

Coordination and Comitativity in Sqliq Atayal*

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The present paper examines coordination and comitativity in Sqliq Atayal and investigates the similarities and differences between coordinative and comitative constructions. It includes a discussion of the status of conjoined elements, a semantic-functional comparison, and a syntactic comparison of the two named constructions. Furthermore, based on Stassen's (2000) classification, Sqliq Atayal can be categorized as an AND-language. It is hoped that the findings may shed some light on the typological study of coordination and comitativity in Austronesian languages.

Key words: Sqliq Atayal, coordination, comitativity, AND-language

1. Introduction

Atayal is one of the Austronesian languages spoken in Taiwan. It has two major dialects, namely, Sqliq and C'uli', with the former being more innovative and the latter more conservative. The present paper examines the constructions of coordination and comitativity in the language, specifically in Sqliq Atayal as spoken in Jianshi Township, Hsinchu County.

The term *coordination*, as stated by Haspelmath (2004:3), refers to syntactic constructions in which two or more units of the same type are combined into a larger unit and still have the same semantic relations with other surrounding elements. The units may be words (e.g. verbs), phrases (e.g. noun phrases), subordinate clauses, or full sentences. Haspelmath (2004:5-6) further indicates that such coordinate constructions divide into conjunctive coordination (i.e. 'and'-coordination), disjunctive coordination

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(i.e. 'or'-coordination), adversative coordination (i.e. 'but'-coordination), or causal coordination (i.e. 'for'-coordination). In this paper, in order to compare coordination and comitativity in Atayal, only conjunctive coordination will be examined.

The term *comitativity*, on the other hand, prototypically expresses the relation of accompaniment which is often translated as 'with' in English. Furthermore, as will be shown below, a comitative construction may sometimes resemble a coordinating construction. However, while a coordinating construction may combine words/phrases or clauses/sentences, a comitative marker only combines noun phrases to form a larger unit.

Before we discuss the constructions of coordination and comitativity in Squilq Atayal, let us consider the following two English sentences:

- (1) John and Mary are going to Taipei.
- (2) John is going to Taipei with Mary.

Note that sentence (1) containing the word *and* designates a coordinating construction, whereas sentence (2) having the word *with* illustrates a comitative construction. Comparing these two constructions, we may observe that they exhibit some syntactic, semantic and pragmatic distinctions:

- (i) With respect to part of speech, *and* is a conjunction and *with* a preposition.
- (ii) With respect to syntactic distribution, *and* may conjoin verb phrases (VPs) and clauses (CLs), in addition to noun phrases (NPs), whereas *with* can only conjoin NPs, as exemplified below:

- (3) a. John is [singing and dancing]_{VP}.
b. [John is going to Taipei, and Mary is going to Tainan]_{CL}.
- (4) a. *John is [singing with dancing]_{VP}.
b. *[John is going to Taipei, with Mary is going to Tainan]_{CL}.

- (iii) With respect to meaning, while sentence (2) only indicates that the two participants go to Taipei *together* (a collective reading; i.e. the two participants *simultaneously* perform the named action), sentence (1) gives two readings (collective and distributive; i.e. the two participants may perform the named action *simultaneously* or *separately*), as paraphrased in (5a-b):¹

¹ Such semantic-functional differences between the constructions containing 'and' and 'with' are observed by many scholars, e.g. Stassen (2003:765).

- (5) a. John and Mary are going to Taipei *together*.
 b. John and Mary are going to Taipei *separately*.

(iv) With respect to pragmatic functions, while sentence (2) views the event from John's perspective (i.e. *John* is the grammatical subject and thus the verb is *is*), sentence (1) views the event from both John and Mary's perspective (i.e. *John* and *Mary* together serve as the grammatical subject and thus the verb is *are*).

The distinctions between coordinating and comitative constructions in English seem quite clear, as shown above. However, this does not appear to be the case in Sqliq Atayal. In the following sections, we shall investigate the similarities and/or differences between the coordinating and comitative constructions in Sqliq Atayal with respect to the status of conjoined elements (either NPs, VPs or CLs), and from semantic-functional and syntactic perspectives, including inclusory construction, topic construction, negative construction, and interrogative construction.

2. Status of conjoined elements

In Sqliq Atayal, there are two markers that are used in coordinating and comitative constructions; namely, *ru'* and *ki'*. In this section, the status of elements being conjoined by *ru'* and *ki'* will be examined.

2.1 Status of *ru'*-conjoined elements

Egerod (1999:ix) treats *ru'* as a particle, just like the other pre-nominal markers *qu'*, *na'*, *nqu'*, *sa*, *squ'*, *te* and *ki'*, and more specifically he calls it a 'particle of coordination'. Rau (1992) and Huang (1993), on the other hand, categorize *ru'* as a conjunction, since it can conjoin two (or more) elements into a larger unit. The elements being conjoined are not restricted to NPs; they can be VPs or CLs as well. Below are some examples with *ru'* conjoining two NPs. Note that the conjoined NPs can be kinship terms or common nouns, and that common nouns can be animate (either human or non-human) or inanimate (either concrete or abstract):²

² Atayal examples given in this paper are mostly taken from our own fieldnotes, unless specified otherwise. They follow the writing system co-claimed by the Ministry of Education and the Council of Indigenous Peoples on December 15, 2005. Most of the symbols are identical to IPA symbols except for the following: b ⇒ voiced bilabial fricative /β/, g ⇒ voiced velar fricative /ɣ/, ng ⇒ voiced velar nasal /ŋ/, n_g ⇒ consonant cluster /n/ & /g/; y ⇒ palatal glide /j/, and ' ⇒ glottal stop /ʔ/.

- (6) NP₁ ru' NP₂
- a. kinship terms
 m-usa'=ku' m-ita' [yaba' ru' yaya'].³
 AF-go=1S.Nom AF-see father Conj mother
 'I am going to see Father and Mother.'
 - b. common nouns (animate – human)
 m<n>wah taypak qu' [bnkis ru' laqi'].
 AF<Prf>come Taipei Nom old:man Conj child
 'The old man and the child went to Taipei (and are back now).'
 - c. common nouns (animate – non-human)
 sizy-on=maku' qu' [hozil ru' ngyaw].
 like-PF=1S.Gen Nom dog Conj cat
 'I like dogs and cats.'
 - d. common nouns (inanimate – concrete)
 swa'=su' m-tbzyeh [ngasal ru' pqwasan] krryax pi?
 why=2S.Nom AF-come:and:go home Conj school often Part
 'Why do you often come and go between home and school?' (Based on Hayung 2008:23)
 - e. common nouns (inanimate – abstract)
 pspung hiya' ga', s<m>pung squ' [maqux ru' slaqux].
 judge Emp Top <AF>decide Loc winning Conj losing
 'As for a judge, he decides (who is) the winner or loser.' (Based on Hayung 2008:97)

When there are more than two NPs to be conjoined, *ru'* may only precede the last coordinand though it may precede all the coordinands except for the first one, as shown below:

³ Symbols and abbreviations used in this paper are as follows. =: indicates that the following bound pronoun is a clitic; < >: the enclosed element is an infix or its gloss; 1PE: first person plural exclusive; 1PI: first person plural inclusive; 1S: first person singular; 2P: second person plural; 2S: second person singular; 3P: third person plural; 3S: third person singular; AF: Agent Focus; BF: Beneficiary Focus; Com: Comitative; Conj: Conjunction; Dist: Distal; Emp: Emphatic; Gen: Genitive; IF: Instrument Focus; Imp: Imperative; Imprf: Imperfective aspect; Irr: Irrealis; LF: Locative Focus; Loc: Locative; NAF: Non-Agent Focus; Neg: Negation; Neu: Neutral; Nom: Nominative; Nrf: Non-referential; P: Plural; Part: Particle; PF: Patient Focus; Prf: Perfective aspect; Prox: Proximal; Rec: Reciprocal; Red: Reduplication; Rem: Remote; Rf: Referential; Top: Topic.

- (6) NP₁, (ru') NP₂ ru' NP₃
- f. ana' nanu' cyux=nya' bir-un, yan [l-lukus, l-yamil,
any what Imprf.Rem=3S.Gen buy-PF like P-clothes P-shoe
ru' l-habuk].
Conj P-belt
'She buys everything, such as clothes, shoes, and belts.' (Based on Hayung
2008:120)
- f. ana' nanu' cyux=nya' bir-un, yan [l-lukus,
any what Imprf.Rem=3S.Gen buy-PF like P-clothes
ru' l-yamil, ru' l-habuk].
Conj P-shoe Conj P-belt
'She buys everything, such as clothes, shoes, and belts.'

As for the VP and CL coordinating constructions, the distinctions between them are not clear to us yet. Rau (1992:186-187) distinguishes conjoined VPs from conjoined CLs by means of the subject's being present once (VP coordination) or more than once (CL coordination). In a similar way, this paper utilizes the criterion⁴ whether each coordinand has an overt NP manifesting the subject argument in differentiating between VP and CL coordinations; that is, coordinands without the presence of the subject arguments are regarded as conjoined VPs (e.g. (7a-b)), and only full clauses are treated as coordinating CLs (e.g. (8a-b)).

- (7) VP₁ ru' VP₂ (VP₁, VP₂ ru' VP₃)
- a. [plquy ru' qruyux] ngurus=nya'.
white.AF Conj long.AF beard=3S.Gen
'His beard is white and long.'
- b. [m-usa' ngasal=mu ru' m-anig qulih] krryax qu' ciwas.
AF-go house=1S.Gen Conj AF-eat fish often Nom Ciwas
'Ciwas often goes to my house and eats fish.'

⁴ Similarly, Haspelmath (2004:11) points out that in many languages, clausal and verbal coordinations cannot be easily distinguished. Because it is quite unclear what criteria one may use to argue whether he/she is dealing with clausal or verb-phrase conjunction, the notion "verbal conjunction" often lumps together clauses and verb phrases. Since such a distinction is not crucial to the present paper, the discussion stops here; further investigations may be left for future research.

- (8) CL₁ ru' CL₂
- a. [m-aniq=saku'] ru' [m-ita'=saku' biru'].
 AF-eat=1S.Nom Conj AF-see=1S.Nom book
 '(lit.) While I am eating, I am reading a book.'
- b. [t<m>apih tapih limuy] ru' [m-qwas sayun].
 <AF>fan fan Limuy Conj AF-sing Sayun
 'When Limuy is fanning a fan, Sayun is singing.'

2.2 Status of *ki'*-conjoined elements

Next let us consider the status of *ki'*-conjoined elements. Egerod (1999:ix) regards *ki'* as a particle of inclusion and treats it as a noun particle meaning 'also, and, together with' (1999:118). Rau (1992:189), on the other hand, analyzes *ki'* as a conjunction meaning 'together with' which 'is used to join the subject to the noun referring to person or person with whom the subject is doing the action.' The present paper considers *ki'* a case marker because syntactically it only precedes an NP and semantically it designates the following NP as having an accompaniment role,⁵ and is thus a Comitative case marker:

- (9) ki' functioning like a Comitative case marker: NP₁ ki' NP₂ (NP₂: personal proper nouns or kinship terms)
- a. m-qwas qu' tali' ki' ciwas krryax.
 AF-sing Nom Tali' Com Ciwas often
 'Tali' often sings with Ciwas.'
- b. wal mngka' qu' sayun ki' yaya'=nya'.
 go.AF.Prf Taipei Nom Sayun Com mother=3S.Gen
 'Sayun went to Taipei with her mother.'

