Clause combining in Kadorih of Central Kalimantan

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The clause combining system in Kadorih has not been described to date. In this paper, I propose an account of clause combining in Kadorih, examining the phenomena of coordination, relativization, complementation, and adverbial clause formation. The analysis looks into the formal differences between coordination and subordination on the basis of three tests of cataphora, clause movement, and clause insertion. Concerning relativization in Kadorih, I argue that relative clause formation can be applied only to subjects, and demonstrate that non-subjects basically need to be promoted to subjects through voice alternation. Additionally, I classify different complement-taking predicates in Kadorih according to (a) conceptual tightness between predicates and complements and (b) syntactic rigidity of constituent order. Furthermore, I describe several aspects of Kadorih adverbial clauses such as proposition negation of adverbial clauses and subject sharing between adverbial and main clauses.

1. Introduction¹

The goal of this paper is to describe the core part of the clause combining system in Kadorih. Kadorih is a dialect of Dohoi, an Austronesian language which belongs to the Barito languages. Kadorih is spoken by approximately 11,000 people in the upper reaches of Kahayan River in Central Kalimantan (Inagaki 2008, 2013, 2014a; cf. Blust & Smith 2014). There is another dialect of Dohoi, namely Melawi dialect (Couderc 2013) spoken in West Kalimantan. A variety spoken in the east part of Central Kalimantan may be another dialect.

The systems of clause combining in Barito languages/dialects have been hardly described to date. This paper attempts to look into the clause combining of one of these languages/dialects, namely Kadorih dialect of Dohoi, and discusses the difference between coordination and subordination, ellipsis in coordination (section 2), noun phrase accessibility in relative subordination (section 3), strategies of complementation (section 4), and some features in the usage of adverbial clauses (section 5).

2. Coordination

2.1 Coordination and subordination

There are syntactic tests for distinguishing between coordinate and subordinate constructions (see Haspelmath 1995, Diessel 2001 for details). In the following, three of these syntactic tests are briefly illustrated with examples from Kadorih. First, while subordinate clauses allow cataphora, coordinate sentences do not. Second, while subordinate clauses can be placed before or after main clauses, the position of coordinate sentences is invariable. Third, while subordinate clauses can be inserted into the middle of sentences, coordinate constructions cannot.

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- (1) a. [olu eam=ku nohto=ah], inai amai doro pasti oko ndai=ka. although not=1SG.A see=3P mother father twosome surely old PFV=also '[Although I haven't seen (lit. don't see) them], his parents must have been old.'
 - b. [anai behtang amai Lawang], tutang [anai kubura-i]. there longhouse father (name) and there grave-3sG.POSS '[There is Amai Lawang's longhouse], and [there is his grave].'
 - c. *[anai behtang=ah], tutang [anai kuburan amai Lawang].

 (Intended meaning: '[There is his longhouse], and [there is Amai Lawang's grave].')

The examples in (1) show subordinate and coordinate constructions that include a concessive subordinator *olu* 'although' (=1a) and a conjunctive coordinator *tutang* 'and, additionally' (=1b), respectively. In (1a), a pronominal clitic *ah* '(third person (singular/plural) patientive argument)' cataphorically refers to 'parents' denoted by *inai amai* 'mother-father' in the following main clause. While the subordinate clause allows cataphora in (1a),² the coordinate construction in (1c) does not. The pronominal clitic *ah* '(third person possessor)' cannot cataphorically refer to *Amai Lawang* '(person name)' in (1c).

(2a) and (2b) show temporal subordinate clauses placed after and before main clauses.

- (2) a. Enda molutuh konah [uli Yoga matoi bari]. (name) boil (soup).dish after (name) cook rice 'Enda cooked soup dish [after Yoga cooked rice].'
 - b. [uli Yoga matoi bari], Enda molutuh konah. '[After Yoga cooked rice], Enda cooked soup dish.'
 - c. [Enda molutuh konah] tutang [Yoga matoi bari]. '[Enda cooked soup dish] and [Yoga cooked rice]'.
 - d. *tutang [Yoga matoi bari] [Enda molutuh konah].

While subordinate clauses can be moved freely to the position before or after the main clause, coordinate clauses cannot be moved as shown in (2d). Additionally, subordinate clauses can be inserted within the main clause (as in (3a), between subject/topic constituent and predicate), whereas coordinate clauses cannot as in (3b) below.

- (3) a. Enda, [uli Yoga matoi bari], ... molutuh konah. 'Enda, [after Yoga cooks rice], cooks soup dish.'
 - b. *[Enda, tutang [Yoga matoi bari], ... molutuh konah].

It should be noted that, in Kadorih, subordinate clause insertion such as in (3a) is very rare, and that there would be a clear pause between the subordinate clause and the rest of the sentence, as shown by the three dots in (3a). This boundary pause signals that a sentence is split apart in an unusual way.

In addition to these syntactic characteristics of subordinate and coordinate constructions, subordination and coordination can be viewed in terms of 'speech act perspective'

² In fact, subordinate clauses in Kadorih rarely include a cataphoric pronominal clitic. In story-telling texts that I have collected, (1a) is the only excerpt of subordinate clause in which a cataphoric clitic refers to an entity denoted by a noun phrase in the following main clause.

