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# ON THE APPARENT COMPLEMENTIZER USE OF POSTVERBAL KHUANN IN TAIWANESE SOUTHERN MIN\*

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#### **ABSTRACT**

This paper looks at sentences involving the apparent complementizer use of khuann in Taiwanese Southern Min from a generative perspective. I show that, unlike typical complementizers, postverbal khuann does not display selectional restrictions with its preceding predicate and is not constrained in terms of ordering among complementizers. I further suggest khuann is not a complementizer but a lexical verb that resides in a conjunct of the conjunction structure.

Keywords: complementizer, coordinate structure, Taiwanese Southern Min

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#### 1. INTRODUCTION

The morphemes *kong* and *khuann* in Taiwanese Southern Min (henceforth Taiwanese) are verbs whose basic meanings are *to say* and *to see* respectively, as shown in (1) and (2):

- (1) Abing kong Asam e lai. 1 Abing say Asam will come 'Abing says Asam will come.'
- (2) Abing teh khuann tiansi.
  Abing PROG see TV
  'Abing is watching TV.'

It has been pointed out in the literature that the two elements can be used in various contexts where the literal, or verbal, meaning appears to be altered or lost to some extent (for *kong*, Cheng 1991, 1997; Chang 1998; Simpson and Wu 2002; Wu 2004; Kao 2007; Hsieh and Sybesma 2011; Lau 2013; for *khuann*, Cheng 1991, 1997; Kao 2007). I will henceforth refer to such cases as their atypical variants. One of the atypical uses of both elements is that they seem to introduce an embedded clause, which is generally considered a function of complementizers. Examples are taken from Cheng (1991, 1997):

- (3) Abing siunn kong Asam be lai a.
  Abing think KONG Asam NEG come ASP
  'Abing thought that Asam was not coming.'
- (4) Abing mng khuann Asam kam beh khi jitpun. Abing ask KHUANN Asam Q will go Japan 'Abing asked whether Asam would go to Japan.' v

<sup>1</sup> The spelling conventions of Taiwanese used in this paper follow from the Romanization system proclaimed by the Ministry of Education of Taiwan. The tone information is not included in this study. Abbreviations used in this paper: NEG= negation, ASP= aspectual marker, Q= question particle/ marker, SG= singular, PL= plural, PROG= progressive marker, TOP= topic marker, DAT= dative marker, NOM= nominative marker, CL= classifier.

Given that the main predicates *siunn* 'think' and *mng* 'ask' in (3) and (4) are verbs that typically subcategorize a clausal complement, *kong* and *khuann*, which precede the embedded clauses, are thus considered to be complementizers in some previous studies. In addition, the two seem to further differ in that *khuann* selects a [+Q] clausal complement, which needs to be a question that has some information gap to fill. On the other hand, no such restriction is found for *kong*, so it can select either a [+Q] or [-Q] clausal complement. This difference can be demonstrated from the following contrastive pair: when *kong* in (3) is replaced with *khuann*, as in (5), the sentence becomes ill-formed. This is because the embedded clause is clearly a declarative one (i.e., [-Q]). In contrast, *kong* can replace *khuann* in (4), and the resulting sentence, as in (6), is still acceptable.

- (5) \*Abing siunn khuann Asam be lai a.

  Abing think KHUANN Asam NEG come ASP
  Int. 'Abing though that Asam was not coming.'
- (6) Abing mng kong Asam kam beh khi jitpun. Abing ask KONG Asam Q will go Japan 'Abing asked whether Asam would go to Japan.'

Previous literature has mostly focused on the grammaticalization process where the atypical uses emerge; only a few works discuss their syntactic derivations, all of which were on the morpheme *kong*. In other words, there appears to be no generative syntactic proposal on the use of *khuann* as in (4). Therefore, based on the relatively richer literature on the complementizer *kong*, this study aims to investigate sentences involving the apparent complementizer use of *khuann* in Taiwanese from a syntactic perspective. In particular, I will argue that, while Taiwanese has a genuine complementizer *kong*, the complementizer use of *khuann* is only apparent. Rather, I show that *khuann* in cases like (4) in fact occurs in a coordination structure, in which *khuann* resides in a conjunct that is coordinated by a covert conjunction marker with a conjunct led by the first predicate.

The paper is organized as follows. Section 2 first excludes the possibility of treating *khuann* as a complementizer and Section 3 presents

the current analysis and its supporting arguments. Section 4 concludes the paper.

### 2. KHUANN ≠ COMPLEMENTIZER

This section begins with a brief review of the literature to show that *kong* can function as a true complementizer. I will then provide evidence based on the comparison and interaction with *kong* to show that *khuann* cannot be treated as a complementizer.