When there are more than two conjoined NPs, *ki'* may only precede the last coordinand; no other possibility is allowed, as shown below:

⁵ Pre-nominal markers like ki' in Formosan languages are called differently among linguists; for instance, 'relation markers' by Tsuchida (1980:191), 'construction markers' by Ferrell (1982: 12) and Cauquelin (1991:42), and 'case markers' by Li (1997). For a more detailed discussion and definition of 'case markers', please refer to Huang et al. (1998:23-24).

- (9) NP₁ (*ki') NP₂ ki' NP₃
- c. m-qwas qu' tali', temu ki' ciwas krryax.
 AF-sing Nom Tali' Temu Com Ciwas often
 'Tali' often sings with Temu and Ciwas.'
- c'. *m-qwas qu' tali' ki' temu ki' ciwas krryax.
 AF-sing Nom Tali' Com Temu Com Ciwas often
 'Tali' often sings with Temu and Ciwas.'
- c''. *m-qwas qu' tali' ki' temu, ciwas krryax.
 AF-sing Nom Tali' Com Temu Ciwas often
 'Tali' often sings with Temu and Ciwas.'

Concerning the distribution of the marker *ki'*, it mostly precedes personal proper nouns or kinship terms, as exemplified by (9a-b). However, *ki'* sometimes appears before common nouns that manifest human beings. For instance:

- (10) ki' functioning like a Comitative case marker: NP₁ ki' NP₂ (NP₂: common nouns)
- a. m-qwas qu' tali' ki' kneril=nya' krryax.
 AF-sing Nom Tali' Com woman=3S.Gen often
 'Tali' often sings with his wife.'
- b. wal mngka' qu' sayun ki' tmosiq qasa.
 go.AF.Prf Taipei Nom Sayun Com gum (in eyes) that
 'Sayun went to Taipei with that good-for-nothing.'

Furthermore, while elder and perhaps more sophisticated Atayal speakers only use *ki'* when conjoining proper nouns, most young people use *ru'* in substitution of *ki'*.⁶ For instance:

- (9) NP₁ ru' NP₂
- a'. m-qwas qu' tali' ru' ciwas krryax.
 AF-sing Nom Tali' Conj Ciwas often
 'Tali' and Ciwas often sing (together or separately).'

⁶ It is interesting to note that in Huang et al. (2000) (*Collection of Atayal Data and Vocabularies*), out of 40,000 words or so, the word *ki'* appears 38 times and *ru'* 923 times. Apparently, the latter is more often used. However, whether the marker *ki'* will completely be replaced by *ru'* deserves future observation.

- b'. wal mngka' qu' sayun ru' yaya'=nya'.
 go.AF.Prf Taipei Nom Sayun Conj mother=3S.Gen
 'Sayun and her mother went to Taipei (together or separately).'

However, notice that the meanings of (9a-a') and (9b-b') are not exactly identical. We shall return to this issue in §3.

Though *ki'* may conjoin NPs, unlike the conjunction *ru'* (see (7a-b) & (8a-b)), it cannot conjoin VPs or CLs, as exemplified below:

(7) *VP₁ ki' VP₂

- a'. *[plquy ki' qruyux] ngurus=nya'.
 white.AF Com long.AF beard=3S.Gen
 'His beard is white and long.'

- b'. *[m-usa' ngasal=mu ki' m-anik qulih] krryax qu' ciwas.
 AF-go house=1S.Gen Com AF-eat fish often Nom Ciwas
 'Ciwas often goes to my house and eats fish.'

(8) *CL₁ ki' CL₂

- a'. *[m-anik=saku'] ki' [m-ita'=saku' biru'].
 AF-eat=1S.Nom Com AF-see=1S.Nom book
 'While I am eating, I am reading a book.'

- b'. *[t<m>apih tapih limuy] ki' [m-qwas sayun].
 <AF>fan fan Limuy Com AF-sing Sayun
 'When Limuy is fanning a fan, Sayun is singing.'

2.3 Summary

To sum up the present discussion, we conclude that:

- (i) The element *ru'* is a conjunction and can conjoin NPs, VPs, or CLs, whereas *ki'* is a Comitative case marker and can only conjoin NPs.
- (ii) In conjoining NPs, *ki'* mostly precedes proper nouns or kinship terms and sometimes precedes common nouns manifesting human participants, whereas *ru'* extends its original usage and is able to conjoin all kinds of NPs.
- (iii) In conjoining more than two NPs, *ru'* may either precede all the coordinands except for the first one or only precede the last coordinand, while *ki'* only precedes the last coordinand without any other possibility being allowed.

3. Semantic-Functional comparison

In this section, we shall explore the semantic-functional similarities and differences between constructions containing *ru'* and *ki'* in Sqliq Atayal. As will be shown below, depending on the type of verb the named construction has, different readings are obtained. That is, whether the verbs are ordinary verbs, reciprocal verbs,⁷ deictic verbs, AF (Agent Focus)⁸ verbs, or NAF (Non-Agent Focus) verbs, the named constructions may yield either collective, distributive, locative, and/or directional readings.

3.1 Collective and distributive readings

Recall that, as discussed in §1, the coordinating and comitative constructions in English may designate different meanings. That is, the coordinating construction may yield both collective and distributive readings (i.e. the two participants perform the named action simultaneously or separately), while the comitative construction only presents a collective reading (i.e. the two participants simultaneously perform the named action). Such semantic-functional distinctions also appear in Sqliq sentences containing the markers *ru'* and *ki'*, as examples in (9)-(10) (repeated below) demonstrate:

- (11) a. m-qwas qu' tali' ki' ciwas krryax. (=9a)
 AF-sing Nom Tali' Com Ciwas often
 'Tali' often sings with Ciwas.'
- a'. m-qwas qu' tali' ru' ciwas krryax. (=9a')
 AF-sing Nom Tali' Conj Ciwas often
 i. 'Tali' and Ciwas often sing together.'
 ii. 'Tali' and Ciwas often sing separately.'
- b. wal mngka' qu' sayun ki' yaya'=nya'. (=9b)
 go.AF.Prft Taipei Nom Sayun Com mother=3S.Gen
 'Sayun went to Taipei with her mother.'
- b'. wal mngka' qu' sayun ru' yaya'=nya'. (=9b')
 go.AF.Prft Taipei Nom Sayun Conj mother=3S.Gen
 i. 'Sayun and her mother went to Taipei together.'
 ii. 'Sayun and her mother went to Taipei separately.'

⁷ Following Lichtenberk (1994) (as cited in Chuang 2007:77), "reciprocal verbs are defined as requiring two (or more) participants involved in the same action. These two participants may either act one upon the other ... or take part in the same action together."

⁸ Please refer to Huang (1993, 1995, 2000) for a detailed discussion of the focus system in Atayal.

Note that the verbs in the above sentences (i.e. *mqwas* 'sing' and *wal* 'went') are neither reciprocal nor deictic. Also as indicated in the English glosses, Atayal sentences (11a-b) containing *ki*' only give a collective reading, while sentences (11a'-b') containing *ru*' present a collective and a distributive reading; in other words, both constructions can entail collective readings, and only the coordinating construction may also give a distributive reading.

In addition, the Comitative case marker *ki*' gives the sense of accompaniment (as indicated by the English preposition 'with' in the glosses of (11a-b)); that is, the participant manifested by the *ki*'-introduced NP is not the major participant of the event but an adjunct one. On the other hand, the participants manifested by the *ru*'-conjoined NPs are both major participants of the event (as indicated by the English conjunction 'and' in the glosses of (11a'-b')).

Note that the above sentences are all AF constructions. Below let us consider some NAF sentences in the language:

- (12) a. tcing-un=maku' qu' tali' ki' sayun.
 beat-PF=1S.Gen Nom Tali' Com⁹ Sayun
 'Tali' and Sayun will be beaten by me.'
- a'. tcing-un=maku' qu' tali' ru' sayun.
 beat-PF=1S.Gen Nom Tali' Conj Sayun
 'Tali' and Sayun will be beaten by me.'
- b. tcing-un=myan qu' tali' ki' sayun.
 beat-PF=1PE.Gen Nom Tali' Com Sayun
 'Tali' and Sayun will be beaten by us.'
- b'. tcing-un=myan qu' tali' ru' sayun.
 beat-PF=1PE.Gen Nom Tali' Conj Sayun
 'Tali' and Sayun will be beaten by us.'

Note that NAF sentences containing either *ki*' or *ru*', (i.e. (12a-a') & (12b-b')), make no semantic distinctions (nor any syntactic distinctions, as will be demonstrated by (22c) & (30c)); they present only a collective reading—both *tali*' and *sayun* manifest Patient participants instead of Agent ones, and they both get involved in the event 'beating' simultaneously. In other words, the marker *ki*' in sentences with NAF verbs functions

⁹ As shown here and in §3.2, the marker *ki*' may exhibit diverse functions. However, since such multifunctional features are due to the semantics of cooccurring verbs, *ki*'s in all the Squiliq examples have the morphemic gloss 'Com'.

more like a coordinator and presents a coordinative interpretation without the accompaniment sense. On the other hand, sentences containing the marker *ru'* only give a collective (but not a distributive) reading,¹⁰ just like sentences containing the marker *ki'*.

Similar situations can also be found in the following NAF sentences:

- (13) a. tcing-un=saku' ni' tali' ki' sayun.
 beat-PF=1S.Nom Gen Tali' Com Sayun
 'I will be beaten by Tali' and Sayun.'
- a'. tcing-un=saku' ni' tali' ru' sayun.
 beat-PF=1S.Nom Gen Tali' Conj Sayun
 'I will be beaten by Tali' and Sayun.'
- b. tcing-un=sami ni' tali' ki' sayun.
 beat-PF=1PE.Nom Gen Tali' Com Sayun
 'We will be beaten by Tali' and Sayun.'
- b'. tcing-un=sami ni' tali' ru' sayun.
 beat-PF=1PE.Nom Gen Tali' Conj Sayun
 'We will be beaten by Tali' and Sayun.'

Again the marker *ki'* in (13a-b), like *ru'* in (13a'-b'), functions more like a conjunction. Thus, all these four sentences present only a collective reading; both Agent participants (i.e. *tali'* and *sayun*) get involved in the named event simultaneously.

Next, let us examine coordinating and comitative constructions that contain reciprocal verbs. Consider the following Atayal sentences:

- (14) a. cyux **m-tucing** qu' watan ki'/ru' temu'.
 Imprf.Rem AF.Rec-beat Nom Watan Com/Conj Temu'
 'Watan and Temu' are fighting against each other.'
- b. **m-p-cheng** qba' krryax qu' mlikuy ki'/ru' kneril qasa.
 AF-Rec-hold hand often Nom male Com/Conj female that
 'That man and that woman often hold hands.' (Based on Hayung 2008: 249)

¹⁰ Our Atayal informants consider that sentences like (12a') only yield a collective reading, and the distributive reading can only be given by means of coordinating CLs, as exemplified below:

(12) a". tcing-un=maku' qu' tali' ha ru' tcing-un=maku' uzi qu' sayun.
 beat-PF=1S.Gen Nom Tali' Part Conj beat-PF=1S.Gen too Nom Sayun
 'Tali' will be beaten by me, and (then) Sayun will be beaten by me, too.'

