset$ -*ci/ci*                *dakoc*    *i*  
 go    1S.NOM    CONJ.NCM    NOM-NCM/NCM    Dakoc    PREP  
*posong*.  
 Taitung  
 'Dakoc and I went to Taitung.'
- c. Ma-palo    *aku*        *atu*        *ci*        *aki*        *cingra*.  
 UV-beat    1S.GEN    CONJ    NCM    Aki    3S.NOM  
 'Aki and I beat him.' (Implication: It is certain that the speaker and Aki did beat him, and they beat him at the same time.)
- c'. Ma-palo    *aku*        *atu*        *n-i*                *aki*        *cingra*.  
 UV-beat    1S.GEN    CONJ    GEN-NCM    Aki    3S.NOM  
 'Aki and I beat him.' (Implication: It is not certain that if the speaker and Aki both beat him. Or, the speaker and Aki might have beaten him at different times.)

When the conjuncts play an actor in an AV construction, the NP has to be preceded by *ci*, which can be rendered as a covert nominative case plus a noun class marker (i.e.  $\emptyset$ -*ci*), or simply a noun class marker.<sup>24</sup> (See Amis case marking system in §2.) When the

<sup>24</sup> As (15a) is equivalent to (15b), I suspect that the *ci* in (15a) is only a noun class marker so

conjunction construction is in undergoer voice (UV), the second conjunct can be marked by *ci* “the noun class marker” or *n-i* “the genitive case and the noun class marker”, and these two coding choices manifest different degrees of tightness between the two conjuncts as discussed in §3.

When the conjoined NPs serve as a patient, there are certain restrictions for the case-marking of the second conjunct:

- (16) a. Ma-nengneng isu Ø-*ci* aki atu Ø-*ci*/  
 UV-see 2S.GEN NOM-NCM Aki CONJ NOM-NCM  
*ci* panay?  
 NCM Panay  
 ‘Did you see Aki and Panay?’
- a’. Ma-nengneng isu Ø-*ci* aki *aci* panay?  
 UV-see 2S.GEN NOM-NCM Aki CONJ.NCM Panay  
 ‘Did you see Aki and Panay?’
- b. Mi-tala kaku *ci* aki-*an* atu *ci* panay-*an*.  
 AV-wait 1S.NOM NCM Aki-DAT CONJ NCM Panay-DAT  
 ‘I am waiting for Aki and Panay.’
- b’. \*Mi-tala kaku *ci* aki-*an* atu *ci* panay.  
 AV-wait 1S.NOM NCM Aki-DAT CONJ NCM Panay  
 ‘I am waiting for Aki and Panay.’
- c. Mi-tala kaku *ci* aki-*an* *aci* panay-*an*.  
 AV-wait 1S.NOM NCM Aki-DAT CONJ.NCM Panay-DAT  
 ‘I am waiting for Aki and Panay.’

As illustrated in (16), the second conjunct, which denotes a patient, is marked by *ci* in an UV construction (e.g. (16a)). In an AV construction, the dative case marker *-an* has to show up. That is, the second conjunct has to be properly case-marked.

## 5.2 Common nouns

When the second conjunct is a common noun, its case marking is more constrained than that of a personal proper noun. When this conjunct serves as a possessor, both types of structure (i.e. case-marked and case-unmarked) are allowed, and common vs.

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that it can blend with *a* and becomes part of the conjunct. However, this hypothesis calls for further research. The same hypothesis applies to *ci* in (16a), which is equivalent to (16a’).

individual possession is then distinguished. The examples are given in (17):

- (17) a. Mi-takaw cingra t-u payso *n-u* wawa  
 AV-steal 3S.Nom DAT-NCM money GEN-NCM child  
*atu singsi.*  
 CONJ teacher  
 ‘He is going to steal **the child and the teacher’s** money.’
- b. Mi-takaw cingra t-u payso *n-u* wawa  
 AV-steal 3S.Nom DAT-NCM money GEN-NCM child  
*atu n-u singsi.*  
 CONJ GEN-NCM teacher  
 ‘He is going to steal **the child’s and the teacher’s** money.’