## 2.1 Kong as a Genuine Complementizer

Cheng (1991), reprinted as Cheng (1997), suggests that both *kong* and *khuann*, in their atypical uses, can be a complementizer that closes off and introduces a subordinate clause, as demonstrated earlier in (3) and (4). For the atypical *kong*, he states that its verbal meaning is almost completely bleached and should thus be considered to be a new functional word which emerges through grammaticalization; the contrast of lexical vs. functional *kong* is shown in (7)-(8). Kao (2007) and Lau (2013) also arrive at the same conclusion that *kong* which precedes a clause is a genuine complementizer.

- (7) Gua siunnbeh kong i be lai a, tansi bo
  1SG want say 3SG NEG come ASP but NEG
  kong tshutlai.
  say out
  'I wanted to say he was not coming, but I didn't say it.'
- (8) Gua siunn lai, tansi aulai kong be 1sg think KONG 3SG NEG come but later tsiah tsaiiann kong kisit lai. then know **KONG** 3sg actually will come 'I thought that he was not coming, but later I know he would come actually.'

Simpson and Wu (2002) discuss two types of atypical *kong*, one of which occurs after a verb and is followed by a clause, as in (9). As clearly revealed by its distribution, this *kong* is the same as the one discussed in (8).

(9) Ahui siunn kong Asin m lai. Ahui think KONG Asin NEG come 'Ahui thought that Asin was not coming.' (Simpson and Wu 2002: 80)

This particular *kong* is a typical complementizer, though different from English *that* in that it is compatible with either a [+Q] or [-Q] clausal complement. They mention that verbs of communication are crosslinguistically attested as being grammaticalized as complementizers when they occur after other verbs expressing communication or cognitive state (e.g., *shout*, *yell*, *believe*, *think*, etc.). This is especially the case for languages that independently allow verbs in serialization. The grammaticalization process they propose is provided in (10) below, in which the sequence of verbs in serialization *shout say* is reanalyzed as *shout that*. In conclusion, they specifically treat *kong* that precedes an embedded clause as a complementizer that heads a head-initial CP.

(10) Verb 1 Verb 2 → Verb (1) Complementizer shout say shout that (Simpson and Wu 2002: 75)

Hsieh and Sybesma (2011) deal with another pattern regarding the double occurrence of atypical *kong*, as shown in (11):

(11) Kong Abing ma bat inggi kong.

KONG Abing too know English KONG

'[I am surprised that] Abing understands English too.'

(Hsieh and Sybesma 2011: 62)

They suggest that the sentence-initial *kong* and the sentence-final *kong* are both elements in the CP domain. In other words, they also consider the

sentence-initial kong to be similar, if not entirely identical, to the complementizer kong and heads a lower CP (i.e., CP<sub>1</sub>). The sentence-final kong, on the other hand, heads a higher CP (i.e., CP<sub>2</sub>). The sentence is then derived via movement of the lower CP<sub>1</sub> to the Spec of the higher CP<sub>2</sub>, as schematized in (12).

(12) [CP2 
$$\underbrace{\text{CP1} \quad \text{C1}_{kong} \left[\text{IP} \dots \text{IP} \dots\right]}_{\text{\textbf{A}}} \quad \text{C2}_{kong} \quad t_{\text{CP1}} \right] \right]$$
(Hsieh and Sybesma 2011: 67)

It is clear from the above discussion that the previous studies generally agreed upon the idea that *kong* can serve as a genuine complementizer in Taiwanese. In other words, when a given verb subcategorizes a clause as its argument, such a clausal complement can be introduced by the presence of the complementizer *kong*, just as one would expect of an ordinary complementizer.

### 2.2 The Status of khuann

As mentioned earlier, Cheng (1991, 1997) suggests that *khuann* can function as a complementizer and his view is based on *khuann*'s surface similarity to common complementizers.<sup>2</sup> Kao (2007), however, suggests

<sup>&</sup>lt;sup>2</sup> Unlike the current study, which focuses on the apparent complementizer use of *khuann* that occurs right after a verb and is immediately followed by a clause, Cheng (1997) is more ambitious in covering various roles that *khuann* assumes, including being a verb, an adverb and a diminutive marker. Based on examples as (i), he states that *khuann* looks like a complementizer in such cases, though he does not provide arguments for this proposal. Nevertheless, as this paper will show in more detail, *khuann* cannot be treated as a complementizer. Note that in addition to the reasons provided in the following discussion, one can see Cheng's examples like (i) involve imperatives. Cross-linguistically, imperative sentences are generally not introduced by a sentence-initial complementizer (Speas and Tenny 2003; Haegeman and Hill 2013). Thus it's unlikely for *khuann* in (i) to serve as a complementizer; rather, *khuann* actually behaves as a verb denoting the action desired to be carried out by the addressee. I thank one anonymous reviewer for urging me to clarify this point.