- (15) ki' functioning like a Comitative/Locative marker
- a. m-usa'=saku' m-'abi' ki' taru' kira'.
 AF-go=1S.Nom AF-sleep Com Taru' later
 i. 'I am going to sleep with Taru' later.'
 ii. 'I am going to sleep at Taru's (house) later.'

As indicated above, sentence (15a) has two readings; the marker *ki'* may serve as a Comitative marker (and thus (i) the accompaniment sense) or as a Locative marker (and thus (ii) the proper noun *taru'* designating 'Taru's house'). In the latter sense, *ki'* functions somewhat like the Locative case marker *te*¹² in (15b) which precedes a common noun *ngasal* 'house' designating a place:

- (15) b. m-usa'=saku' m-'abi' te ngasal taru' kira'.
 AF-go=1S.Nom AF-sleep Loc house Taru' later
 'I am going to sleep at Taru's house later.'

Besides functioning as a Comitative or Locative marker, the element *ki'* may serve to indicate a unidirectional relationship between the two arguments and thus be analyzed either as an Ablative (i.e. source-oriented) or Allative (i.e. goal-oriented) marker when sentences have deictic verbs like *pqsyu* 'borrow' and *tbzirun* 'sell':

- (16) ki' functioning like an Ablative marker
 ungat pila'=maku' ru' yasa **p-qsyu**=saku' ki' yumin.
 Neg money=1S.Gen Conj so Irr-borrow.AF=1S.Nom Com Yumin
 'I have no money, and so I will borrow (money) from Yumin.'
- (17) ki' functioning like an Allative marker
 ungat lukus ni' limuy ru' **tbzir-un**=maku' lukus ki' limuy.
 Neg clothes Gen Limuy Conj sell-PF=1S.Gen clothes Com Limuy
 'Limuy does not have clothes, and so I will sell clothes to Limuy (her).'

In the two examples above, *ki'* serves to introduce the source and the goal of the named events. When *ki'* cooccurs with source-oriented verbs like *pqsyu* 'borrow' (e.g. (16)), it introduces the source of the event 'borrow' and hence functions like an Ablative marker. On the other hand, when *ki'* cooccurs with goal-oriented verbs like *tbzirun* 'sell' (e.g. (17)), it introduces the goal of the event 'sell' and thus functions like an Allative marker.¹³

¹² Concerning the case marking system of Sqliq Atayal, please refer to Huang (1993:55).

¹³ A discussion of similar diverse functions of *ki'* in Mayrinax Atayal, another dialectal variant

Before ending the present discussion, we may wonder whether *ki*'s having comitative, coordinative, locative, ablative and allative functions should be analyzed as one morpheme (and thus a polysemous one) or different morphemes, and whether any grammaticalization process has taken place.¹⁴ In this paper, it is postulated that *ki*' in Atayal has multifunctional usages; that is, a one-morpheme approach is adapted, and diverse functions associated with *ki*' seem to be determined by the semantics of cooccurring verbs.

3.3 Summary

To sum up the present discussion, we conclude that:

- (i) While *ru*' merely serves as a coordinating conjunction, the element *ki*' has multifunctional usages.
- (ii) With respect to collective and distributive readings (i.e. either performing simultaneous or separate actions), *ru*'-conjoined NPs generally allow both readings, whereas NPs conjoined by *ki*' only give a collective reading (i.e. performing simultaneous actions).
- (iii) In NAF constructions and reciprocal constructions, *ki*' functions more like a coordinating conjunction; and the named constructions, either with *ru*' or *ki*', only entail a collective reading, without accompaniment or distributive sense.
- (iv) Depending on the cooccurring verbs (either a motion verb, a source-oriented verb, or a goal-oriented verb), *ki*' may function like a Locative, an Ablative, or an Allative marker respectively.

of Atayal as spoken in Miaoli, has been presented in Huang (1995:102). Some examples with *ki*' functioning like an Ablative or an Allative marker are given below for comparison:

- (i) a. pa-pasina'-un=mu ku' pila' ki' yumin.
 Red-request-PF=1S.Gen Nom.Rf money KI' Yumin
 'I will ask Yumin to return the money to me.'
- b. pa-pasina'-un=mu ku' pila' cku' 'ulaqi'.
 Red-request-PF=1S.Gen Nom.Rf money KI' child
 'I will ask the child to return the money to me.'
- (ii) ukas a' pila'=mu ru' pa-kabauh=cu ki' yumin.
 Neg Nom.Nrf money=1S.Gen Conj Irr-borrow=1S.Nom KI' Yumin
 'I have no money, and I will borrow (money) from Yumin.'

Also, such multifunctional usages of comitative case markers are found in other languages, e.g. *gen* in Mandarin Chinese (cf. Furukawa 2000 & Chuang 2007).

¹⁴ Many scholars, e.g. Stolz (2001) and Stolz et al. (2006), point out that in certain languages, comitative, instrumental, and directional/locational might somehow be related.

4. Syntactic comparison

In this section, inclusory construction, topic construction, negative construction, and interrogative construction containing markers *ki'* and *ru'* will be examined.

4.1 Inclusory construction¹⁵

Recall that in examples (9)-(10), the marker *ki'* is used in conjoining two nouns (i.e. NP₁ *ki'* NP₂), proper and/or common nouns that manifest or are related to human beings. Now consider the following examples with one of the involved participants manifested by a bound pronoun¹⁶ (i.e. Pronoun *ki'* NP):

- (18) a. m-qwas=**sami** ki' ciwas krryax.
 AF-sing=1PE.Nom Com Ciwas often
 'I often sing with Ciwas.'
- b. wal=**simu** mngka' ki' yaya'=nya'?
 go.AF.Prfl=2P.Nom Taipei Com mother=3S.Gen
 'Did you go to Taipei with her mother?'
- c. nyux=**sami** m-tucing ki' temu'.
 Imprf.Prox=1PE.Nom AF.Rec-beat Com Temu'
 'Temu' and I are fighting against each other.'
- d. nyux=**simu** m-p-kayal ki' sayun?
 Imprf.Prox=2P.Nom AF-Rec-say Com Sayun
 'Are you and Sayun conversing with each other?'

Notice that the pronouns in the above sentences are all plural, i.e. *sami* 'we' and *simu* 'you (pl.)', instead of their singular counterparts, i.e. *saku'* 'I' and *su'* 'you (sg.)'. Also, each event presented in (18a-d) involves two participants. In other words, the plural pronouns under discussion count in the participant manifested by the Comitative marker *ki'*-introduced NP (i.e. *ciwas* in (18a), *yaya' nya'* in (18b), *temu'* in (18c) and *sayun* in (18d)), and thus form 'inclusory construction'. Such a syntactic property seems to be widely observed throughout the Austronesian language family (Haspelmath 2007:

¹⁵ In this paper, the term "inclusory construction" is adopted (ref. Lichtenberk 2000, Haspelmath 2004 and Reid 2009), instead of "inclusive plural pronouns" as used in Huang (1993, 1995, 2006).

¹⁶ For the complete pronominal system of Sqliq Atayal, please refer to Huang (1993:17).

30-31). Following Haspelmath (2004:25), the pronoun is called ‘the inclusory pronoun’ (i.e. the one denoting the total set) and the NP ‘the included NP’.

However, each of the sentences in (18a-d) may be given a second reading, as shown below:

- (18) a. m-qwas=**sami** ki' ciwas krryax.
 AF-sing=1PE.Nom Com Ciwas often
 i. ‘I often sing with Ciwas.’
 ii. ‘We often sing with Ciwas.’
- b. wal=**simu** mngka' ki' yaya'=nya'?
 go.AF.Prf=2P.Nom Taipei Com mother=3S.Gen
 i. ‘Did you go to Taipei with her mother?’
 ii. ‘Did you all go to Taipei with her mother?’
- c. nyux=**sami** m-tucing ki' temu'.
 Imprf.Prox=1PE.Nom AF.Rec-beat Com Temu'
 i. ‘Temu’ and I are fighting against each other.’
 ii. ‘Temu’ and we are fighting against each other.’
- d. nyux=**simu** m-p-kayal ki' sayun?
 Imprf.Prox=2P.Nom AF-Rec-say Com Sayun
 i. ‘Are you and Sayun conversing with each other?’
 ii. ‘Are you all and Sayun conversing with each other?’

Note that, as indicated by the two readings, the plural pronouns in (18a-d) may either refer to the total set of participants (i.e. an inclusory meaning), or refer to plural participants and the participant manifested by the included NP (i.e. an additive meaning). In other words, like Haspelmath (2004:25) points out, inclusory constructions may be ambiguous—as depicting an inclusory meaning and an additive meaning. However, it is not yet certain whether such an additive interpretation in Atayal is because the marker *ki*' is gradually replaced by the conjunction *ru*' (recall (9a'-b')), or because the element *ki*' may denote a coordinative meaning while co-appearing with reciprocal verbs (recall (14a-e)).

There is another thing that deserves further attention. All the inclusory constructions given above seem to allow the plural pronouns (i.e. inclusory pronouns) to be substituted by singular pronouns in Jianshi Atayal, as exemplified below:¹⁷

¹⁷ It is well-known that Sqliq Atayal is rather innovative, with a lot of structural properties disappearing. The absence of inclusory pronouns in (18a'-d') seems to evidence such an observation.

- (18) a'. m-qwas=**saku'** ki' ciwas krryax.
 AF-sing=1S.Nom Com Ciwas often
 'I often sing with Ciwas.'
- b'. wal=**su'** mngka' ki' yaya'='nya'?'
 go.AF.Prf=2S.Nom Taipei Com mother=3S.Gen
 'Did you go to Taipei with her mother?'
- c'. nyux=**saku'** m-tucing ki' temu'.
 Imprf.Prox=1S.Nom AF.Rec-beat Com Temu'
 'Temu' and I are fighting against each other.'
- d'. nyux=**su'** m-p-kayal ki' sayun?
 Imprf.Prox=2S.Nom AF-Rec-say Com Sayun
 'Are you and Sayun conversing with each other?'

Determining whether the inclusory construction in Squliq Atayal as spoken in Jianshi, Hsinchu County, is disappearing merits future observation.

Before ending this subsection, note that though *ru'* may substitute for the Comitative marker *ki'* ((9a-b) vs. (9a'-b')), the substitution of *ki'* with the conjunction *ru'* is not allowed in inclusory construction, as demonstrated by the following ungrammatical sentences:

- (19) a. *m-qwas=**sami** ru' ciwas krryax.
 AF-sing=1PE.Nom Conj Ciwas often
 'We and Ciwas often sing.'
- b. *wal=**simu** mngka' ru' yaya'='nya'?'
 go.AF.Prf=2P.Nom Taipei Conj mother=3S.Gen
 'Did you all and her mother go to Taipei?'
- c. *nyux=**sami** m-tucing ru' temu'.
 Imprf.Prox=1PE.Nom AF.Rec-beat Conj Temu'
 'We and Temu' are fighting against each other.'
- d. *nyux=**simu** m-p-kayal ru' sayun?
 Imprf.Prox=2P.Nom AF-Rec-say Conj Sayun
 'Are you all and Sayun conversing with each other?'