However, when the common noun conjuncts are actors, only a case-unmarked second conjunct is allowed:

- (18) a. Mi-salama *k-u-ra* fafahiyan *atu* wawa.  
 AV-play NOM-NCM-that woman CONJ child  
 ‘That woman and the child are playing.’
- a'. \*Mi-salama *k-u-ra* fafahiyan *atu k-u* wawa.  
 AV-play NOM-NCM-that woman CONJ NOM-NCM child  
 ‘That woman and (her) child are playing.’
- b. \*Mi-salama *k-u-ra* fafahiyan *atu k-u-ra*  
 AV-play NOM-NCM-that woman CONJ NOM-NCM-that  
*wawa.*  
 child  
 ‘That woman and that child are playing.’
- c. Ma-palo *aku* *atu* wawa cingra.  
 UV-beat 1S.GEN CONJ child 3S.NOM  
 ‘I and the child beat him.’
- d. \*Ma-palo *aku* *atu n-u* wawa cingra.  
 UV-beat 1S.GEN CONJ GEN-NCM child 3S.NOM  
 ‘I and the child beat him.’
- e. \*Ma-palo *aku* *atu n-u-ra* wawa cingra.  
 UV-beat 1S.GEN CONJ GEN-NCM-that child 3S.NOM  
 ‘I and that child beat him.’

- e'. Ma-palo *aku* *atu-ra* *wawa* *cingra*.  
 UV-beat 1S.GEN CONJ-that child 3S.NOM  
 'I and that child beat him.'

The sentences in (18a-c) exemplify AV constructions, while those in (18d-e') illustrate UV constructions. The second conjunct is not case-marked in these examples, which shows a sharp contrast with those of personal proper nouns. Notice that even when the second conjunct is preceded by a demonstrative, its case cannot show up. As we can see in (19) below, this behavior is different from that of a patient conjunct, which is allowed to be case-marked as long as it is preceded by a demonstrative.

- (19) a. K<um>aen *kaku* *t-u-ni* *futing* *atu* *dateng*.  
 <AV>eat 1S.NOM DAT-NCM-this fish CONJ vegetable  
 'I am eating this fish and vegetable (i.e. one dish).'
- b. \*K<um>aen *kaku* *t-u-ni* *futing* *atu* *t-u*  
 <AV>eat 1S.NOM DAT-NCM-this fish CONJ DAT-NCM  
*dateng*.  
 vegetable  
 'I am eating this fish and vegetable (i.e. one dish).'
- b'. K<um>aen *kaku* *t-u-ni* *futing* *atu* ***t-u-ni***  
 <AV>eat 1S.NOM DAT-NCM-this fish CONJ DAT-NCM-this  
*dateng*.  
 vegetable  
 'I am eating this fish and this vegetable (i.e. two dishes).'
- c. Ma-kaen *n-i* *aki* *k-u* *futing* *atu* *hmay*.  
 UV-eat GEN-NCM Aki NOM-NCM fish CONJ rice  
 'Aki ate the fish and rice.'
- c'. \*Ma-kaen *n-i* *aki* *k-u* *futing* *atu*  
 UV-eat GEN-NCM Aki NOM-NCM fish CONJ  
*k-u* *hmay*.  
 NOM-NCM rice  
 'Aki ate the fish and the rice.'
- d. Kaen-en *k-u-ni* *futing* *atu* *dateng!*  
 eat-UV NOM-NCM-this fish CONJ vegetable  
 'Eat this fish and vegetable (i.e. one dish)!'

- d'. Kaen-en *k-u-ni* *futing* *atu* *k-u-ni*  
 eat-UV NOM-NCM-this fish CONJ NOM-NCM-this  
*dateng!*  
 vegetable  
 'Eat this fish and this vegetable (i.e. two dishes)!'

### 5.3 Personal pronouns

Compared with personal proper nouns and common nouns, the conjunction with pronominal conjuncts seems to be the most structurally constrained. First of all, the conjunct can only be *atu*, but not *aci* (e.g. (21b') and (21c')). Second, the second conjunct tends to be case-marked. The examples in (20) are the conjunction of two pronominal possessors.