(Haiman & Thompson 1984). It is recognized that while illocutionary force is present in coordinate constructions, it is absent in subordinate clauses (Foley & Van Valin 1984, Hengeveld 1998, Verstraete 2005). In Kadorih, for example, *kuwoh* or *inon*, which may optionally be used to constitute polar questions, can be placed at the beginning of a sentence or immediately after conjunctive coordinator *tutang*, as shown in (4a) and (4b). On the other hand, these polar question indicators can never occur immediately after a subordinator (here: *uli* 'after') as in (4d). In addition, a sentence-final rising pitch may be used to express a question instead of these polar question indicators in (4a–c), but it cannot be used for questioning an event in a subordinate clause.

- (4) a. *kuwoh/inon* [Enda molutuh konah] tutang [Yoga matoi bari]?

 Q/Q (name) boil (soup).dish and (name) cook rice

 'Did [Enda cook soup dish] and did [Yoga cook rice]?'
 - b. [Enda molutuh konah], tutang kuwoh/inon [Yoga matoi bari]? '[Enda cooked soup dish], and did [Yoga cook rice]?'
 - c. *kuwoh/inon* Enda molutuh konah [uli Yoga matoi bari]? 'Did Enda cook soup dish [after Yoga cooked rice]?'
 - d. *Enda molutuh konah [uli kuwoh/inon Yoga matoi bari]?

Verstraete (2005:614) suggests that illocutionary force is unmarked and neutralized in subordinate clauses. Therefore, subordinators do not allow question or command indicators to follow them as in (4d).

2.2 Ellipsis in coordination

This section discusses ellipsis observed in coordination which involves an overt coordinator. In Kadorih, subject noun phrases and Tense Aspect Modality (TAM) indicators may undergo ellipsis in coordinate constructions. The ellipsis in coordination in Kadorih is always forward ellipsis (i.e. 'the ellipsis site is in the second coordinand', Haspelmath 2007:39), and it is restricted to sentences whose coordinands share a subject or a TAM indicator. For example, the same subject occurs in the second coordinand in (5a), and it is elided in (5b). These two sentences have the same propositional meaning. On the other hand, sentences which contain different subjects in each coordinand such as in (5c) do not allow ellipsis because the coordinands do not share a subject.

- (5) a. [Enda muhi pinjan] tutang [Enda jio-jion=ka muhi keceng]. (name) wash dishes and (name) quick-quick=also wash cooking.pot '[Enda washed dishes] and [Enda also washed a cooking pot somewhat quickly].'
 - b. [Enda muhi pinjan] tutang [0 jio-jion=ka muhi keceng].

 '[Enda washed dishes] and [(she) also washed a cooking pot somewhat quickly].'
 - c. [Enda muhi pinjan] tutang [Yoga jio-jion=ka muhi keceng].

 '[Enda washed dishes] and [Yoga also washed a cooking pot somewhat quickly].'

Similarly, if a TAM auxiliary is shared in a coordinate construction, the one in the second coordinand can be elided as shown in (6a) and (6b) (Auxiliaries: *jadi* for '(resultative perfect aspect)' and *tou* for '(ability/possibility/permission modality)'. See Inagaki (2013)

for details). This means that TAM indicators can have scope over the whole coordinate construction.

- (6) a. [Enda jadi muhi pinjan] tutang [Yoga (jadi) muhi keceng].

 '[Enda has already washed dishes] and [Yoga (has already) washed a cooking pot].'
 - b. [Enda tou muhi pinjan] tutang [Yoga (tou) muhi keceng]. '[Enda can wash dishes] and [Yoga can wash cooking pots].'

In contrast, object noun phrases in coordinate constructions do not undergo forward ellipsis. A shared object in a coordinate construction may only be pronominalized as illustrated by ah '(third person (singular/plural) patientive argument)' in (7).

(7) [Enda ngopolum listrik] tahpi [eam ngopolop=ah]. (name) switch.on electricity but not switch.off=3P '[Enda switched on the light] but [(she) didn't switch it off].'

Similarly, verbs also do not undergo ellipsis in coordinate constructions even if they are shared by each coordinand. All types of verbs in coordinate constructions are invariably expressed in Kadorih. If a verb such as *muhi* 'wash' in (8a) is elided as in (8b), the coordinate construction will be ungrammatical only because a verb is simply absent in a coordinand. The example without a verb in the second coordinand in (8d) can be grammatical only if it is understood as a equational clause which means the person whose name is Yoga (=subject, animate) is a cooking pot (=predicate, inanimate). Although (8d) may be grammatical, it is semantically anomalous, contradictory to say that [animate] is [inanimate].

- (8) a. [Enda muhi pinjan] tutang [jio-jion ka muhi keceng].

 '[Enda washed dishes] and [(she) also washed a cooking pot somewhat quickly].'
 - b. *[Enda muhi pinjan] tutang [jio-jion ka 0 keceng].
 - c. [Enda muhi pinjan] tutang [Yoga muhi keceng]. '[Enda washed dishes] and [Yoga washed a cooking pot].'
 - d. #[Enda muhi pinjan] tutang [Yoga **6** keceng]. (OK if it means 'Enda washed dishes and Yoga is a cooking pot.')

Since verbs in Kadorih do not undergo ellipsis in coordinate constructions, phrasal coordination such as *pinjan tutang keceng* 'dishes and cooking pots' in (9) should not be analyzed as a phrase derived from sentential coordination through ellipsis. The sentence 'Enda washed dishes and Enda washed cooking pots' does not derive 'Enda washed dishes and cooking pots' through the double ellipsis of the shared subject and verb. Therefore, the example in (9) only shows a coordination between a noun and a noun.