A possible explanation for the ungrammaticality of (19a-d) is that the conjunction *ru'* is to conjoin elements of the same status, and since the plural pronouns used here are bound forms, they cannot be conjoined with free NPs. Sentences (19a-d) can be corrected if

the corresponding free Neutral pronouns of the above-mentioned bound pronouns are used and appear in Topic constructions, which will be discussed in §4.2.2.

4.2 Topic construction

Atayal allows only the grammatical subject to appear as Topic. Below let us examine Topic construction with *ki'* and that with *ru'* respectively.

4.2.1 Topic construction with *ki'*

In the following discussion, we shall investigate sentences having the grammatical subject encoded by free nouns or bound pronouns. First, consider sentence (20a) with the marker *ki'* conjoining free nouns manifesting Agent participants (i.e. NP₁ ki' NP₂) and their corresponding Topic constructions (20b-e):

- (20) a. m-qwas qu' sayun ki' ciwas krryax.
AF-sing Nom Sayun Com Ciwas often
'Sayun often sings with Ciwas.'
- b. sayun ki' ciwas ga', m-qwas krryax.
Sayun Conj Ciwas Top AF-sing often
'As for Sayun and Ciwas, they often sing (together).'
- c. sayun ga', m-qwas ki' ciwas krryax.
Sayun Top AF-sing Com Ciwas often
'As for Sayun, she often sings with Ciwas.'
- d. *ciwas ga', m-qwas sayun krryax.
Ciwas Top AF-sing Sayun often
'*As for Ciwas, Sayun often sings with her.'
- e. *ki' ciwas ga', m-qwas sayun krryax.
Com Ciwas Top AF-sing Sayun often
'*As for Ciwas, Sayun often sings with her.'

Examining the above sentences, we note that (i) either NP₁ ki' NP₂ (i.e. the Subject along with an adjunct participant introduced by *ki'*) or NP₁ alone (i.e. the Subject) may serve as Topic (e.g. (20b-c)), but (ii) NP₂ by itself cannot, as illustrated by (20d-e), which seems to indicate that the status of NP₂ is not identical to that of NP₁, and that NP₂ plays a less important role in the named event (or is 'backgrounded' in Stassen's terminology (2003:765)).

A similar phenomenon is also observed in sentences containing reciprocal verbs with *ki'* functioning more like a coordinating conjunction (recall (14a-e)) or conjoining two NPs designating Agent participants, as exemplified below:

- (21) a. m-tucing 'i' tali' ki' sayun.
 AF.Rec-beat Nom Tali' Com Sayun
 'Tali' and Sayun are beating each other.'
- b. tali' ki' sayun ga', m-tucing.
 Tali' Com Sayun Top AF.Rec-beat
 'As for Tali' and Sayun, they are beating each other.'
- c. tali' ga', m-tucing ki' sayun.
 Tali' Top AF.Rec-beat Com Sayun
 'As for Tali', he and Sayun are beating each other.'
- d. *ki' sayun ga', m-tucing 'i' tali'.
 Com Sayun Top AF.Rec-beat Nom Tali'
 '*As for Sayun, Tali' and she are beating each other.'
- e. *sayun ga', m-tucing 'i' tali'.
 Sayun Top AF.Rec-beat Nom Tali'
 '*As for Sayun, Tali' and she are beating each other.'

Again we may note that either NP₁ ki' NP₂ or NP₁ alone (i.e. the grammatical subject) may serve as Topic (e.g. (21b-c)), but NP₂ by itself cannot (e.g. (21d-e)), which further supports that the status of NP₂ is not identical to that of NP₁.

Next, consider NAF sentences with *ki'* conjoining two NPs manifesting Patient arguments and Genitive bound pronouns serving as an Agent participant:

- (22) a. tcing-un=**maku'** qu' tali' ki' sayun. (=12a)
 beat-PF=1S.Gen Nom Tali' Com Sayun
 'Tali' and Sayun will be beaten by me.'
- b. tali' ki' sayun ga', tcing-un=**maku'**.
 Tali' Com Sayun Top beat-PF=1S.Gen
 'As for Tali' and Sayun, they will be beaten by me.'
- c. *tali' ga', tcing-un=**maku'** ki' sayun.
 Tali' Top beat-PF=1S.Gen Com Sayun
 '*As for Tali', he and Sayun will be beaten by me.'

- d. *sayun ga', tcing-un=**maku'** qu' tali'.
 Sayun Top beat-PF=1S.Gen Nom Tali'
 '*As for Sayun, Tali' and she will be beaten by me.'
- (23) a. tcing-un=**myan** qu' tali' ki' sayun.
 beat-PF=1PE.Gen Nom Tali' Com Sayun
 'Tali' and Sayun will be beaten by us.'
- b. tali' ki' sayun ga', tcing-un=**myan**.
 Tali' Com Sayun Top beat-PF=1PE.Gen
 'As for Tali' and Sayun, they will be beaten by us.'
- c. *tali' ga', tcing-un=**myan** ki' sayun.
 Tali' Top beat-PF=1PE.Gen Com Sayun
 '*As for Tali', he and Sayun will be beaten by us.'
- d. *sayun ga', tcing-un=**myan** qu' tali'.
 Sayun Top beat-PF=1PE.Gen Nom Tali'
 '*As for Sayun, Tali' and she will be beaten by us.'

Note that the above sentences with NP₁ ki' NP₂ manifesting two Patient participants and serving as the grammatical subject do not work exactly in the same way as AF sentences (20)-(21) with NP₁ ki' NP₂ manifesting two Agent participants and serving as the grammatical subject. That is, while NP₁ *sayun* in (20c) and *tali'* in (21c) may serve as Topic, (22c) and (23c) with NP₁ *tali'* alone appearing in the Topic position are not acceptable with the intended meanings. A possible explanation is that when Patient argument NP₁ appears alone in the Topic position, NP₂ *sayun* and the 1st participant *maku'* '1S.Gen' in (22c) or *myan* '1PE.Gen' in (23c) (i.e. the Agent(s) of the event) are left behind to form a larger unit, but they play different semantic roles (i.e. *sayun* serving as one of the Patients, and *maku'/myan* the Agent(s)). However, if NP₂ *sayun* manifests another Agent participant like *maku'* or *myan*, they together then represent the Agent participants of the event 'beating', as shown in (24a)-(25a), with their non-Topic counterparts (24b)-(25b):

- (24) a. tali' ga', tcing-un=**maku'** ki' **sayun**.
 Tali' Top beat-PF=1S.Gen Com Sayun
 'As for Tali', he will be beaten by Sayun and me.'
- b. tcing-un=**maku'** ki' sayun qu' tali'.
 beat-PF=1S.Gen Com Sayun Nom Tali'
 'Tali' will be beaten by Sayun and me.'

- (25) a. tali' ga', tcing-un=**myan** ki' sayun.
 Tali' Top beat-PF=1PE.Gen Com Sayun
 'As for Tali', he will be beaten by us and Sayun.'
- b. tcing-un=**myan** ki' sayun qu' tali'.
 beat-PF=1PE.Gen Com Sayun Nom Tali'
 'Tali' will be beaten by us and Sayun.'

The above discussion basically deals with free NPs conjoined by *ki'* and manifesting either Agent or Patient participants. Next, consider sentences with the grammatical subject being bound pronouns manifesting the Agent participant(s), and *ki'*-conjoined NPs serving as adjunct participants:

- (26) a. tcing-un=**saku'** ni' tali' ki' sayun.
 beat-PF=1S.Nom Gen Tali' Com Sayun
 'I will be beaten by Tali' and Sayun.'
- a'. **kuzing** ga', tcing-un ni' tali' ki' sayun.
 1S.Neu Top beat-PF Gen Tali' Com Sayun
 'As for me, I will be beaten by Tali' and Sayun.'
- b. tcing-un=**sami** ni' tali' ki' sayun.
 beat-PF=1PE.Nom Gen Tali' Com Sayun
 'We will be beaten by Tali' and Sayun.'
- b'. **sami** ga', tcing-un ni' tali' ki' sayun.
 1PE.Neu Top beat-PF Gen Tali' Com Sayun
 'As for us, we will be beaten by Tali' and Sayun.'

As demonstrated above, since the grammatical subject is encoded by bound pronouns *saku'* and *sami*, their corresponding free Neutral pronouns need to be utilized when appearing in Topic position, i.e. *kuzing* and *sami*.¹⁸

Some similar—yet not exactly identical—examples are given below. The major participant (manifested by the pronoun here) can appear in Topic position, with or without *ki'*-introduced NP (e.g. (27b-e)), and *ki'*-introduced NP alone cannot serve as Topic (e.g. (27f-g)):

¹⁸ In Sqliq Atayal (but not in conservative dialects like Mayrinax), some bound Nominative pronouns and free Neutral pronouns share the same forms; namely, *sami* '1PE.Nom, 1PE.Neu' and *simu* '2P.Nom, 2P.Neu'.

- (27) a. m-qwas=**sami** ki' ciwas krryax.
 AF-sing=1PE.Nom Com Ciwas often
 i. 'I often sing with Ciwas.'
 ii. 'We often sing with Ciwas.'
- b. **kuzing** ki' ciwas ga', m-qwas=**sami** krryax.
 1S.Neu Com Ciwas Top AF-sing=1PE.Nom often
 'As for Ciwas and me, we often sing (together).'
- c. **kuzing** ga', m-qwas=**sami** ki' ciwas krryax.
 1S.Neu Top AF-sing=1PE.Nom Com Ciwas often
 'As for me, I often sing with Ciwas.'
- d. **sami** ki' ciwas ga', m-qwas=**sami** krryax.
 1PE.Neu Com Ciwas Top AF-sing=1PE.Nom often
 i. 'As for Ciwas and me, we often sing (together).'
- ii. 'As for us and Ciwas, we often sing (together).'
- e. **sami** ga', m-qwas=**sami** ki' ciwas krryax.
 1PE.Neu Top AF-sing=1PE.Nom Com Ciwas often
 'As for us, we often sing with Ciwas.'
- f. *ki' ciwas ga', m-qwas=**sami** krryax.
 Com Ciwas Top AF-sing=1PE.Nom often
 i. '*As for Ciwas, I often sing with her.'
 ii. '*As for Ciwas, we often sing with her.'
- g. *ciwas ga', m-qwas=**sami** krryax.
 Ciwas Top AF-sing=1PE.Nom often
 'As for Ciwas, I/we often sing with her.'

Note that the two readings of (27a) result in different Topic constructions (27b-e). That is, the named event may involve either two participants (i.e. Ciwas and I in (27b-c)) or more participants (i.e. we and Ciwas in (27e)), or two or more participants as denoted in (27d). And again the *ki'*-introduced NP alone cannot appear in Topic position (e.g. (27f-g)).

Below are examples containing 2nd personal plural pronouns and reciprocal verbs to support the above observation:

- (28) a. m-qwas=**simu** ki' temu' krryax?
 AF-sing=2P.Nom Com Temu' often
 i. 'Do you often sing with Temu?'
 ii. 'Do you all often sing with Temu?'