<sup>(</sup>i) Khuann i kam beh tsiah png kong! KHUANN 3SG Q want eat rice KONG 'See if he wants to eat the meal!'

that *khuann* cannot be a complementizer. She provides examples like (13) and argues the simultaneous double occurrence of *khuann* before and after the complementizer *kong* indicates that *khuann* is unlikely to be a complementizer.<sup>3</sup>

(13) Li kam u mng khuann kong khuann siang beh lai. 2SG Q have ask KHUANN KONG KHUANN who want come 'Have you asked who wants to come?' (Kao 2007: 19)

In the following discussion, I show that while the atypical *kong* is treated as a complementizer, *khuann* simply cannot be analyzed this way. Two pieces of evidence are in order. First, the complementizer *kong* is

Secondly, the occurrence of *khuann* drastically alters the clause type of a given sentence, which is generally not a function of adverbs. As can be seen below, (iia), without *khuann*, is a *wh*-question that requires an answer from the hearer, but with the appearance of *khuann*, (iib) becomes a declarative sentence that does not demand an answer. As adverbs are generally known not to display such clause-typing ability, this pattern also refutes the adverb analysis of *khuann*.

<sup>&</sup>lt;sup>3</sup> Kao instead claims that the atypical *khuann* should be analyzed as an adverb. Nevertheless, her adverb analysis to *khuann* occurring in the V-*khuann* context is untenable for a number of reasons. In addition to its failure in capturing data to be presented in section 3, the adverb view meets the following challenges. First, the presence of *khuann* allows an otherwise non-clause-taking verb to take a clausal complement. For instance, in (i), the unergative verb *khau* 'cry' turns out to be able to take a clausal complement (as revealed by the occurrence of the modal *e* that implies the realization of a clausal layer) when *khuann* occurs. That is, the occurrence of *khuann* is obligatory here and removing it would downright degrade the sentence. However, as is commonly known, an adverb cannot possibly give rise to any effect on altering the argument structure of predicates and should in principle be syntactically optional. Therefore, patterns like these cast doubt on the adverb view.

<sup>(</sup>i) i teh khau khuann u lang e tongtsin i bo.

3SG PROG cry KHUANN have person will sympathize 3SG Q.NEG

'He is crying and seeing whether someone will sympathize with him.'

<sup>(</sup>ii) a. Abing tangsi beh likhui jitpun?
Abing when will leave Japan
'When will Abing leave Japan?'

b. Abing (teh) khuann tangsi beh likhui jitpun. Abing PROG KHUANN when will leave Japan 'Abing is considering when to leave Japan.'

restricted to occur in cases where the preceding main predicates are verbs of saying and mental activity. Examples of such verbs include, but are not limited to, *think*, *know*, *feel* and the resulting sentences, which are of course well-formed, are provided in (14):

```
(14) Abing
             { jinui /
                          tsaiiann / kamkak } (kong)
    Abing
               think
                          know
                                    feel
                                              KONG
    Asam
               khi bikok
                               a.
    Asam
               go
                    U.S.
                               ASP
     'Abing {thinks / knows / feels} that Asam has gone to the U.S.'
```