(9) [Enda muhi pinjan tutang keceng]. 'Enda washed dishes and cooking pots.'

3. Relative subordinator ijo

This section deals with noun phrase accessibility in relative constructions in Kadorih. A (restrictive) relative clause is a subordinate clause which modifies a head noun and picks up the subset of referents of that noun (Keenan 1985, Andrew 2007, Dixon 2010).

Languages differ in terms of the degree of accessibility of different syntactic functions to relative clause formation (Keenan & Comrie 1977, 1979).

Kadorih uses a particle *ijo* to form a subordinate clause, which is called 'relative clause' in other languages. The basic strategy of relative clause formation applies only to subjects. In order to be relativized, non-subjects need to be promoted to subjects through voice alternation, or, less frequently, pronominal clitics or affixes are retained obligatorily in the position relativized.

- (10) shows an example of relativization on subject.
- (10) dolang panyahkit [ijo tou munu dolang kalunon]
 PL disease REL TAM:PS kill PL human
 'diseases that can kill humans'

The relativized noun phrase *dolang panyahkit* 'diseases' in (10) is interpreted as the subject of the restricting clause *tou munu dolang kalunon* 'can kill humans'. It can be assumed that there is a gap for the subject position in the restricting clause and that the subject *dolang panyahkit* 'diseases' is extracted from the clause-initial position that it would have occupied in a simple construction. This is simply because the restricting clause *tou munu dolang kalunon* 'can kill humans' is, on its own, not a full-fledged sentence: it is only translatable as 'can kill humans'.

- (11) shows elicited examples of relative clauses. Indirect and direct objects cannot be relativized directly as shown in ungrammatical constructions in (11b) and (11c).
- (11) a. *ulun bahkas* [*ijo nonga Enda wadai*] (=rih Yoga) human male REL give (name) cake (=ANAPH name) 'The man [who gave Enda a cake] (was Yoga).'
 - b. *ukun [ijo Yoga nonga Enda](=rih wadai)
 (Intended meaning: 'The food [that Yoga gave Enda] (was a cake).')
 - c. *ulun bawi [ijo Yoga nonga wadai](=rih Enda)
 (Intended meaning: 'The woman [to whom Yoga gave a cake] (was Enda).')

Object arguments can be promoted by voice alternation to subject position and relativized as in (12). The restricting clause in (12a) is in undergoer voice and corresponds to the one in actor voice in (11b), and (12b) is the one in undergoer voice corresponding to (11c).³

- (12) a. ukun [ijo t<an>onga Yoga ahkan Enda] (=rih wadai) food REL <UV>give (name) for (name) (=ANAPH cake) 'The food [that Yoga gave to Enda] (was a cake).'
 - b. *ulun bawi* [*ijo tanonga Yoga wadai*](=rih Enda)

 'The woman [to whom Yoga gave a cake] (was Enda).'

Relativization on object of an actor-voice clause is not grammatical in Kadorih and has never occurred in Kadorih texts and conversations analyzed in this study. These facts are consistent with the results obtained by elicitation in (11b) and (11c). However, objects in actor voice may be relativized only if personal pronominals are retained in object position as in (13). In (13a), object pronominal enclitic *ah* is retained after the transitive verb *nahup*

³ In simple undergoer voice sentences, the postposition *kai* can be used to mark agents, but it will be ungrammatical if this postposition is used in relative clauses: **ukun ijo tanonga Yoga kai ahkan Enda*, **ulun bawi ijo tanonga Yoga kai wadai* are not acceptable.

'hit', and in (13b), object pronominal suffix -i is substituted with the final morphophonological element (=morphologically "linker", phonologically alveolar nasal) of the transitive verb kuma(n) 'eat'. Such resumptive pronominals do not appear in the case of relativization on subject.

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a. ohcin louk [ijo Yoga nahup=ah] (=rih asu) animal REL (name) hit =3P (=ANAPH dog)
'The animal [that Yoga hit] (was a dog).'
b. ukun [ijo yaduon Enda kuma-i (=rih sahang) food REL TAM:IAB (name) eat-3P (=ANAPH chili)
'The food [that Enda cannot eat] (is chili).'
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Object relativization in Kadorih requires a special word order if they contain TAM indicators as in (13b). The modal indicator yaduo(n) 'cannot' is usually placed after a subject (here: Enda) in simple constructions, but in the case of relativization on object, it must be placed in the position immediately after the relative subordinator ijo, and the agent argument Enda obligatorily occurs after the modal indicator. This word order is similar to that in (12) where predicates in undergoer voice follow ijo and agent arguments occur after the predicates.

Similar sorts of retained pronominals also appear in possessed noun phrases in restricting clauses. The relativization of possessives frequently occurs in Kadorih discourse. In (14a), the possessor noun phrase *ulun* 'human' is relativized and the coreferential pronominal enclitic *ah* is obligatorily retained in the restricting clause. Similarly, in (14b) and (14c), the possessor *kalunon* 'humankind' and *hati* 'clothes' are expressed by the coreferential pronominal suffix *-i* in each restricting clause. The possessive relationship observed in this type of relative construction can be either alienable as in (14a) or inalienable as in (14b).⁴

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(14) a. ulun [ijo luhku=ah nihou] human REL cigarette=3SG.POSS disappear 'man [whose cigarette disappeared]'
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- b. *kalunon* [*ijo ara-i Matun Tawan*] humankind REL name-3SG.POSS (name) 'the human [whose name is Matun Tawan]'
- c. *hati* [*ijo kobua-i jaat*]=*rih ai*=*kku*. clothes REL scent-3SG.POSS bad=ANAPH possession/self=1SG.POSS '[The bad smelling clothes] are mine.'