- b. **isu'** ki' temu' ga', m-qwas=**simu** krryax?
 2S.Neu Com Temu' Top AF-sing=2P.Nom often
 'As for you and Temu', do you often sing (together)?'
- c. **isu'** ga', m-qwas=**simu** ki' temu' krryax?
 2S.Neu Top AF-sing=2P.Nom Com Temu' often
 'As for you, do you often sing with Temu'?'
- d. **simu** ki' temu' ga', m-qwas=**simu** krryax.
 2P.Neu Com Temu' Top AF-sing=2P.Nom often
 i. 'As for you and Temu', do you all often sing (together)?'
 ii. 'As for you all and Temu', do you all often sing (together)?'
- e. **simu** ga', m-qwas=**simu** ki' temu' krryax?
 2P.Neu Top AF-sing=2P.Nom Com Temu' often
 'As for you all, do you often sing with Temu'?'
- f. *ki' temu' ga', m-qwas=**simu** krryax?
 Com Temu' Top AF-sing=2P.Nom often
 '*As for Temu', do you often sing with him?'
- g. *temu' ga', m-qwas=**simu** krryax?
 Temu' Top AF-sing=2P.Nom often
 '*As for Temu', do you often sing with him?'
- (29) a. **m-tucing=sami** ki' sayun.
 AF.Rec-beat=1PE.Nom Com Sayun
 i. 'Sayun and I are beating each other.'
 ii. 'We and Sayun are beating each other.'
- b. **kuzing** ki' sayun ga', **m-tucing=sami**.
 1S.Neu Com Sayun Top AF.Rec-beat=1PE.Nom
 'As for Sayun and me, we are beating each other.'
- c. **kuzing** ga', **m-tucing=sami** ki' sayun.
 1S.Neu Top AF.Rec-beat=1PE.Nom Com Sayun
 'As for me, Sayun and I are beating each other.'
- d. **sami** ki' sayun ga', **m-tucing=sami**.
 1PE.Neu Com Sayun Top AF.Rec-beat=1PE.Nom
 i. 'As for Sayun and me, we are beating each other.'
 ii. 'As for us and Sayun, we are beating each other.'

- e. **sami** ga', **m-tucing=sami** ki' sayun.
 1PE.Neu Top AF.Rec-beat=1PE.Nom Com Sayun
 'As for us, Sayun and we are beating each other.'
- f. *ki' sayun ga', **m-tucing=sami**.
 Com Sayun Top AF.Rec-beat=1PE.Nom
 'As for Sayun, she and I are beating each other.'
- g. *sayun ga', **m-tucing=sami**.
 Sayun Top AF.Rec-beat=1PE.Nom
 'As for Sayun, she and I are beating each other.'

Note that while (28b-c)/(29b-c) indicate two participants involved in the 'beating' or 'singing' event, by contrast two or more participants take part in the named events (i.e. (28a/d) and (29a/d)), and at least three participants are involved in (28e)/(29e). Again the *ki'*-introduced NP alone cannot appear in Topic position (e.g. (28f-g)/(29f-g)).

Three observations may summarize the above discussion:

- (i) NP₁ ki' NP₂ may appear as Topic.
- (ii) NP₁ alone may or may not serve as Topic (depending on whether the verb is an AF or NAF one), whereas NP₂ alone can never function as Topic.
- (iii) Bound pronouns may not serve as Topic; their corresponding free Neutral pronouns need to be utilized instead.

4.2.2 Topic construction with *ru'*

Following the discussion on Topic construction with *ki'*, we shall examine sentences containing the grammatical subject manifested by free nouns or bound pronouns. First, consider sentences (30a) and (31a) with *ru'*-conjoined free nouns manifesting the Agent participants (i.e. NP₁ ru' NP₂) and their corresponding Topic constructions (30b-e):

- (30) a. m-qwas qu' sayun ru' ciwas krryax.
 AF-sing Nom Sayun Conj Ciwas often
 'Sayun and Ciwas often sing (together or separately).'
- b. sayun ru' ciwas ga', m-qwas krryax.
 Sayun Conj Ciwas Top AF-sing often
 'As for Sayun and Ciwas, they often sing (together or separately).'
- c. *sayun ga', m-qwas ru' ciwas krryax.
 Sayun Top AF-sing Conj Ciwas often
 '*As for Sayun, she and Ciwas often sing (together or separately).'

- d. *ru' ciwas ga', m-qwas sayun krryax.
 Conj Ciwas Top AF-sing Sayun often
 '*As for Ciwas, she and Sayun often sing (together or separately).'
- e. *ciwas ga', m-qwas sayun krryax.
 Ciwas Top AF-sing Sayun often
 '*As for Ciwas, she and Sayun often sing (together or separately).'
- (31) a. m-tucing 'i' tali' ru' sayun.
 AF.Rec-beat Nom Tali' Conj Sayun
 'Tali' and Sayun are beating each other.'
- b. tali' ru' sayun ga', m-tucing.
 Tali' Conj Sayun Top AF.Rec-beat
 'As for Tali' and Sayun, they are beating each other.'
- c. *tali' ga', m-tucing ru' sayun.
 Tali' Top AF.Rec-beat Conj Sayun
 '*As for Tali', he and Sayun are beating each other.'
- d. *ru' sayun ga', m-tucing 'i' tali'.
 Conj Sayun Top AF.Rec-beat Nom Tali'
 '*As for Sayun, Tali' and she are beating each other.'
- e. *sayun ga', m-tucing 'i' tali'.
 Sayun Top AF.Rec-beat Nom Tali'
 '*As for Sayun, Tali' and she are beating each other.'

Sentences with *ru*'-conjoined NPs differ from sentences with *ki*'-conjoined NPs with respect to their ways of forming Topic constructions. Notice that NP₁ and NP₂ in the coordinating construction are of equal status, and the two together form a larger unit and neither can be extracted when serving as Topic (e.g. (30b) vs. (30c-e); (31b) vs. (31c-e)), differing from NP₁ in NP₁ ki' NP₂ that can alone appear in Topic position (ref. (20c) & (21c)).¹⁹

Next, examine the following NAF sentences with *ru*'-conjoined NPs manifesting Patient arguments and serving as the grammatical subject, and Genitive-bound pronouns serving as the Agent participant:

¹⁹ This seems to further confirm Ross' (1967) proposal of *Coordinate Structure Constraint* (as cited in Haspelmath 2004:28-30). The named constraint stipulates that any conjunct or any element within a conjunct is not allowed to move out of a coordinate.

- (32) a. tcing-un=**maku'** qu' tali' ru' sayun.
 beat-PF=1S.Gen Nom Tali' Conj Sayun
 'Tali' and Sayun will be beaten by me.'
- b. tali' ru' sayun ga', tcing-un=**maku'**.
 Tali' Conj Sayun Top beat-PF=1S.Gen
 'As for Tali' and Sayun, they will be beaten by me.'
- c. *tali' ga', tcing-un=**maku'** ru' sayun.
 Tali' Top beat-PF=1S.Gen Conj Sayun
 '*As for Tali', he and Sayun will be beaten by me.'
- d. *ru' sayun ga', tcing-un=**maku'** qu' tali'.
 Conj Sayun Top beat-PF=1S.Gen Nom Tali'
 '*As for Sayun, Tali' and she will be beaten by me.'
- e. *sayun ga', tcing-un=**maku'** qu' tali'.
 Sayun Top beat-PF=1S.Gen Nom Tali'
 '*As for Sayun, Tali' and she will be beaten by me.'
- (33) a. tcing-un=**myan** qu' tali' ru' sayun.
 beat-PF=1PE.Gen Nom Tali' Conj Sayun
 'Tali' and Sayun will be beaten by us.'
- b. tali' ru' sayun ga', tcing-un=**myan**.
 Tali' Conj Sayun Top beat-PF=1PE.Gen
 'As for Tali' and Sayun, they will be beaten by us.'
- c. *tali' ga', tcing-un=**myan** ru' sayun.
 Tali' Top beat-PF=1PE.Gen Conj Sayun
 '*As for Tali', he and Sayun will be beaten by us.'
- d. *ru' sayun ga', tcing-un=**myan** qu' tali'.
 Conj Sayun Top beat-PF=1PE.Gen Nom Tali'
 '*As for Sayun, Tali' and she will be beaten by us.'
- e. *sayun ga', tcing-un=**myan** qu' tali'.
 Sayun Top beat-PF=1PE.Gen Nom Tali'
 '*As for Sayun, Tali' and she will be beaten by us.'

Comparing the above sentences with NAF sentences (22)-(23) containing *ki'*, and ungrammatical (32c)/(33c) with grammatical (22c)/(23c), we may notice that the impossibility of having NP₁ in Topic position in (32c)/(33c) and the possibility of

allowing NP₁ in Topic position in (22c)/(23c) further confirm that NP₁ and NP₂ in NP₁ ru' NP₂ are of equal status and cannot be separated; they form a tight unit, unlike NP₁ ki' NP₂.

Next, let us consider some NAF sentences with the grammatical subject manifested by bound pronouns and designating Patient participant(s), and with *ru'*-conjoined NPs representing Agent participants:

- (34) a. tcing-un=**saku'** ni' tali' ru' sayun.
 beat-PF=1S.Nom Gen Tali' Conj Sayun
 'I will be beaten by Tali' and Sayun.'
- a'. **kuzing** ga', tcing-un ni' tali' ru' sayun.
 1S.Neu Top beat-PF Gen Tali' Conj Sayun
 'As for me, I will be beaten by Tali' and Sayun.'
- b. tcing-un=**sami** ni' tali' ru' sayun.
 beat-PF=1PE.Nom Gen Tali' Conj Sayun
 'We will be beaten by Tali' and Sayun.'
- b'. **sami** ga', tcing-un ni' tali' ru' sayun.
 1PE.Neu Top beat-PF Gen Tali' Conj Sayun
 'As for us, we will be beaten by Tali' and Sayun.'

Note that because the grammatical subject of (34a-b) is encoded by bound pronouns *saku'* and *sami*, their corresponding free Neutral pronouns need to be utilized when appearing in Topic position, i.e. *kuzing* in (34a') and *sami* in (34b'), similar to the case with *ki'* as illustrated in (26a/a'-b/b').

Now recall the unacceptability of having the conjunction *ru'* in inclusory construction, as exemplified by ungrammatical sentences (19a-d) which have bound Nominative pronouns and an NP introduced by *ru'* (repeated below for convenience):

- (19) a. *m-qwas=**sami** ru' ciwas krryax.
 AF-sing=1PE.Nom Conj Ciwas often
 'We and Ciwas often sing.'
- b. *wal=**simu** mngka' ru' yaya'=nya'.
 go.AF.Prf=2P.Nom Taipei Conj mother=3S.Gen
 'Did you all and her mother go to Taipei?'
- c. *nyux=**sami** m-tucing ru' temu'.
 Imprf.Prox=1PE.Nom AF.Rec-beat Conj Temu'
 'We and Temu' are fighting against each other.'

- d. *nyux=**simu** m-pkayal ru' sayun?
 Imprf.Prox=2P.Nom AF.Rec-say Conj Sayun
 'Are you all and Sayun conversing with each other?'