- (20) a. Tayra k-u *widang nira* *atu* *widang aku* i  
 go NOM-NCM friend 3S.GEN CONJ friend 1S.GEN PREP  
 taypak.  
 Taipei  
 'His friend(s) and my friend(s) went to Taipei.' or 'His and my friend(s)  
 went to Taipei.'
- b. Tayra k-u *widang nira* *atu* (*widang*) *n-u*  
 go NOM-NCM friend 3S.GEN CONJ friend GEN-NCM  
*maku* i taypak.  
 1S.POSS PREP Taipei  
 'His friend(s) and my (friend(s)) went to Taipei.' or 'His and my friend(s)  
 went to Taipei.'
- c. Tayra k-u *widang nira* *atu* *maku* i taypak.  
 go NOM-NCM friend 3S.GEN CONJ 1S.POSS PREP Taipei  
 'His friend(s) and mine went to Taipei.' or 'His and my friend(s) went to  
 Taipei.'
- d. Tayra k-u *widang nira* *atu* *kaku* i taypak.  
 go NOM-NCM friend 3S.GEN CONJ 1S.NOM PREP Taipei  
 'His friend(s) and I/\*mine went to Taipei.'

As illustrated in (20), the second conjunct is coded by a genitive pronoun preceded by its head (e.g. (20a)), or a possessive pronominal noun optionally preceded by the genitive case and the head (e.g. (20b-c)). If the second conjunct shows up in its nominative form, it

cannot be interpreted as a possessor, as shown in (20d). Notice that (20a-c) are ambiguous in terms of the reading between common possession and individual possession.

When the pronominal conjunct is an actor, it can only be marked nominative regardless of the voice of the construction.

- (21) a. Mi-patiked *kaku* *atu* *cingra*.  
 AV-fish 1S.NOM CONJ 3S.NOM  
 ‘I and he go fishing.’
- a'. Mi-patiked *kaku* *aci* *cingra*.  
 AV-fish 1S.NOM CONJ.NCM 3S.NOM  
 ‘I and he go fishing.’
- b. Ma-kaen *nira* *atu* *kaku* *ku* *futing*.  
 UV-eat 3S.GEN CONJ 1S.NOM NOM-NCM fish  
 ‘He and I ate the fish.’
- b'. \*Ma-kaen *nira* *aci* *kaku* *ku* *futing*.  
 UV-eat 3S.GEN CONJ.NCM 1S.NOM NOM-NCM fish  
 ‘He and I ate the fish.’
- b''. \*Ma-kaen *nira* *atu* *aku/n-u* *maku*  
 UV-eat 3S.GEN CONJ 1S.GEN/GEN-NCM 1S.POSS  
*k-u* *futing*.  
 NOM-NCM fish  
 ‘He and I ate the fish.’

When the pronominal conjunct denotes a patient, the structures are the same as those that we have observed for personal proper nouns. That is, the second conjunct either appears in the dative case (in an AV construction) or appears in the nominative case (in a UV construction). Examine:

- (22) a. Mi-palo  $\emptyset$ -ci *aki* *takuwanan* *atu* *cingranan*.  
 AV-beat NOM-NCM Aki 1S.DAT CONJ 3S.DAT  
 ‘Aki is going to beat/is beating me and him.’
- a'. \*Mi-palo  $\emptyset$ -ci *aki* *takuwanan* *atu* *cingra*.  
 AV-beat NOM-NCM Aki 1S.DAT CONJ 3S.NOM  
 ‘Aki is going to beat/is beating me and him.’
- b. Ma-palo *n-i* *aki* *kaku* *atu* *cingra*.  
 UV-beat GEN-NCM Aki 1S.NOM CONJ 3S.NOM  
 ‘Aki beat me and him.’