Objects of prepositions, for example, locational or instrumental noun phrases are not relativizable as shown in (15). Instrumental noun phrases are relativized only if the verb hapa(n) 'use' is used and a coreferential pronominal is retained in the object position in restricting clauses, as shown in (16).

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(15) a. *lowu [ijo Yoga bagawi (aang)]
village REL (name) work (at/in/on)
(Intended meaning: 'the village [where Yoga worked]')
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⁴ See Sneddon (1996:278–280) and Verhaar (1978:320) for the description on inalienability of similar relative constructions in Indonesian.

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b. *pisou [ijo Yoga napa bacang (umba=ah)]
knife REL (name) make spinning.top (with=3P)

(Intended meaning: 'the knife [with which Yoga made a spinning top]')
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(16) pisou [ijo Yoga hapa-i] knife REL (name) use-3P 'the knife [that Yoga used]'

It should be noted here that the relative subordinator *ijo* in Kadorih is used to constitute various constructions which usually suppress a head noun as in (17).

- (17) a. [*ijo* dohop amai Busun umba papahtoi]=rih baya keluarga,
 REL help father (name) with death=ANAPH only family
 'The ones [who helped Amai Busun (prepare) the funeral] were only (his) families'
 - b. baya iroh=ih [ijo dohop ponguburan, dohop amai Busun]. only they=just REL help burial help father (name) 'It was only they [who helped Amai Busun (prepare) the burial].'

Both examples in (17) are equational sentences without a copula, but the anaphoric demonstrative *rih* 'that' and the focus particle *ih* 'just' can be analyzed as kinds of indicators of the right boundaries of each preceding noun phrase. These sentences are cleft constructions which have contrastive and identificational readings. In (17), 'people who helped Amai Busun' and 'others' are contrasted. The relative subordinator *ijo* is used to identify the entity denoted by *keluarga* '(his) family' in (17a) and *iroh* 'they' in (17b), the subsets of 'people', which are, however, not overtly expressed as the head nouns. For more information on identificational or cleft construction which has argument-focus structure, see Inagaki (2014b: 237–238).

Similarly, the head nouns are not expressed in the four *ijo*-clauses in (18), but in this case, a particle marking plurality is placed before *ijo*-clauses, and it indicates that the *ijo*-clauses refer to countable entities although there are no head nouns.

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(18) lang=[jo mahcu tiruh], lang=[jo doni buli],
PL= REL far sleep PL= REL near go.home
[jo=bobulen] k<an>itot uku-i, [jo=bakalui] k<an>uku-i.
REL=blind <UV>send food-3SG.POSS REL=have.sore <UV>feed-3SG.A

'Those [who (came from) afar] slept, those [who (came from) nearby] went home, the one [who is blind] was given some food, and the one [who has many sores] was fed.'
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4. Complementation

Complementation is "the syntactic situation which arises when a notional sentence or predication is an argument of a predicate" (Noonan 1985:42). In Kadorih, almost all complement clauses occur in object position. There is no complementizing morpheme, but the complementizer *bahuwa* 'that' borrowed from Malay may be used to form a complement clause for utterance verbs such as *mander* 'say, tell'.

(19) ahku, jadi=ka mander ahka-i
I TAM:PFT=also say/tell for-3SG.P

[bahuwa ahku huang mandohop io nyamah ngolomi hawun].

COMP I TAM:WN help him until night tomorrow
'I also told him [that I was going to help him until tomorrow night].'

The borrowed complementizer bahuwa is optional in complement clauses. Thus, there is no change in meaning if the complement clause in (19) is simply juxtaposed to the utterance verb mander as in ahku, jadi=ka mander ahkai ahku huang mandohop io nyamah ngolomi hawun. In fact, juxtaposition is the most common way to complementize a clause in Kadorih.

Bahuwa-complement clauses are considered to function as object arguments because they have the same syntactic behavior as object noun phrases. For example, if an object argument is dislocated to the beginning of a sentence, then the transitive verb must take a third person pronominal enclitic/suffix which is coreferential to the dislocated object noun phrase (see (20)). In the elicited example in (21), the complement clause following bahuwa 'that' is dislocated from the position that it occupied in the corresponding spontaneous speech in (19), and the third person pronominal enclitic appears on the transitive utterance verb mander 'say, tell', and the sentence is acceptable.

- (20) a. Racahaci mander auh orih. (name) say/tell voice ANAPH 'Racahaci said that thing.'
 - b. auh orih, Racahaci mander=ah voice ANAPH (name) say/tell=3P 'That thing, Racahaci said it.'
- (21) [(bahuwa) ahku huang mandohop io nyamah ngolomi hawun], ahku jadi=ka mander=ah ahka-i.

'[That I was going to help him until tomorrow night], I also said it to him.'

In the case of predicates of 'knowledge and acquisition of knowledge' (hereafter, K & AK) such as *taan* 'know' and *ngalai arop* 'learn, teach oneself' and also in the case of an utterance verb *ngisok* 'ask', interrogatives seem to function as complementizers. However, they cannot be substituted by *bahuwa* as shown in (22). Moreover, it is completely acceptable if *bahuwa* is placed even between a complement-taking predicate and a complement clause which contains an interrogative at the beginning as in (23).