To help correct these AF sentences, their corresponding Topic constructions need to be used, as shown below:

- (35) a. **sami** ru' ciwas ga', m-qwas=**sami** krryax.
 1PE.Neu Conj Ciwas Top AF-sing=1PE.Nom often
 'As for us and Ciwas, we often sing (together).'
- b. **simu** ru' yaya'=nya' ga', wal=**simu** mngka'?
 2P.Neu Conj mother=3S.Gen Top go.AF.Prf=2P.Nom Taipei
 'As for you all and her mother, did you all go to Taipei (together)?'
- c. **sami** ru' temu' ga', nyux=**sami** m-tucing.
 1PE.Neu Conj Temu' Top Imprf.Prox=1PE.Nom AF.Rec-beat
 'As for us and Temu', we are fighting against each other.'
- d. **simu** ru' sayun ga', nyux=**simu** m-p-kayal?
 2P.Neu Conj Sayun Top Imprf.Prox=2P.Nom AF-Rec-say
 'As for you all and Sayun, are you all conversing with each other?'

Similarly, ungrammatical NAF sentence (36a) can be corrected, as exemplified below:

- (36) a. *tcing-un=**sami** ru' sayun ni' tali'.
 beat-PF=1PE.Nom Conj Sayun Gen Tali'
 'We and Sayun will be beaten by Tali'.'
- b. **sami** ru' sayun ga', tcing-un ni' tali'.
 1PE.Neu Conj Sayun Top beat-PF Gen Tali'
 'As for us and Sayun, we will be beaten by Tali'.'

However, there are some constructions having *ru'* that cannot be improved even when the grammatical subject is topicalized, perhaps because the bound Genitive pronoun²⁰ and *ru'*-introduced NP can never form a larger unit syntactically:

- (37) a. *tcing-un=**maku'** ru' sayun qu' tali'.
 beat-PF=1S.Gen Conj Sayun Nom Tali'
 'Tali' will be beaten by me and Sayun.'

²⁰ The language does not have free Genitive pronouns.

- a'. *tali' ga', tcing-un=**maku'** ru' sayun.
 Tali' Top beat-PF=1S.Gen Conj Sayun
 'As for Tali', he will be beaten by me and Sayun.'
- a''. ***maku'** ru' sayun ga', tcing-un qu' tali'.
 1S.Gen Conj Sayun Top beat-PF Nom Tali'
 '*As for me and Sayun, Tali' will be beaten.'
- b. *tcing-un=**myan** ru' sayun qu' tali'.
 beat-PF=1PE.Gen Conj Sayun Nom Tali'
 'Tali' will be beaten by us and Sayun.'
- b'. *tali' ga', tcing-un=**myan** ru' sayun.
 Tali' Top beat-PF=1PE.Gen Conj Sayun
 'As for Tali', he will be beaten by us and Sayun.'
- b''. ***myan** ru' sayun ga', tcing-un qu' tali'.
 1PE.Gen Conj Sayun Top beat-PF Nom Tali'
 '*As for us and Sayun, Tali' will be beaten.'

4.2.3 Summary

To summarize the discussion given in subsection 4.2, we conclude that:

- (i) Either NP₁ ki' NP₂ or NP₁ ru' NP₂ may appear in Topic position.
- (ii) NP₂ alone cannot serve as Topic in any structures.
- (iii) NP₁ in NP₁ ki' NP₂ may alone serve as Topic (if the verb is an AF one), while NP₁ in NP₁ ru' NP₂ cannot appear in Topic position.
- (iv) Bound pronouns may not serve as Topic; their corresponding free Neutral pronouns need to be utilized instead.

4.3 Negative construction

In this subsection, *ki'* and *ru'* in negative construction will be investigated. First, compare the following affirmative sentences and their negative counterparts:

- (38) a. m-qwas qu' sayun ki' tali'.
 AF-sing Nom Sayun Com Tali'
 'Sayun sings/sang with Tali'.'

- b. ini' pqwas qu' sayun ki' tali'.
 Neg sing.AF Nom Sayun Com Tali'
 'Sayun did not sing with Tali'.'
- (39) a. m-qwas qu' sayun ru' tali'.
 AF-sing Nom Sayun Conj Tali'
 'Sayun and Tali' sing/sang (together or separately).'
- b. ini' pqwas qu' sayun ru' tali'.
 Neg sing.AF Nom Sayun Conj Tali'
 'Sayun and Tali' did not sing.'

Notice that (38b) seems to mean the same as one of the readings given in (39b), i.e. the collective reading, 'Sayun and Tali' do not sing together.' The syntactic and/or semantic differences between (38b) containing *ki'* and (39b) containing *ru'* may become clearer when we examine the following sentences:

- (38) c. ini' pqwas qu' sayun ki' tali', ana' ga, m-qwas ki' ciwas.
 Neg sing.AF Nom Sayun Com Tali' but AF-sing Com Ciwas
 'Sayun did not sing with Tali', but she sang with Ciwas.'
- d. ini' pqwas qu' sayun ki' tali', ana' ga, m-zyugi' hiya'.
 Neg sing.AF Nom Sayun Com Tali' but AF-dance 3S.Neu
 'Sayun did not sing with Tali', but she danced.'
- e. ini' pqwas qu' sayun ki' tali', ana' ga, m-zyugi'.
 Neg sing.AF Nom Sayun Com Tali' but AF-dance
 'Sayun did not sing with Tali', but they danced.'
- (39) c. *ini' pqwas qu' sayun ru' tali', ana' ga, m-qwas ru' ciwas.
 Neg sing.AF Nom Sayun Conj Tali' but AF-sing Conj 3S.Neu
 '*Sayun and Tali' did not sing, but she and Ciwas sang.'
- d. *ini' pqwas qu' sayun ru' tali', ana' ga, m-zyugi' hiya'.
 Neg sing.AF Nom Sayun Conj Tali' but AF-dance 3S.Neu
 '*Sayun and Tali' did not sing, but she danced.'
- e. ini' pqwas qu' sayun ru' tali', ana' ga, m-zyugi'.
 Neg sing.AF Nom Sayun Conj Tali' but AF-dance
 'Sayun and Tali' did not sing, but they danced.'

As shown in (38c-e), the event expressed by the added clauses may involve either the major participant *Sayun* alone, or *Sayun* with another participant (introduced by *ki'*).

The implication is that the named participant *Sayun* needs to lead the main story line (i.e. Haspelmath's 'topicality' (2004:16)), with or without adjunct participant(s). Examples (39c-e) illustrate the same implication; that is, the storyline needs to be led by the grammatical subject, except that it is manifested by the two major participants *Sayun* and *Tali*, and neither can be extracted. Consequently, the (un-)grammaticality of (38)-(39) supports the idea that constructions containing *ki*' and *ru*' do not function alike syntactically, though they may capture similar scenarios.

Now consider the examples containing bound pronouns that manifest one of the participants:

- (40) a. m-qwas=**sami** ki' tali'.
 AF-sing=1PE.Nom Com Tali'
 i. 'I sing/sang with Tali'.
 ii. 'We sing/sang with Tali'.'
- b. ini'=**sami** pqwas ki' tali'.
 Neg=1PE.Nom sing.AF Com Tali'
 i. 'I did not sing with Tali'.
 ii. 'We did not sing with Tali'.'
- b'. ini'=**sami** pqwas ki' tali', ana' ga, m-yugi'=**sami**.
 Neg=1PE.Nom sing.AF Com Tali' but AF-dance=1PE.Nom
 'I did not sing with Tali', but we dance.'
- c. ini'=**saku**' pqwas ki' tali'.
 Neg=1S.Nom sing.AF Com Tali'
 'I did not sing with Tali'.'

As noted in (40b-c), the negator *ini*' attracts the bound pronoun *sami* 'we' and *saku*' 'I', leaving the *ki*'-introduced NP behind the verb *pqwas* 'sing'. Note that there are two readings given by (40b) with either two or three participants involved, but only one reading is presented in (40b') with only two participants involved in the named event. The varying readings provided by (40b-b') may be due to the larger context given in (40b') and thus the second bound pronoun *sami* sets up the limited participants for the first *sami*. Some similar examples follow for further reference:

- (41) a. m-qwas=**simu** ki' tali'?'
 AF-sing=2P.Nom Com Tali'
 i. 'Do/Did **you** sing with Tali'?'
 ii. 'Do/Did **you** all sing with Tali'?'

- b. ini'=s**imu** pqwas ki' tali'?'
 Neg=2P.Nom sing.AF Com Tali'
 'Didn't **you/you all** sing with Tali'?'
- c. ini'=s**u'** pqwas ki' tali'?'
 Neg=2S.Nom sing.AF Com Tali'
 'Didn't **you** sing with Tali'?'

Next, consider the following examples containing the conjunction *ru'*:

- (42) a. *m-qwas=**sami** ru' tali'.
 AF-sing=1PE.Nom Conj Tali'
 'We and Tali' sing.'
- b. *ini'=**sami** pqwas ru' tali'.
 Neg=1PE.Nom sing.AF Conj Tali'
 'We and Tali' did not sing.'
- c. *ini'=**saku'** pqwas ru' tali'.
 Neg=1S.Nom sing.AF Conj Tali'
 'Tali' and I did not sing.'

As noted above, none of sentences (42a-c) are correct, perhaps because: (i) the bound pronoun *sami* and the free NP introduced by *ru'* cannot form a larger unit, as stated earlier; and (ii) the bound pronoun *sami* is attracted to the negator and is separated from the *ru'*-introduced NP, which renders ungrammatical sentences. The free Neutral pronouns may help correct such sentences, as shown below:

- (42) a'. m-qwas qu' **sami** ru' tali'.
 AF-sing Nom 1PE.Neu Conj Tali'
 'We and Tali' sing.'
- b'. ini' pqwas qu' **sami** ru' tali'.
 Neg sing.AF Nom 1PE.Neu Conj Tali'
 'We and Tali' didn't sing (together or separately).'
- c'. ini' pqwas qu' **kun** ru' tali'.
 Neg sing.AF Nom 1S.Neu Conj Tali'
 'Tali' and I didn't sing (together or separately).'

To conclude this subsection, we note that:

- (i) In negative construction containing NP₁ ki' NP₂, either NP₁ & NP₂, NP₂, or the named event can be negated, whereas in negative construction containing NP₁ ru' NP₂, only the named event can be negated.
- (ii) The negative counterpart of an inclusory construction has its bound pronoun attached to the negator, leaving the *ki'*-introduced NP alone behind the verb. On the other hand, while a sentence does not allow the cooccurrence of a bound pronoun and an NP conjoined by *ru'*, the corresponding free Neutral pronoun is used in forming such a sentence and its negative counterpart.

4.4 Interrogative construction

The last syntactic structure to be examined is interrogative construction containing the markers *ru'* and *ki'*. First, consider the following question with the interrogative word *ima'* 'who':

- (43) a. *ima' m-usa' mngka'?*
 who AF-go Taipei
 'Who will go to Taipei?'

Notice that (43a) is actually an equational construction with the Nominative case marker *qu'* often being omitted in oral speech. Its complete form follows:

- (43) a'. *ima' qu' m-usa' mngka'?*
 who Nom AF-go Taipei
 '(lit.) Who is the one that will go to Taipei? / Who will go to Taipei?'

In reply to questions (43a-a'), the following are used:

- (43) b. *sayun ru' tali' qu' m-usa' mngka'.*
 Sayun Conj Tali' Nom AF-go Taipei
 '(lit.) Sayun and Tali' are the ones that will go to Taipei. / Sayun and Tali' will go to Taipei.'
- b'. *sayun ru' tali' m-usa' mngka'.*
 Sayun Conj Tali' AF-go Taipei
 '(lit.) Sayun and Tali' are the ones that will go to Taipei. / Sayun and Tali' will go to Taipei.'
- b''. *sayun ru' tali'.*
 Sayun Conj Tali'
 'Sayun and Tali'.'