The following table summarizes the discussion of this section:

**Table 9:** Semantic properties and case marking of the second conjunct

Type of Noun	Semantic Role	Voice	Case Marking of the Second Conjunct
Personal Pronouns	Possessor	--	Case-marked
	Actor	AV	Case-marked
		UV	Case-unmarked
	Patient	AV	Case-marked
		UV	Case-marked
Personal Proper Nouns	Possessor	--	Case-marked and Case-unmarked
	Actor	AV	$\gamma^{25}$
		UV	Case-marked and Case-unmarked
	Patient	AV	Case-marked
		UV	Case-marked and Case-unmarked
Common Nouns	Possessor	--	Case-marked and Case-unmarked
	Actor	AV	Case-unmarked
		UV	Case-unmarked
	Patient	AV	Case-marked (when preceded by demonstrative) and Case-unmarked
		UV	Case-marked (when preceded by demonstrative) and Case-unmarked

The table above exhibits certain tendencies for the case marking of the second conjunct in Amis NP conjunction. First, personal proper nouns possess the most structural flexibility as they can be either case-marked or unmarked. While common nouns do not have as much flexibility as that of personal proper nouns, personal pronouns are the most constrained in terms of their case-marking when they appear as the second conjunct. Second, however, in terms of case-markedness, personal pronouns win over personal proper nouns and common nouns because they are almost always case-marked, except when they serve as an actor (e.g. (21)). If we conceive the case-markedness of the second conjunct as a hierarchy, personal pronouns will be on the top of the hierarchy. The personal proper nouns will be in the middle, and the common nouns will show up at the bottom. Although I do not have a good reason to explain the first tendency,<sup>26</sup> the

<sup>25</sup> As the nominative case form for personal proper nouns is covert, we cannot tell whether this conjunct is case-marked or not. See the discussion in §5.1.

<sup>26</sup> I suspect that the case-marking flexibility of personal proper nouns is due to their multiple morphological forms of case markers. Unlike common nouns, whose case markers are always a prenominal free morpheme, and personal pronouns, of which the case is marked on the pronouns, the case markers of personal proper nouns can be a covert form, a prenominal free morpheme (e.g. *ni*), or a suffix (e.g. *-an*). These multiple morphological case forms will avoid

second one seems to follow the Animacy Hierarchy mentioned in the typological research (e.g. Silversten 1976, Whaley 1997). This Hierarchy is shown in (23):

- (23) The Animacy Hierarchy (Whaley 1997:173)  
 1 & 2 person > 3 person pronoun > proper name/kin term > human NP >  
 animate NP > inanimate NP

As mentioned in Whaley (1997:172), the categories higher on the hierarchy often are grammatically distinguished from those that are lower. Case-marking is one of the ways to show such grammatical distinctions. Thus, Amis in general observes the hierarchy regarding the case marking of the second conjunct.

## 6. Conclusion

In this paper, I have re-examined NP conjunction in Amis. The following analyses are proposed in this study. First, the conjunction markers *atu* and *aci* are re-analyzed as two unified conjunctors instead of consisting of two free morphemes (i.e. a general linker and a case marker). While I have shown that the *-tu* part in *atu* has lost its case marking function and noun class marking function, the *-ci* in *aci* still retains its noun class marking function. Second, it is found that there are two types of NP conjunction in Amis that differ in terms of the case marking of the second conjunct. These two structural types indicate the semantic tightness of the two conjoined NPs. I have discussed the syntax-semantic interface within the framework of RRG, and I have proposed that these two types signal two nexus types at the NP juncture: NP cosubordination and NP coordination. Finally, I have investigated the case-marking of the second conjunct and its relation with the semantic features of this conjunct. In general, personal proper nouns exhibit the most variations of case-marking, but personal pronouns are the most likely to be case-marked in NP conjunction. The case-markedness of the second conjunct follows the typological tendency summarized in the Animacy Hierarchy.

There are some issues that call for further research regarding this topic. First, while we have found that Amis in general observes the Animacy Hierarchy, the positions of some details such as the person of the pronouns (e.g. 1 & 2 person vs. 3 person pronouns) and the animacy of common nouns (e.g. animate vs. inanimate nouns) on the hierarchy are not clear.

Second, more semantic roles should be included in the discussion. For example, it will be interesting to see how location is marked as a locative noun is marked by the

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the co-occurrence of *atu* or *aci* with another prenominal marker. This is especially true for the dative case marker *-an*, a suffix.

dative case (for personal proper nouns) or the preposition *i* (for common nouns). We are wondering whether the dative case or the preposition has to show up with the second conjunct.