- a. ahku eam=ku taa-i
 I not=1SG.A know-3P

 [inon(/*bahuwa) anak=ku=tuh cuhkup=ih homboh tolu].
 what(/*COMP) child=1SG.POSS=this enough=just together three
 'I don't know [whether (all) my three children will together (grow up) safely].'
 - b. ahku=rih ngalai arop=ku [inon kolou(/*bahuwa) potaan pasawat]. I=ANAPH study self=1SG.POSS how fly airplane 'I taught myself [how to fly an airplane].'
 - c. ahku ngisok [inon(/*bahuwa) io tou nangui (inon eam)].

 I ask what(/that) he TAM:PS swim (what not)

 'I asked [whether he could swim (or not)].'

- (23) a. ahku eam=ku taai [bahuwa inon anak=ku=tuh cuhkup=ih homboh tolu].
 - b. ahku=rih ngalai arop=ku [bahuwa inon kolou potaang pasawat].
 - c. ahku ngisok [bahuwa inon io tou nangui (inon eam)].

While the complementizer bahuwa is optionally used in Kadorih, interrogatives, when required as in the case of K & AK predicates, are obligatorily used in complement clause constructions. The sentences in (22) will be ungrammatical if the interrogatives are omitted as in (24). Since the utterance verb ngisok 'ask' and its complements are syntactically similar to K & AK predicates and their complements, it is more appropriate to regard ngisok as a predicate of K & AK in Kadorih.

- (24) a. *ahku eam=ku taai [**0** anak=ku=tuh cuhkup=ih homboh tolu].
 - b. *ahku=rih ngalai arop=ku [**∅** potaang pasawat].
 - c. *ahku ngisok [**0** io tou nangui].

Additionally, when interrogatives function as an argument in a complement clause as in (25), any other interrogatives should not be used as a complementizer.

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(25) ahku ngisok [(bahuwa/*inon) ihko kani inon]. I ask (COMP/ *what) you want what 'I asked [what you want].'
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These results of the syntactic tests allow us to assume that interrogatives in Kadorih can function as complementizers. However, they are usually used only with predicates of K & AK.

The other interrogatives *mira* 'when', (*tahkan*) *amoh* '(from) where', or *pira* (*behti*) 'how many (people)' also behave like *inon* 'what' and *inon kolou* 'how' in (26a) and (26b). On the other hand, the more common interrogative *narai* 'what', a borrowed interrogative from Ngaju, cannot be used as a complementizer. More importantly, among non-borrowed interrogatives, only *iai* 'who' does not allow direct *bahuwa*-complementation as shown in (26c). In order to enable interrogative *iai* to occur in *bahuwa*-complement clauses, an equative clause which contains a noun phrase formed by *ijo*-relativization must be constructed as in (27a), or *iai* must be reduplicated to derive an indefinite pronoun as in (27b).

- (26) a. *ahku ngisok* [(*bahuwa*) *pira behti jadi sohu*]. I ask COMP how.many body TAM:PF go.downstream 'I asked [how many people had gone downstream].'
 - b. *ahku ngisok* [(bahuwa) mira iroh sohu]. 'I asked [when they went downstream].'
 - c. ahku ngisok [(*bahuwa) iai jadi sohu].
 - 'I asked [who had gone downstream].'
- (27) a. ahku ngisok [(bahuwa) iai (i)jo jadi sohu].

 'I asked [who had gone downstream]'

 (lit. 'I asked who is the one that had gone downstream'.)
 - b. *ahku ngisok* [(*bahuwa*) *ia-iai jadi sohu*]. 'I asked [whether someone had gone downstream].'

The other complementation-like strategy is nominalization by means of a prefix pVN- that derives an abstract noun (V represents the vowels a and o in free variation, and N represents a homorganic nasal with the initial consonant of a base). This kind of nominalization has been attested with utterance verbs such as mander 'say, tell' and ngesah 'tell a story' as in (28).

- (28) a. ahku huang mander [panyala=kku ondou hawun] ahka-i. I TAM:WN say/tell PVN.walk=1SG.POSS day tomorrow for-3SG.P 'I am going to tell him about [my tomorrow's trip].'
 - b. ahku huang ngesah [po-lombut oko amai=ku doro I TAM:WN tell.story PVN-come old father=1SG.POSS twosome oko bokinai=ku tahkan Ngomili=nai]. old foster.mother=1SG.POSS from (place)=a.moment.ago
 'I am going to tell (you) about [my father and foster mother's coming from Tumbang Miri]'.
 - c. ahku huang ngesah [(**bahuwa**) oko amai=ku doro oko bokinai=ku **lombut** tahkan Ngomili=nai].
 - 'I am going to tell (you)[that my father and foster mother came from Tumbang Miri].'

In (28a), a verb *nyalan* 'walk' is nominalized by means of the prefix pVN- resulting in panyala(n), and its final alveolar nasal is substituted with k which is used for linking to the following first person singular possessive enclitic (but k, on its own, may function as a first person singular marker in other contexts without being followed by the enclitic ku). Similarly, in (28b), a verb lombut 'come' is nominalized by prefixing pVN-, and it is followed by genitive noun phrase $oko \ amai=ku \ doro \ oko \ bokinai=ku$ 'my father and foster mother'. The sentences in (28a, b) are the ones told at the beginning of stories. The nominalized noun phrases which follow an utterance verb in (28a, b) are more appropriate for the title of each story than the one employing bahuwa- or juxtaposition complementation strategies such as the elicited example in (28c). In fact, after telling the stories, the storyteller entitled these stories through nominalization, "panyalakku ondou hawun" and "kesah polombut kok ko

These nominalized noun phrases function as the objects of each utterance verb. If they appear at the beginning of each sentence, then the verbs must take a third person pronominal as exemplified earlier in (20) and (21). Such examples for (28a) and (28b) are shown in (29a) and (29b), respectively.