- c. sayun ki' tali' **qu'** m-usa' mngka'.
 Sayun Com Tali' Nom AF-go Taipei
 '(lit.) Sayun and Tali' are the ones that will go to Taipei. / Sayun and Tali' will go to Taipei.'
- c'. sayun ki' tali' m-usa' mngka'.
 Sayun Com Tali' AF-go Taipei
 '(lit.) Sayun and Tali' are the ones that will go to Taipei. / Sayun and Tali' will go to Taipei.'
- c''. sayun ki' tali'.
 Sayun Com Tali'
 'Sayun and Tali'.'

The above responses either use *ru'* or *ki'* in conjoining two NPs manifesting involved participants, with the Nominative case marker *qu'* (i.e. (43b-c)), or without *qu'* (i.e. (43b'-c')), or short responses (i.e. (43b''-c'')) respectively. As demonstrated here, responses containing *ru'* and *ki'* do not seem to present clear semantic-functional distinctions. Also, note that (43b) and (43c) are equational sentences (like (43a')), and the conjoined NPs (i.e. *sayun ru' tali'* in (43b-b') and *sayun ki' tali'* in (43c-c')) serve as the predicate and appear in the sentence-initial position.

Similar examples with an additional auxiliary *cyux* and/or a reciprocal verb *mtucing* 'beat each other' are given below for further illustration:

- (44) a. ima' (**qu'**) cyux m-qwas?
 who Nom Imprf.Dist AF-sing
 'Who is singing?'
- b. temu' ru' sayun (**qu'**) cyux m-qwas.
 Temu' Conj Sayun Nom Imprf.Dist AF-sing
 '(lit.) Temu' and Sayun are the ones that are singing. / Temu' and Sayun are singing.'
- c. temu' ki' Sayun (**qu'**) cyux m-qwas.
 Temu' Com Sayun Nom Imprf.Dist AF-sing
 '(lit.) Temu' and Sayun are the ones that are singing. / Temu' and Sayun are singing.'
- (45) a. ima' (**qu'**) cyux m-tucing?
 Who Nom Imprf.Dist AF.Rec-beat
 'Who are fighting?'

- b. tali' ru' wilang (**qu'**) cyux m-tucing.
 Tali' Conj Wilang Nom Imprf.Dist AF.Rec-beat
 '(lit.) Tali' and Wilang are the ones that are fighting against each other. /
 Tali' and Wilang are fighting against each other.'
- c. tali' ki' wilang (**qu'**) cyux m-tucing.
 Tali' Com Wilang Nom Imprf.Dist AF.Rec-beat
 '(lit.) Tali' and Wilang are the ones that are fighting against each other. /
 Tali' and Wilang are fighting against each other.'

Similar to (43b-c) and (43b'-c'), (44b-c) and (45b-c) contain two NPs being conjoined by *ru'* and *ki'* and functioning as the predicates of equational sentences. They are responses to questions (44a)-(45a), without making significant semantic-functional distinctions.

Note that each question discussed above uses the interrogative word *ima'* 'who' in inquiring all of the participants involved in the named event. Next, let us examine the following question with *ki'* conjoining the interrogative word *ima'* and NP *tali'*:

- (46) a. ima' ki' tali' (**qu'**) m-usa' mngka'?'
 who Com Tali' Nom AF-go Taipei
 '(lit.) Who and Tali' are the ones that will go to Taipei? / Who will go to Taipei with Tali'?'

Differing from questions (43a), (44a) and (45a), question (46a) inquires only the participant(s) along with *tali'* instead of all the participants involved. Note that in (46a), with or without the Nominative case marker, (46a) begins with the interrogative word *ima'* 'who' followed by *ki'* introducing the known NP *tali'*; in other words, (46a) is from the perspective of 'who'. In reply to the question, responses containing *ki'* and *ru'* are both acceptable, as exemplified below:

- (46) b. sayun ki' tali' (**qu'**) m-usa' mngka'.
 Sayun Com Tali' Nom AF-go Taipei
 '(lit.) Sayun and Tali' are the ones that will go to Taipei. / Sayun and Tali' will go to Taipei.'
- c. sayun ru' tali' (**qu'**) m-usa' mngka'.
 Sayun Conj Tali' Nom AF-go Taipei
 '(lit.) Sayun and Tali' are the ones that will go to Taipei. / Sayun and Tali' will go to Taipei.'

- d. sayun.
'Sayun.'

Similarly, the following question functions like (46a), inquiring only the participant(s) along with *tali'* instead of all, but differing from (46a), it begins with the NP *tali'* followed by the interrogative word *ima'* 'who' introduced by *ki'*:

- (47) a. tali' ki' ima' (**qu'**) m-usa' mngka'?'
Tali' Com who Nom AF-go Taipei
'(lit.) Tali' and who are the ones that will go to Taipei? / With whom will Tali' go to Taipei?'

In terms of perspective, (47a) differs from (46a); i.e. (47a) is from *Tali'*; however, the question allows its responses containing either *ki'* and *ru'*, just like (46a):

- (47) b. tali' ki' sayun (**qu'**) m-usa' mngka'.
Tali' Com Sayun Nom AF-go Taipei
'(lit.) Tali' and Sayun are the ones that will go to Taipei. / Tali' and Sayun will go to Taipei.'
- c. tali' ru' sayun (**qu'**) m-usa' mngka'.
Tali' Conj Sayun Nom AF-go Taipei
'(lit.) Tali' and Sayun are the ones that will go to Taipei. / Tali' and Sayun will go to Taipei.'
- d. sayun.
'Sayun.'

In other words, although the perspectives of sentences (46a) and (47a) are different, responses to each may contain either *ki'* or *ru'*. A possible explanation is that the *ki'*- and *ru'*-conjoined NPs in initial position (e.g. (46b) vs. (46c), (47b) vs. (47c)) seem to function alike; i.e. a collective reading is given instead of the accompaniment sense denoted by *ki'*.

However, because of having different perspectives, (46a) and (47a) present different syntactic behaviors. Recall (46a) is from the perspective of *ima'*, and thus allows the movement of *ki'*-introduced NP:

- (46) a'. ima' (**qu'**) m-usa' mngka' ki' tali'?'
who Nom AF-go Taipei Com Tali'
'Who will be the one that will go to Taipei with Tali'??'

On the other hand, (47a) is from *Tali'* and the interrogative word *ima'* is preceded by the marker *ki'*; thus, the movement of either the interrogative word *ima'* or the NP *tali'* is not permitted, as shown below:

- (47) a'. *ki' ima' (qu') m-usa' mngka' tali'?
 Com who Nom AF-go Taipei Tali'
 '(lit.) With whom is the one that Tali' will go to Taipei?'
 a''. *tali' (qu') m-usa' mngka' ki' ima'?
 Tali' Nom AF-go Taipei Com who
 '(lit.) *Tali' is the one that will go to Taipei with whom?'

As illustrated above, the interrogative word *ima'* preceded by the marker *ki'* cannot occur in sentence-initial position, serving as the predicate of the sentence (e.g. (47a)); neither can it be moved out of the sentence-initial/predicate position.

Next, let us examine questions with the conjunction *ru'* conjoining the interrogative word *ima'* and NP *tali'*:

- (48) a. ima' ru' tali' (qu') m-usa' mngka'?
 who Conj Tali' Nom AF-go Taipei
 '(lit.) Who and Tali' are the ones that will go to Taipei?'
 (49) a. tali' ru' ima' (qu') m-usa' mngka'?
 Tali' Conj who Nom AF-go Taipei
 '(lit.) Tali' and who are the ones that will go to Taipei?'

Here both NPs *ima' ru' tali'* and *tali' ru' ima'* serve as the predicates and appear sentence-initially, similar to (46a) and (47a). Their responses follow:

- (48) b. sayun ru' tali' (qu') m-usa' mngka'.
 Sayun Conj Tali' Nom AF-go Taipei
 '(lit.) Sayun and Tali' are the ones that will go to Taipei. / Sayun and Tali' will go to Taipei.'
 (49) b. tali' ru' sayun (qu') m-usa' mngka'.
 Tali' Conj Sayun Nom AF-go Taipei
 '(lit.) Tali' and Sayun are the ones that will go to Taipei. / Tali' and Sayun will go to Taipei.'

However, because the interrogative word *ima'* and the NP *tali'* in (48a)-(49a) are conjoined by the coordinator *ru'*, neither *ima'* nor *tali'* can be extracted from the sentential initial/predicate position (Recall Ross' proposal (1967) of *Coordinate Structure Constraint*):

- (48) a'. **ima'* (**qu'**) m-usa' mngka' ru' tali'?
 who Nom AF-go Taipei Conj Tali'
 a''. *ru' tali' (**qu'**) m-usa' mngka' ima'?
 Conj Tali' Nom AF-go Taipei who
- (49) a'. **tali'* (**qu'**) m-usa' mngka' ru' ima'?
 Tali' Nom AF-go Taipei Conj who
 a''. *ru' ima' (**qu'**) m-usa' mngka' tali'?
 Conj who Nom AF-go Taipei Tali'

To sum up the present discussion, we conclude that:

- (i) Interrogative sentences containing *ru'* or *ki'* are Equational sentences.
- (ii) Either *ru'* or *ki'* can precede either interrogative word (Q) or an NP.
- (iii) Either NP ru'/ki' Q or Q ru'/ki' NP is possible.
- (iv) While ki' NP can be moved away from the sentence-initial position and ki' Q cannot, none of ru' NP, ru' Q, NP and Q can be moved away from the sentence-initial position.

5. Conclusion

Below we shall first sum up the previous discussion, and then present a brief comparison among Atayal dialects with respect to coordination and comitativity.