In other words, the complementizer *kong* introduces clausal complements to verbs that are known to subcategorize clauses. As a result, if *kong*-clauses follow predicates that do not select clausal complements, the resulting sentences would then be ungrammatical. The prediction is borne out. As shown in (15), when the main predicate preceding the *kong*-clause belongs to typical activity verbs such as *hit* or *eat* which cannot take clauses as their complements, the corresponding sentence is unacceptable:<sup>4</sup>

```
(15) a. *Abing phah (kong)
                                         tsin thiann.
                               Asam
        Abing hit KONG
                                         very ache
                               Asam
       Int. 'Abing hits such that Asam feels very painful.'
     b. *Abing phah (kong)
                               Asam
                                         e
                                               thiann
                                                         bo.
        Abing hit KONG
                               Asam
                                         will ache
                                                         Q.NEG
       Int. 'Abing hits whether Asam will feel painful.'
     c. *Abing tsiah (kong)
                               tshai
                                               sik.
                                         u
        Abing eat KONG
                               dish
                                         have cooked
       Int. 'Abing eats such that the dishes are cooked.'
     d. *Abing tsiah (kong)
                               tshai
                                               sik
                                         u
                                                         bo.
        Abing eat KONG
                               dish
                                         have cooked
                                                         Q.NEG
       Int. 'Abing eats whether the dishes are cooked.'
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<sup>&</sup>lt;sup>4</sup> Thus the problem with (15) resides in the lack of any subcategorization relation between the predicate and the clausal complement but not in the overtness of the complementizer *kong*. The parentheses enclosing *kong* show that the acceptability of the sentences is not affected by *kong*'s overtness.

On the other hand, the choice of the preceding verbs for *khuann* is rather free. In addition to verbs inherently compatible with complements that bear information gaps, such as *ask*, *guess*, *check*, etc., typical activity verbs like *hit* and *eat* are also possible to occur as the matrix verbs preceding *khuann*. This is exemplified in (16)-(17).

(16) Abing long m { ioh / kiamtsa } khuann mng u
Abing all NEG guess check KHUANN door have
kuainn ho bo.
close well Q.NEG
'Abing never wants to {guess / check} whether the door is properly

closed.'

- (17) a. Abing phah khuann Asam e thiann bo.

  Abing hit KHUANN Asam will ache O.NEG
  - 'Abing hit (Asam) and checked whether Asam will feel painful.'
  - b. Abing tsiah khuann tshai u sik bo.

    Abing eat KHUANN dish have cooked Q.NEG

    'Abing ate (the dishes) and checked whether the dishes were cooked.'

Given that the relation between *khuann* and its preceding verb enjoys much greater freedom, *khuann* is unlikely to be a complementizer, because complementizers generally do not behave in this way. Precisely, embedded complementizers are known for their dual capacity of selecting a clause and being selected by elements in the main clause such as matrix predicates (Roussou 2010). For instance, the class of predicates that selects clausal complements introduced by the English complementizer *that* is restricted and co-occurrence with matrix activity verbs is never sanctioned, as exemplified in (18).

(18) a. \*John hits (that) Bill feels painful.b. \*Sam eats (that) the dishes are well cooked.

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<sup>&</sup>lt;sup>5</sup> Note that though the verbs allowed to occur before *khuann* are relatively free, certain restrictions can still be observed. I will discuss and provide explanations for the noted restrictions later in section 3.

In other words, since verbs such as *hit* and *eat* do not select clauses as their arguments, *that*-clauses cannot follow and serve as their clausal complements. In this light, the behavior of *khuann* as in (17) blatantly deviates from typical complementizers in that clauses headed by true complementizers do not occur indiscriminately with non-clause-taking predicates. <sup>6</sup>

Another argument pointing to the non-complementizer status of *khuann* comes from its interaction with the genuine complementizer *kong*, as Kao (2007) noted. Consider the following sentence.

(19) Abing long m bat mng kong khuann Asam Abing all NEG ever ask KONG KHUANN Asam u khi-kue bikok bo.
have go-ASP U.S. Q.NEG
'Abing has never asked whether Asam has been to the U.S.'

In (19), kong and khuann occur in the same sentence as two consecutive and adjacent elements. Complementizer stacking is a rare phenomenon cross-linguistically; moreover, when it is attested in a language, it is observed to comply with certain constraints. For instance, as discussed in Zwart (2014), Dutch has three finite complementizers: dat 'that' for finite declarative clauses, of 'whether' for finite interrogative clauses, and als 'if' for finite conditional clauses. They can also be combined among themselves, forming cases like alsdat 'that', ofdat 'whether', and alsof 'as if', though none of them can occur twice and the combination of three consecutive complementizers is not allowed. As