- (29) a. [panyala=kku ondou hawun], ahku huang mander=ah ahkai. 'About [my trip tomorrow], I am going to tell it to him.'
 - b. [polombut oko amai=ku doro oko bokinai=ku tahkan Ngomili=nai], ahku huang ngesah=ah.
 - 'About [my father and foster mother's coming from Tumbang Miri], I am going to tell [you].'

On the other hand, (30a) and (30b) show examples in which the complementizer *bahuwa* is inserted after utterance verbs in (28a) and (28b), respectively.

(30) a. *ahku huang mander [bahuwa panyalak=ku ondou hawun] ahkai. *ahku huang mander ahkai [bahuwa panyalak=ku ondou hawun].

b. ahku huang ngesah [bahuwa polombut oko amai=ku doro oko bokinai=ku tahkan Ngomili=nai].

'I am going to tell (you) about [my father and foster mother's coming from Tumbang Miri].'

Interestingly, while the verb *mander* 'say, tell' does not seem to allow *bahuwa*-insertion before the nominalized noun phrase, as in (30a), *ngesah* 'tell a story' permits it, as in (30b). However, as already seen in (19) above, *mander* usually co-occurs with a *bahuwa*-complement clause. A possible account for the (un)acceptability of *bahuwa* in (30) is basically attributable not to a syntactic reason but to a pragmatic one. Since the phrase *panyalakku ondou hawun* 'my tomorrow's trip' is a more conventionalized and more frequent expression than *polombut* + genitive noun phrase in (30b), (30a) is a more nounlike element than (30b), and because of this, it does not allow *bahuwa*-complementation in the same way that a simple noun cannot be complementized.

Another complement-taking verb *nyuhu* 'command, request' allows complement dislocation as shown in (31c), but not *bahuwa*-insertion as in (31b).⁵

- (31) a. io nyuhu [ahku macek=ah huli].

 he command me check=3P re(turn)

 'He requested [me to recheck them (=example sentences)].'
 - b. *io nyuhu [bahuwa ahku macek=ah huli].
 - c. [ahku macek=ah huli], io nyuhu=ah.

A manipulative verb *maksa* 'force' and its complement also behave like *nyuhu* 'request, command' as in (32).

- (32) a. oko amai=ku **maksa** [ahku ngitot io nokuh Ngomili=nai]. old father=1SG.POSS force me deliver him toward (place)=there 'My father forced [me to take him to Tumbang Miri].'
 - b. *oko amai=ku **maksa [bahuwa** ahku ngitot io nokuh Ngomili=nai].
 - c. [ahku ngitot io nokuh Ngomili=nai], oko amai=ku **maksa** ahku.

Similarly, the verb ngua(n) 'make', which can be used as a manipulative predicate, also has a juxtaposed complement that does not allow bahuwa-insertion, as shown in (33b). Moreover, a different result will be obtained if we implement the dislocation test. There are two things that render the dislocated sentence in (33c) odd. One is that, when no affectee follows it, the verb ngua(n) 'make' denotes not a causative event but a 'making' event, and the other is that the non-human ihco kobahtang lihat 'a langsat tree' cannot be an agent of the 'making-event'. Thus, the verb ngua(n) functions as a manipulative verb only if an affectee and a predicate of the complement clause follow it as in (33a).

⁵ If a TAM marker *huang* '(future/wanting)' is used in a complement clause of *nyuhu* (e.g. *io nyuhu ahku huang macek=ah huli.*), then the sentence implies that the action denoted by the complement clause has not been completed at the time of the utterance.

- a. ihco kobahtang lihat nguan [ahku bojoin nohtok=ah one (trunk) Lansium.domesticum make me many.times cut.off=3p jatuh nyamah aro tohtok=ku].

 that.particular until many cut=1sG.POSS

 'A langest tree made [me cut them (-its branches) many times until Loot
 - 'A langsat tree made [me cut them (=its branches) many times until I got many cut (branches)].'
 - b. *ihco kobahtang lihat **nguan [bahuwa** ahku bojoin nohtok=ah jatuh nyamah aro tohtok ku].
 - c. *[ahku bojoin nohtok=ah jatuh nyamah aro tohtok ku], ihco kobahtang lihat ngua-i.

Generally speaking, the result of an insertion test between a complement-taking predicate and its complement is an indication of the degree of separability. Their high separability correlates with the conceptual looseness of integration between the two events denoted by a predicate and its complement. In contrast, their low separability correlates with the conceptual tightness of integration between the two events, and in the case of causative events, they share the same spatio-temporal profile (Shibatani & Pardeshi 2001).

The dislocation test is also an indication of separability and constituenthood of the complement. If a complement clause allows movement, it is loosely combined with the complement-taking predicate and it can be regarded as an independent syntactic unit. In contrast, if a complement clause cannot be moved, it is tightly combined with the predicate and the complement clause construction has rigid constituent order.

The part of the result of these two tests in Kadorih is summarized in (34). This somewhat simplified table shows that complement-taking predicates in Kadorih differ from each other in terms of conceptual tightness (shown by **boldface**) and syntactic rigidity of constituent order.