Third, a cross-dialectal study is needed for this topic. Based on my preliminary survey of Falangaw Amis, I have found at least two differences from Haian Amis in its manifestation of NP conjunction. While Haian Amis employs two conjunctors *atu* and *aci*, the latter, appearing as *asi*, is much less commonly used in Falangaw Amis. One of my informants even claims that she never uses this conjunct in the construction. Moreover, the case-marking variation of the second conjunct that we have observed in Haian Amis is not as acceptable in Falangaw Amis. For instance, examples such as (19b') and (19d') are rendered ungrammatical by my Falangaw informants. The following Falangaw sentences are given for reference:

- (24) a. K<um>aen kaku      *t-u-ni*      *futing*      ***atu-ni-ni***  
          <AV> eat    1S.NOM    DAT-NCM-this    fish      CONJ-RED-this  
          *dateng.*  
          vegetable  
          'I am eating this fish and this vegetable (i.e. two dishes).'
- a'. \*K<um>aen kaku      *t-u-ni*      *futing*      ***atu***  
          <AV>eat    1S.NOM    DAT-NCM-this    fish      CONJ  
          ***t-u-ni***      *dateng.*  
          DAT-NCM-this    vegetable  
          'I am eating this fish and this vegetable (i.e. two dishes).'
- b. K<um>aen kaku      *t-u-ni*      *futing*      ***atu-rira***  
          <AV> eat    1S.NOM    DAT-NCM-this    fish      CONJ-that  
          *dateng.*  
          vegetable  
          'I am eating this fish and that vegetable (i.e. two dishes).'
- b'. \*K<um>aen kaku      *t-u-ni*      *futing*      ***atu***  
          <AV> eat    1S.NOM    DAT-NCM-this    fish      CONJ  
          ***t-u-rira***      *dateng.*  
          DAT-NCM-that    vegetable  
          'I am eating this fish and this vegetable (i.e. two dishes).'

As illustrated in (24), the demonstrative affixes now attach to the conjunct instead of the case marker. It seems that the case-marking of the second conjunct is more constrained in this dialect. Finally, as we have seen in §2, Falangaw Amis displays a

pronominal system in which the third person pronouns are marked by a case marker (of common nouns) and a possessive pronominal noun; in other words, these pronouns seem to be conceived as common nouns. We are not sure if this difference will influence the coding of the second conjunct.

Last but not least, it may be interesting to see if the two types of NP conjunction (or the two juncture-nexus types of complex NPs) in Amis also manifest the distinction between a WITH-language and an AND-language, a typological dichotomy discussed in Stassen (2000).

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Department of English  
National Taiwan Normal University  
162, Sec. 1, Heping East Road  
Taipei 106, Taiwan  
jjwu@ntnu.edu.tw

## 阿美語名詞組的連結結構

吳靜蘭

國立台灣師範大學

本文探討阿美語名詞組的連結結構，特別是兩個連結詞 *atu* 和 *aci* 的組成分析及兩種不同的連結結構句型。這兩種句型主要差別在於第二個連結名詞組是否有格位標示。首先，本研究發現，連結詞 *atu* 應視為單一成分，而非如先前文獻（如 Tsai & Zeng 1997 和 E. Liu 2003）所提出連接詞 *a* 再加上格位標記 *tu* 的組合。本文認為 *aci* 也應視為單一成分，然而 *aci* 中的 *ci* 還保有其標示人稱專有名詞的功能。再者，本研究也發現，第二個連結名詞組有無格位標示乃是表示兩個連結名詞組之間的語意緊密度。本文也嘗試從角色指稱語法的觀點針對此種語法-語意互動的現象提出分析。本研究認為，這兩種不同的連結結構句型乃是表示是兩種不同的複雜名詞組：名詞組層次的並列結構及名詞組層次的複並結構。本文最後討論這兩種結構能否使用與第二個連結名詞組的名詞類別及語意角色的相關性。

關鍵詞：名詞組連結結構，阿美語，角色指稱語法 (RRG)