To anticipate the later discussion, the obligatory occurrence of *khuaan* is well expected since *khuann* is in fact a verb that can take an interrogative clause as its complement while a verb like *hit* cannot. As such, if *phah* 'hit' stands alone as the main predicate like (i), the improper selectional relation leads the derivation to crash. In this sense, the current view captures the obligatory/optional presence of *khuann* when it combines with different

preceding predicates as observed in Cheng (1997: 112- 113). I thank the reviewer for

bringing up this point.

<sup>&</sup>lt;sup>6</sup> To put it in another way, the presence of *khuann* in (17) is essential in that its very existence allows an interrogative clausal complement to follow, as below:

<sup>(</sup>i) \*Abing phah Asam e thiann bo.
Abing hit Asam will ache O.NEG

shown in (20), their co-occurrence possibilities yield an ordering template. It can thus be concluded that at most two distinct complementizers can co-occur in serialization and that multiple occurrence of complementizers has to follow a fixed order.

(20) Finite Complementizers and Their Relative Order in Dutch als — of — dat (Zwart 2014: 10)

Similar constraints apply to Japanese complementizer stacking as well. Saito (2010) and Miyagawa (2011) point out that the complementizers ka 'Q' and to 'that' can be stacked in the complement clause selected by predicates such as tazuneru 'ask', as exemplified by (21a). However, such stacking only tolerates the interrogative complementizer ka to precede the declarative complementizer to 'that' but not the other way around, as shown by the contrast of (21b).

- (21) a. John-wa Bill-ni [ dare-ga kita ka to] tazuneta.

  John-TOP Bill-DAT who-NOM cameQ that asked
  Lit. 'John asked Bill that who came.'
  - b. \*John-wa Bill-ni [ dare-ga kita to ka] tazuneta.

    John- TOP Bill-DAT who-NOM camethat Q asked
    Int. 'John asked Bill that who came.'

Moreover, as pointed out by Saito (2010), not all matrix predicates allow complementizer stacking: although predicates such as *shiritagaru* 'wanted-to-know' semantically select an interrogative clause, just as *tazuneru* 'ask' does, they cannot take complementizer stacking clauses as shown in (22).

(22) \*John-wa [dare-ga kita ka to] shiritagatteiru. John-TOP who-NOM cameQ that want-to-know Int. 'John wants to know that who came.'

In other words, though the phenomenon of serializing complementizers is not impossible, their occurrence and distribution are regulated by orderly constraints.

Back to Taiwanese, if the consecutive sequence of *kong* and *khuann* were indeed two stacked complementizers, one would expect their order to be fixed. However, this expectation is not met since the reversed order where *khuann* precedes *kong* is also allowed, as in (23), a minimal pair of (19):

(23) Abing long m bat mng khuann kong Asam u
Abing all NEG ever ask KHUANN KONG Asam have khi-kue bikok bo. (cf. 19)
go-ASP U.S. Q.NEG

'Abing has never asked whether Asam has been to the U.S.'

More surprising is that *khuann* can in fact occur before and after *kong* simultaneously. That is, the pattern in which two instances of *khuann* embrace the genuine complementizer *kong* in a sentence is also attested.

(24) Li kam u mng khuann kong khuann siang beh lai. 2SG Q have ask KHUANN KONG KHUANN who want come 'Have you asked who wants to come?' (Kao 2007: 19)

Given the flexible ordering and doubling occurrence of *kong* and *khuann*, it seems reasonable to conclude that *khuann* is not likely a complementizer.<sup>7</sup>

Overall, based on the well-established properties of typical complementizers, this section rejects the previous complementizer analysis of *khuann*. Specifically, it is shown that clauses following *khuann* do not exhibit the usual selectional relations with the preceding predicates and the oft-seen distributional restrictions among complementizers are not

<sup>&</sup>lt;sup>7</sup> The main focus here is to reject treating *khuann* as a complementizer and, anticipating the later discussion, to show that it is a verb. Accordingly, we expect that semantic differences would emerge when *khuaan* appears in different ordering with other constituents, just as one would expect from the scope interaction of regular predicates.

observed with *khuann* either. In this light, we need to look for an alternative account that can accommodate the aforementioned facts and at the same time explain the apparent complementizer status of *khuann*.

#### 3. THE ANALYSIS

Having established that *khuann* is not a complementizer, next I propose a proper analysis of the syntactic status of the apparent complementizer *khuann*. For ease of exposition, I will refer to sentences involving the apparent complementizer use of *khuann* simply as the AC-*khuann* construction; as shown in (25), I call the phrase preceding *khuann* the "pre-*khuann* phrase", and the one introduced by *khuann* the "*khuann* phrase."

In what follows, I present a list of grammatical properties that has a direct bearing on its syntactic presentation.

First of all, as a lexical verb, *khuann* has been known to exhibit multiple meanings (Cheng 1991, 1997, cf. Lü 1980). As illustrated below, in addition to its basic meaning 'to see' (26a), it has a variety of extended interpretations including at least the meanings of 'to think' (26b), 'to depend' (26c) and 'to check' (26d):