(34)				bahuwa-	S	syntactic
	predicate type	verb		insertion	dislocation	rigidity_
	UTTERANCE	bakesah	'tell a story'	yes	yes	_
		ngesah	'tell a story'	yes	yes	_
		mander	'say, tell'	yes	yes	_
	K & AK	ngisok	'ask'	yes (+interrogative)	yes	_
		taan	'know'	yes (+interrogative)	yes	_
		ngalai	'learn'	yes (+interrogative)	yes	_
		arop				
	MANIPULATIVE	nyuhu	'command'	no	yes	+
		maksa	'force'	no	yes	+
		nguan	'make'	no	no	++
	FEARING	mihkoh	'be afraid'	no	no	++
	ACHIEVEMENT	nihkos	'try'	no	no	++
	THINKING	mingat	'remember'	yes	no	+
		ngira	'think'	yes	yes	_
	FEELING	ngomo	'feel'	yes	yes	_

Complement-taking verbs of fearing and achievement, like *mihkoh* 'be afraid' and *nihkos* 'try' allow neither *bahuwa*-insertion nor complement dislocation. They take tightly integrated complements and have rigid constituent order.

- (35) a. ahku **mihkoh** [yaduo=kku nyokula anak=ku]. I be.afraid TAM:IAB=1SG.A enroll.someone.in.school child=1SG.POSS 'I am worried [that I cannot put my children in school].'
 - b. ahku nihkos [nokuh koron Anoi holu].

 I try toward hill (place) first.of.all

 'I am going to try [to go to Anoi Hill before anything].'

Perception verbs *nohto* 'see' and *nuneng* 'watch, gaze' can be used either with direct sensory perception senses or with epistemic senses, in which case they mean 'to get to know, understand'. The complementizer *bahuwa* is usually optional when these perception verbs are used with epistemic senses as in (36a) and (37a), but it cannot be used with sensory perception senses as in (36b) and (37b).

- (36) a. Epistemic: Suster nohto [(bahuwa) io ahkan mahtoi].

 Sister see that he TAM:FUT die

 'Sister saw [that he will die].'
 - b. Perception: Suster nohto [(*bahuwa) io honong kuman].

 Sister see that he TAM:IPFV eat

 'Sister saw [he was taking a meal].'
- (37) a. Epistemic: ahku nuneng [(bahuwa) anak=ku beteng=tuh sehat].

 I watch that child=1sg.poss now healthy
 'I see [that my children are healthy now].'
 - b. Perception: *io nuneng* [(*bahuwa) mahtan ondou bolum tutang bolop].

 he watch that sun alive and extinguished 'He watched [a sunrise and sunset].'

5. Adverbial subordinators

Adverbial subordinate clauses modify verb phrases or entire clauses (Thompson & Longacre 1985). Kadorih is a VO language having right branching structures. Adverbial clauses in Kadorih can occur both before and after the main clause and they are marked by initial subordinators, as in other VO languages investigated by Diessel (2001). Subordinating morphemes in Kadorih are listed in (38).

- (38) Adverbial subordinators
 - a. time: beteng 'middle, when', uli 'after', lius 'before (archaic)', saholu 'before', sambil/sambir 'while (loanword)'
 - b. manner: kolou 'like'
 - c. purpose: ahkan 'for, in order to', bele 'lest'
 - d. reason: *kobaiu* 'because'e. concessive: *olu* 'although'
 - f. conditional: (ngi)ndoi 'if', amun 'if (loanword)', jakai 'if'

5.1 Time clauses

The proposition expressed by time adverbial clauses cannot be negated as in (39a) but in the case of purpose or reason clauses, the propositions may be negated as in (39b) and (39c).

- (39) a. [beteng inai=ah ngomin arop=ah sakihtar tolu bulan], when mother=3sG.POSS conceive.baby=3sG.POSS approximately three month ahku hatuh tohko nuhpi. *tahpi io eam batohi beteng orih.

 I TAM:PST exist dream but she not be.pregnant time ANAPH '[When his mother conceived a baby, in the third month of pregnancy], I had a (special) dream. *However, she wasn't pregnant at that time.'
 - b. [ahkan=kai narik=ah] ahku nyawot dohop umba oka=ku.
 in.order.to=we.EX pull=3P I ask.for help with older.sibling=1SG.POSS
 tahpi ihkai jaham narik=ah.
 but we.EX TAM:NPFV pull=3P

 '[In order for us to pull it (=a betel nut tree) down], I asked my older siblings to help me. However, we have not yet pulled it down.'
 - c. [kobaiu iroh uras aro deroh], mukin nyaro waktu ngomosai, because they all many busy probably there.be.not time take.husband nyaro waktu ngoruh. tahpi sabujur=ah, iroh uras eam deroh there.be.not time take.wife but actually they all not busy '[Because they all are busily occupied], probably there is no time to take a husband or wife. However, as a matter of fact, they all are not busy.'

Among time adverbial clauses, only *sambil/sambir* 'while' requires that the subjects of main and subordinate clauses be shared as in (40a). Moreover, no temporal markers can occur in a *sambil/sambir* clause as in (40b).

- (40) a. *ahku* mohcon aang lowu=tuh [sambil ahku ngindoi anak=ku I live at/in/on village=this while I wait child=1SG.POSS jo=honong lenga=ah].

 REL=TAM:IPFV infant=3SG.POSS

 'I (will continue to) live in this village, [waiting until my child of young age (get older)].'
 - b. ahku mohcon aang lowu=tuh **sambil** ahku {*hatuh[TAM:PST] / *ahkan[TAM:FUT]} ngindoi anak ku jo honong lenga ah.