5.1 A summary of previous discussion

The present paper examines the coordinating and comitative constructions in Sqliq Atayal. The discussion includes status of conjoined elements (either NPs, VPs, or CLs), semantic-functional comparison (either collective, distributive, locative, or unidirectional reading, determined mainly by the semantics of cooccurring verbs), and syntactic comparison (in terms of inclusory construction, topic construction, negative construction, and interrogative construction). The following table sums up the findings concerning the coordination and comitativity in Sqliq Atayal:

	NP ₁ <i>ki</i> ' NP ₂	NP ₁ <i>ru</i> ' NP ₂
1. Status of conjoined elements	(1) <i>ki</i> ' conjoins NPs only. (2) Conjoined NPs are preferred to be proper nouns or kinship terms, and sometimes common nouns manifesting or relating to human beings.	(1) <i>ru</i> ' conjoins NPs, VPs, or CLs. (2) Conjoined NPs can be any kinds of nouns.
2. Semantic-functional perspective	(1) Collective reading only—doing something together, with the <i>ki</i> '-introduced participant being an accompaniment, a less important/backgrounded role. (2) Locational and directional readings.	(1) Collective and distributive readings—doing something together or separately. (2) NP ₁ and NP ₂ are of the same status.
3. Syntactic perspective		
3.1 Inclusive construction	<i>ki</i> ' may appear in the inclusive construction.	<i>ru</i> ' cannot appear in the inclusive construction.
3.2 Topic construction	(1) NP ₁ and NP ₂ together (i.e. <u>NP₁ <i>ki</i>' NP₂</u>) may appear in Topic position. (2) AF sentences allow NP ₁ alone to appear in Topic position, leaving <u><i>ki</i>' NP₂</u> in the matrix clause, but not NAF sentences. (3) NP ₂ alone (with or without <i>ki</i> ') cannot appear in Topic position.	(1) Only NP ₁ and NP ₂ together (i.e. <u>NP₁ <i>ru</i>' NP₂</u>) may appear in Topic position. (2) Neither NP ₁ nor NP ₂ alone can appear in Topic position.
3.3 Negative construction	(1) NP ₁ and NP ₂ together can be negated. (2) NP ₂ alone can be negated. (3) The named event can be negated.	(1) NP ₁ and NP ₂ together can be negated. (2) Neither NP ₁ nor NP ₂ alone can be negated.
3.4 Interrogative construction	(1) Interrogative sentences with <i>ki</i> ' are Equational sentences. (2) <i>ki</i> ' can precede either interrogative word (Q) or an NP. (3) Either <u>NP <i>ki</i>' Q</u> or <u>Q <i>ki</i>' NP</u> is possible. (4) <u><i>ki</i>' NP</u> can be moved away from the sentence-initial position, but not <u><i>ki</i>' Q</u> .	(1) Interrogative sentences with <i>ru</i> ' are Equational sentences. (2) <i>ru</i> ' can precede either interrogative word (Q) or an NP (3) Either <u>NP <i>ru</i>' Q</u> or <u>Q <i>ru</i>' NP</u> is possible. (4) Neither NP or Q, preceded by <i>ru</i> ' or not, can be moved away from the sentence-initial position.

Furthermore, Stassen (2000), while conducting a typological study of noun phrase conjunction in 260 languages, divides languages into AND-languages and WITH-languages: (i) AND-languages display both the coordinate and comitative strategies;

(ii) WITH-languages only use comitative strategy for noun phrase conjunction. Based on the above discussion, we thus would like to conclude that Squliq Atayal can be categorized as an AND-language.

5.2 A brief cross-dialectal comparison

As for the other Atayal dialects,²¹ while Mayrinax and S'uli' almost resemble Squliq Atayal with respect to their manifestations and structural properties of coordination and comitativity, Pngawan Atayal presents some exceptions. For instance, while most Atayal dialects have a coordinator *ru'* and a Comitative case maker *ki'*, Pngawan Atayal has a coordinator *lu'* and a Comitative case marker *ci'*. Below is a brief cross-dialectal comparison of coordinating and comitative structural features Atayal dialects present.

Each of the above-named Atayal dialects has a coordinator that can conjoin NPs, VPs and CLs, and a Comitative case marker that only conjoins NPs. However, while all Atayal dialects allow their coordinating makers (*lu'* in Pngawan and *ru'* in the others) to conjoin all types of nouns, these dialects still illustrate some differences regarding the nominal (sub-)classes that their Comitative case markers may conjoin:

- (i) Mayrinax Atayal allows its Comitative case maker *ki'* to conjoin personal proper nouns and some kinship terms like 'father' and 'mother';
- (ii) Squliq Atayal allows the Comitative case maker *ki'* to conjoin proper nouns and common nouns, as long as they manifest human beings or arguments related to human beings;
- (iii) Pngawan Atayal allows its Comitative case marker *ci'* to conjoin two proper nouns, two common nouns, proper and common nouns, as long as they manifest animate arguments, either human or non-human.

²¹ As indicated in §1, Atayal has two major dialects, Squliq and C'uli'. However, each dialect can be further categorized in terms of regional properties. For instance, the C'uli' dialect spoken in the western coast of Taiwan (e.g. Maspazi' [Da-ai 大隘 in Chinese], Wu-feng Township, Hsinchu County, and Mekarang [Meihua 梅花], Jianshi Township, Hsinchu County) shows, among others, /s/~c/ sound correspondence with that spoken in I-lan County, and thus the former is called S'uli' while the latter C'uli'. In addition, the C'uli' dialect spoken in Mayrinax (汶水) and Matabalay (大興) in Tai-an Township, Miaoli County, presents itself as a very unique C'uli' dialect, illustrating very conservative structural properties, and thus the dialect spoken is often called Mayrinax or Matauwal. Another C'uli' dialect spoken in Pngawan (親愛), Jen-ai Township, Nantou County, shows unique mixed properties of Atayal and Seediq (Li 1985), which may be the result of frequent contact. For a more detailed discussion on Atayal dialects, please refer to Huang (2009b).

All the dialects demonstrate the use of inclusory pronouns in the NPs conjoined by the Comitative case marker, as for instance:²²

(50) Mayrinax Atayal

- a. ma-quwas=**cami** ki' lawsing.
 AF-sing=1PE.Nom Com Lawsing
 'I sing with Lawsing.'
- b. m-aniq=**cami** cu' qulih ki' lawsing kariariax.
 AF-eat=1PE.Nom Acc fish Com Lawsing often
 'I often eat fish with Lawsing.'

(51) S'uli' Atayal

- a. p-tpak=**sami** mari ki' torih.
 Irr-play.AF=1PE.Nom ball Com Torih
 'I will play ball with Torih.'
- b. m-gluw=**sami** krriyax m-usa taype ki' pagung.
 AF-together=1PE.Nom often AF-go Taipei Com Pagung
 'I often go to Taipei with Pagung.'

(52) Pngawan Atayal

- a. m<in>awas=**min** ci' nabkis.
 AF<Prf>sing=1PE.Nom Com old:man
 'I once sang with the old man.'
- b. m<in>babahiy=**mamu** ci' temu' hira.
 AF<Prf>fight=2P.Nom Com Temu' yesterday
 'You fought with Temu' yesterday.'

Note that in all the dialects, when the two involved participants are either the speaker/the first-person participant or the hearer/the second-person participant, a bound plural Nominative pronoun is present and is attached to the sentence-initial element (e.g. (50)-(52)). However, in Pngawan Atayal, when the two participants involved are third-person participants, the third person plural Neutral pronoun *laha'* is used and it appears between the two nouns manifesting the two arguments involved, as exemplified by (52c-d):

²² The S'uli' data given here are provided by Torih Syat (p.c.), and most of the work relating to Pngawan Atayal is taken from Huang (2006).

(52) Pngawan Atayal

- c. ma-m-aha tanux ka' yumin **laha'** ci' ngyaw.
Red-AF-go outside Nom Yumin 3P.Neu Com cat
'Yumin will go outside with the cat.'
- d. sa-silay-un=mu ka' huṛil **laha'** ci' ngyaw.
Red-beat-PF=1S.Gen Nom dog 3P.Neu Com cat
'The dog and the cat will be beaten by me (with a stick).'

This feature is unique to Pngawan Atayal; no such requirement is present in other Atayal dialects. However, as discussed in Huang (2009a:21-29), Tgdaya Seediq has a pronoun *daha* meaning 'two; 3P.Gen'²³ and its Nominative case marker is *ka*, and the combination of the two, *daha ka*, seems to have been fossilized and serves as the Comitative case marker. Examples containing *daha ka* follow (Huang 2009a:23-24):

(53) Tgdaya Seediq

- a. **yami** daha ka walis maha taype.
IPE.Neu Com Walis go.AF.Irr Taipei
'I am/We are going to Taipei with Walis; it is I/we and Walis that are going to Taipei (not anybody else).' (As a response to 'Who is going to Taipei?')
- b. **yami** daha ka walis mnusa taype.
IPE.Neu Com Walis go.AF.Prfl Taipei
'I/We went to Taipei with Walis; it was I/we and Walis that went to Taipei (not anybody else).' (As a response to 'Who went to Taipei?')
- c. **yami** daha ka walis tgdiyan.
IPE.Neu Com Walis fight.AF
'I/We fought with Walis; it was I/we and Walis that fought against each other (not anybody else).' (As a response to 'Who fought?')

Comparing Pngawan Atayal and Tgdaya Seediq, we may expect that there must be some relationship between the presence of *laha'* followed by *ci'* in Pngawan and *daha ka* in Tgdaya.²⁴

²³ For a complete pronominal system of Seediq, please refer to Holmer (1996:32).

²⁴ That Pngawan seems to resemble Tgdaya but differs from the other Atayal dialects regarding comitative construction is perhaps due to Pngawan speakers' being surrounded by Tgdaya speakers instead of by other Atayals. In other words, language contact must have had some effect on the indicated resemblance. A similar observation is given by Li (1985).

Another thing worth mentioning is that in Pngawan Atayal, when the Comitative case marker *ci'* is replaced by the coordinating conjunction *lu'*, the named pronoun *laha'* is not allowed to appear, as shown in the following examples containing coordinating NPs:

(54) Pngawan Atayal

- a. *cyel ma-sa-siliy ka' [watan Ø lu' temu].*
 Imprf.Dist Rec-Red-beat Nom Watan Conj Temu
 'Watan and Temu are beating each other (with sticks).'
- b. *cyel m-aguy ka' [huril Ø lu' ngyaw].*
 Imprf.Dist AF-dance Nom dog Conj cat
 'The dog is dancing with the cat.'

The last point deserving some attention is that, in Pngawan Atayal, when the participant involved is manifested by either the first or the second person pronoun, in addition to the plural bound Nominative pronouns, *min* and *mamu*, have to be attached to the first element of the sentence, their corresponding free Neutral pronouns *cami* and *cimu* may—though not necessarily—co-occur in such a construction and precede the Comitative case marker followed by the noun designating the accompanist. Examples are:

(55) Pngawan Atayal

- a. *ma-m-aha=**min** m-ani **cami** ci' temu.*
 Red-AF-go=1PE.Nom AF-eat 1PE.Neu Com Temu
 'I will go to eat with Temu.'
- b. *ma-m-aha=**mamu** inu' cuxan **cimu** ci' nabkis.*
 Red-AF-go=2P.Nom where tomorrow 2P.Neu Com old:man
 'Where will you go with the old man tomorrow?'

5.3 Future research

The present paper has examined the coordinating and comitative constructions in Squaliq Atayal with respect to the status of conjoined elements, and from a semantic-functional aspect and syntactic point of view. The paper has also provided a cross-dialectal comparison between Squaliq and other Atayal dialects, though brief and preliminary. In order to better understand whether a grammaticalization process has been involved concerning the multifunctional features of the element *ki'*, and whether there is any relationship between the structures referred to in the Atayal and Seediq

languages, more detailed syntactic, semantic, and pragmatic investigation and comparison of coordination and comitativity among Atayal dialects and Seediq variants need to be conducted. It is hoped that the present findings will shed some light on the typological study of coordination and comitativity in Austronesian languages.

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賽考利克泰雅語「並列」與「伴同」結構之研究

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泰雅語是台灣南島語的一支，本篇論文主要探討該語言之賽考利克方言中表達「並列」及「伴同」的詞彙 *ru'* 及 *ki'* 的語法及語意異同性。文中將討論這兩個標記所能連結成分之屬性，並從語意或語用功能、及從語法結構等角度比較這兩個標記之異同。另外，根據 Stassen (2000) 的 AND- 及 WITH- 語言分類，賽考利克泰雅語應屬於 AND- 語言。希望本研究之發現能提供給南島語類型學研究一些參考。

關鍵詞：賽考利克泰雅語，並列，伴同，AND-語言