```
(26) a. Abing
                teh
                           khuann
                                      lan.
       Abing
                PROG
                           KHUANN
                                      1<sub>PL</sub>
       'Abing is looking at us.'
     b. Gua
                khuann
                                 si
                                      be
                                            lai
                                                       a.
        1sg
                KHUANN 3SG be
                                      NEG come
                                                       ASP
        'I think he is not coming.'
```

- c. Tsit kiann taitsi ai khuann li-e kuatting. this CL thing need KHUANN 2SG-POSS decision 'This depends on your decision.'
- d. I teh khuann binatsai thinnkhi antsuann.

  3SG PROG KHUANN tomorrow weather how

  'He is checking how the weather will be tomorrow.'

Crucially, *khuann* in the AC-*khuann* construction is not semantically bleached but constantly denotes its subject's agentive behavior of checking and figuring out the answer to its complement, namely the usage as in (26d). As one can observe in an AC-*khuann* sentence like (27), this construction expresses the subject's (i.e., *Asam*'s) intention to unravel the answer to *khuann*'s complement (i.e., who are the dinner participants in (27)), by performing the task denoted by the first predicate (i.e., asking *Abing* in (27)). Put differently, *khuann* in our current focus means to check the answer to the embedded question selected by *khuann* and the pre-*khuann* phrase refers to the action the subject takes so as to find out the relevant answer. As such, this construction refers to two dynamic heterogeneous events and in the case of (27) for instance, this sentence involves one asking event and one checking event.

(27) Asam mng Abing khuann siang beh lai tsiah amtng. Asam ask Abing KHUANN who will come eat dinner 'Asam asked Abing and checked who would come to eat dinner.'

Under this view, *khuann* is regarded as a lexical verb with its own selectional properties.<sup>8</sup> One argument for the verbal treatment of this

<sup>&</sup>lt;sup>8</sup> It is possible to add another marker *mai* following *khuann* as below. The *mai* marker delivers a tentative meaning, namely to denote the speaker's trial at something (i.e., checking the dinner participants in this case). Following Xiao and McEnery (2004:152), grammatical tentativeness involves an animate subject to be engaged in a volitional attempt of an irrealis event. Conforming to their view, the combination of *khuann* and *mai* is used to stress the speaker's tentative engagement in the attempt of checking the proposition of the following clausal complement.

<sup>(</sup>i) Gua mng Abing khuann-mai siang beh lai tsiah amtng. 1SG ask Abing KHUANN-MAI who will come eat dinner 'I ask Abing and check a little who will come to eat dinner.'

particular variant of *khuann* is that it can be modified by modals like *beh* 'will' and adverbs like *thantsa* 'as early as possible', exemplified in (28a). Since these elements are generally considered to modify verbs as in (28b), the fact that they can precede and modify *khuann* suggests that *khuann* is indeed a verb.