5.2 Purpose clauses

A preposition ahka(n) meaning 'for' can be used to form a purpose adverbial clause as in (41). See also (39b). Singular subjects in the adverbial clause are marked by personal suffixes on the preposition, and plural subjects are usually expressed by personal enclitics.

(41) rencana=ku ngorong=ah [ahka-i tou bolum hino]. plan=1SG.POSS repair=3P for-3SG.P TAM:PS alive again 'My plan is to repair it (=an engine) [so that it runs again].'

Kadorih has a special negative subordinator *bele* 'lest' for negative purpose adverbial clauses. The subject marking on this subordinator (-*u* [3SG.A/S] in (42)) is optional.

(42) *io narik=ah* [*bele-u bolukang nokuh lohpou*]. he pull=3P lest-3SG.S fall.down toward house 'He pulled it (=a betel nut tree) [to prevent it from falling on the house].'

5.3 Reason clauses

In Kadorih folk stories, most of the reasons of events in a story are just inferred from the context without an adverbial subordinator of reason. The reason conjunction *kobaiu* 'because' only occurs sporadically. On the other hand, *kobaiu* is commonly used in other text genres and in conversation. For some speakers, it is easy to form multiply embedded reason clauses such as in (43).

(43) tongembah=kai=ih [kobaiu inai Yoga yaduo-i cooked.bland.soup=we.EX=just because mother (name) TAM:IAB-3SG.A honong kuman sahang [kobaiu io rimbit biou]].

TAM:IPFV eat chili because she foster infant
'We merely cooked bland soup [because Inai Yoga cannot temporarily eat chili [because she is bringing up a baby]].'

5.4 Concessive clauses

The example in (44) shows a concessive adverbial clause headed by *olu* 'although'.

(44) [olu ahku nuhkan], paroi=ah eam bolum=ka although I make.hole unhusked.rice=3sg.poss not alive=also kobaiu nyaro ondou uhcan. because there.be.not day rain '[Even if I (make holes to) plant (them)], the rice would not grow because there is not rain.'

In a concessive adverbial clause, the general future tense indicator *ahkan* cannot occur as shown in (45a). The event expressed in a concessive clause must be 'definite future' indicating that the speaker is ready and willing to carry the plan into effect. Typically, it tends to be the situation that is to occur in the near future, for example *ondou hawun* 'tomorrow' as in (45b).

(45) a. *paroi ah eam bolum [olu ahku ahkan nuhkan]. (general future)b. paroi ah eam bolum [olu ahku nuhkan ondou hawun]. (tomorrow's future)

5.5 Conditional clauses

Kadorih has three formally unrelated conditional subordinators, (ngi)ndoi, amun (borrowed from Ngaju), and jakai. While jakai has a restricted distribution, (ngi)ndoi and amun can be used to form any kind of conditional clauses. The conditional subordinator jakai tends to be used for counterfactuals as in (46a). On the other hand, counterfactual conditionals can also be formed by means of ndoi and amun as in (46b) and (46c) without change of meaning, although jakai is usually considered to be the most appropriate subordinator for a counterfactual clause.

- (46) a. [jakai taa-k=nai], eam=ku ngua-i kadorih. if know-1SG.S=a.moment.ago not=1SG.A make-3P like.that '[If I had known (it)], I would not have done so.'
 - b. [ndoi taak=nai], eam=ku nguai kadorih.
 - c. [amun taak=nai], eam=ku nguai kadorih.

These three conditional subordinators may precede a clause denoting an event that might happen or might have happened as shown in (47).

(47) [jakai/ndoi/amun ahku tiruh, limo menit barangai], if I sleep five minute whatever koporos kuhung=ku nihou. ache head=1SG.POSS disappear '[If I slept for three or five minutes or so], my headache would go away.'

6. Conclusion

This paper elucidated the basic part of clause combining system in Kadorih. There are five main findings of this study. Firstly, coordinate and subordinate constructions can be distinguished by means of the three formal tests of cataphora, clause movement, and clause insertion. Secondly, it was illustrated that subject noun phrases and auxiliary TAM indicators may undergo ellipsis in coordinate constructions. Thirdly, the basic strategy of relative clause formation in Kadorih applies only to subjects. In order to be relativized, non-subjects need to be promoted to subjects through voice alternation. Fourthly, complement-taking predicates in Kadorih can be said to differ from each other in terms of conceptual looseness/tightness with their complements and syntactic rigidity/freedom of predicate-complement constituent order. Finally, section 5 briefly discussed some problems occurring in adverbial clauses, such as proposition negation, subject sharing, distribution of the future tense indicator, and the use of different conditional subordinators.

Abbreviations

1	1st person	2	2nd person
3	3rd person	A	agentive argument in a transitive clause
ANAPH	Anaphor	COMP	complementizer
EX	Exclusive	P	patientive argument
			in a transitive clause
PL	Plural	POSS	Possessor
Q	polar question marker	REL	Relativizer
S	sole argument in an	SG	singular
	intransitive clause		
TAM	tense-aspect-modality	FUT	tense:future
IAB	modality:inability	IPFV	aspect:imperfective
NPFV	aspect:non-perfective	PST	tense:past
PFT	aspect:perfect	PFV	aspect:perfective
PS	modality:possibility	WN	modality:wanting
UV	undergoer voice		-

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