```
(28) a. Gua
                mng Abing
                              { beh / thantsa}
                                                            khuann
                ask Abing
                                will as-early-as-possible KHUANN
       1s<sub>G</sub>
       siang
                beh lai
                                tsiah
                                           amtng.
                                           dinner
       who
                will come
                                eat
      'I asked Abing and checked (as early as possible) who would come
       to eat dinner.'
             { beh / thantsa
    b. Lan
                                           tsiah
                                                      amtng
                                                                 (a).
                will as-early-as-possible eat
                                                      dinner
                                                                 ASP
       'We (will) eat dinner (as early as possible).'
```

Another important property of the AC-khuann construction is that the syntactic subject of the khuann phrase must be phonetically empty and this empty subject must have the same reference as the subject of the main clause. Consider (27) for instance: Abing is the object of mng 'ask' and the reference of the empty subject of khuann is identified with the matrix subject Asam. Crucially, it is impossible to have a lexically filled subject (with disjoint reference from the matrix subject) preceding khuann as below:

```
(29) *Asam mng Abing Li-e khuann siang beh lai
Asam ask Abing Li-e KHUANN who will come
tsiah amtng.
eat dinner
Int. 'Asam asked Abing so that Li-e checked who would come to
eat dinner.'
```

Moreover, the matrix subject of the AC-khuann construction must be a sentient animate being, as shown in (30).

(30) \*Hue khui khuann phang guatse e flower blossom KHUANN how.many bee will lai tshai bit. come collect honev

Int. 'Flowers blossom and check how many bees will come to collect the honey.'

On the other hand, if the reference of the first verb's object (e.g., *tshai* 'dish' in (25)) can be understood from the context, this object can (but need not) be left empty and considered a variable bound by an empty topic, just as often seen elsewhere in Chinese syntax (Huang 1987). That is, the first verb may occur with an overt object or with an understood silent object, depending on appropriate discourse contexts. <sup>9</sup> This is one important reason why *khuann* would get the impression of looking like a complementizer: since the first verb's object can be phonetically null once semantic/pragmatic conditions allow, the main verb of the pre-*khuann* phrase would then occur immediately preceding *khuann*, which on the surface is similar to the sequence of Verb-Comp.

The next property is concerned with aspectual marking in the AC-khuann construction. The pre-khuann phrase and the khuann phrase each allows one aspect marker to be present, as illustrated below: 10

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<sup>&</sup>lt;sup>9</sup> Note that the possibility of having an implicit silent object hinges on the existence of a suitable semantic/pragmatic discourse. If interpretational property requires the object to be present, as discussed in Huang (1987), then the object needs to be overtly realized. In other words, here I am not claiming that the absence or presence of the object makes no difference in interpretation; rather, what's crucial is that exactly due to this distributional possibility (with or without an overt object) which depends on the semantics/pragmatics, it is possible to have the understood object left empty in some cases, leading to the apparent illusion that the first verb can immediately precede *khuann*, making *khuann* seem like a complementizer. I thank the reviewer for urging me to clarify this point.

 $<sup>^{10}</sup>$  The fact that two aspect markers can be attached to separate verbs respectively as in (31) shows that cases like *tsiah khuann* in the AC-*khuann* construction cannot be lexical compounds. Generally, typical compounds disallow separate aspect markers to be present with the distinct components (V1/V2) of a given compound:

<sup>(</sup>i) \*Lisi hui-guo (ye) zhi-guo jiaxiang de ditu.

Lisi draw-EXP also make-EXP hometown POSS map

Int. 'Lisi drew the map of his hometown.' (Mandarin huizhi 'to draw')

(31) a. Abing tngteh tsiah (ma) tngteh khuann tshai u
Abing PROG eat also PROG KHUANN dish have
sik bo.
cooked Q.NEG

- 'Abing is tasting and checking if the dishes are cooked.'
- b. Abing tngteh mng (ma) tngteh khuann Ong-e
  Abing PROG ask also PROG KHUANN Ong-e
  tangsi e kauui.
  when will arrive
  - 'Abing is asking and checking when Ong-e will arrive.'
- c. Bian huanlo. Abing iking mng-kue (ma) Abing already ask-EXP also NEG worry khuann-kue toui etang pantoh. KHUANN-EXP where banquet can 'Don't worry. Abing already asked and checked where to hold the banquet.'

Two notes of caution are provided in order. First, since the pre-*khuann* phrase and the *khuann* phrase generally refer to two events that happen in close temporal sequence, the aspect markers occurring in the two phrases are mostly identical given the similar temporal setting. In other words, semantic considerations would preclude the possibility of having, for instance, a progressive marker in one phrase and an experiential marker in the other. <sup>11</sup> Second, since repeating the same aspectual marker twice

<sup>(</sup>ii) \*Abing tshai-kue (ma) hong-kue kaki e sann.
Abing tailor-EXP also sew-EXP self POSS clothes

Int. 'Abing tailored his own clothes.' (Taiwanese *tshaihong* 'to tailor') The above pattern follows from the usual assumption that a compound disallows syntactic operations to target its internal structure (i.e., an effect of lexical integrity). Such distributional properties of lexical compounds are in clear contrast to the two verbs in the AC-*khuann* construction, showing that a lexical compound account is unwarranted. I thank the reviewer for urging me to clarify this point.

<sup>11</sup> Note that it is not possible to place one aspect marker only in the *khuann* phrase:

<sup>(</sup>i) \*Abing tsiah tngteh khuann tshai u sik bo.

Abing eat PROG KHUANN dish have cooked Q.NEG

Anticipating the analysis to be presented later, a case like (i) involves placing an aspect maker in the second conjunct of a coordinate structure. However, this is generally unacceptable on independent grounds: even for run-of-the-mill coordination cases, it is bad

within a short distance is perceived redundant, speakers would often avoid producing such redundancy; nevertheless, when speakers need to resort to repetition as a communicative strategy, introducing an emphatic meaning in the sentence is often found necessary so as to make the repetition semantically/pragmatically legitimate. Therefore, in (31) the addition of conjunction words like *ma* 'also' helps establish the facilitating environment for the aspectual repetition to take place and make the sentence sound more natural.

Based on the properties above, I propose that *khuann* in its apparent complementizer use is a lexical verb that takes an embedded [+Q] clause as its complement and leads a phrase that is part of conjunction structure. The schematic syntactic structure I propose is provided in (32) and the details are offered in the following.

to place any kind of aspect marker only in the second conjunct when the two conjuncts share the same temporal construal, as demonstrated below. This fact shows that the ill-formedness of (i) is induced by the same factor that degrades (iib), but cannot be taken to reject the proposed conjunction structure

<sup>(</sup>ii) a. Abing tngteh phah tiannau kah khuann tiansi.

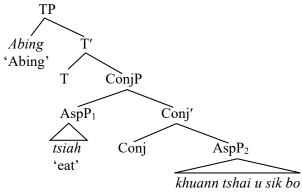
Abing PROG hit computer and watch TV

<sup>&#</sup>x27;Abing is using the computer and watching TV.'

b. \*Abing phah tiannau kah tngteh khuann tiansi.

Abing hit computer and PROG watch TV

(32) Abing tsiah khuann tshai u sik bo.
Abing eat KHUANN dish have cooked Q.NEG



'check whether the dishes are cooked'

In (32), the pre-*khuann* phrase and the *khuann* phrase are (at least) AspPs conjoined under the projection ConjP. In this view, two juxtaposed events are conjoined by a covert coordinator, and they describe the state in which the pre-*khuann* phrase facilitates the subject's evaluation of the situation in the *khuann* phrase. <sup>12</sup> In what follows, I will explain how this structure accounts for the grammatical properties of the AC-*khuann* construction and also provide more arguments in favor of the current proposal.

Firstly, *khuann* is a verb that takes an interrogative complement and conjoins with another predicate phrase, named  $AspP_1$  in the tree. In this conjunction configuration,  $AspP_1$  (pre-*khuann* phrase) does not select  $AspP_2$  (*khuann* phrase), which explains why sentences like (17), repeated here as (33), are possible.

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<sup>&</sup>lt;sup>12</sup> Den Dikken (2006) suggests that a conjunction head is a type of relator in which a functional head introduces a certain predication relation between the two conjoined syntactic objects. In this sense, we can say that the pre-*khuann* phrase and the *khuann* phrase are linked semantically through a relation of sequence and/or facilitation. Also see the discussion of Mandarin *hao* in Liao and Lin (2019), where *hao*-constructions are analyzed as involving paratactic structure.

(33) a. Abing thiann phah khuann Asam bo. Abing hit KHUANN Asam will ache Q.NEG 'Abing hit (Asam) and checked whether Asam would feel painful.' b. Abing tsiah khuann tshai sik u ho KHUANN dish Abing eat have cooked Q.NEG 'Abing ate and checked whether the dishes were cooked.'

Moreover, due to the lexical meaning of *khuann*, which denotes the subject's intention to check the answer to *khuann*'s complement, this subject must be an animate agent with the ability to engage in a volitional activity of searching for answers to the interrogative complements. Given the current analysis that the two conjoined predicate phrases share the same subject, we would then expect AspP<sub>1</sub>, just like AspP<sub>2</sub>, to involve a predicate that selects a volitional agent as its subject as well. This expectation is met. In (33), *phah* 'hit' and *tsiah* 'eat' are verbs that assign the theta-role of "agent" to their subject. In contrast, (34) shows when AspP<sub>1</sub> (pre-*khuann* phrase) consists of predicates like *huannhi* 'happy' and *kau* 'arrive', which are known to take an experiencer and a theme as their subject respectively, the resulting AC-*khuann* construction is unacceptable. In other words, these properties observed with the pre-*khuann* phrase also lend support to the current analysis.

(34) a. \*Abing (tsin) huannhi khuann Asam kam beh lai. Abing very happy KHUANN Asam O will come Int. 'Abing was happy and checked whether Asam would come.' b. \*Abing kau khuann Asam kam beh lai. Abing arrive KHUANN Asam will come Q Int. 'Abing arrived and checked whether Asam would come.'

The proposed structure also captures the ordering facts of *khuann* in relation to the genuine complementizer *kong*. Under the current analysis, since *khuann* is a lexical verb, it can contain another clause, in the form of a complementizer phrase led by *kong*, which can take another *khuann* verb phrase as its main predicate that embeds another *kong* subordinate clause,

as long as appropriate semantic/pragmatic environments permit. <sup>13</sup> As predicted, a number of different sequences are possible, as mentioned earlier, including *kong khuann* in (19), *khuann kong* in (23), and *khuann kong khuann* in (24). Consider (24), repeated here as (35), for example. The ordering of *khuann kong khuann* is possible since *khuann* can take a clausal complement introduced by *kong* and, within the *kong* clause, *khuann* can again serve as its matrix predicate.

(35) Li kam u mng khuann kong khuann siangbeh lai. 2SG Q have ask KHUANN KONG KHUANN who will come 'Have you asked who will come?'

Moreover, recall that the syntactic subject of the *khuann* phrase must be phonetically empty and refer to the subject of the main clause. The proposed coordinate structure also captures the subject properties of the *khuann* phrase. In the literature, a number of different approaches have been proposed to implement the effect of a shared subject in a coordinate structure including a) across-the-board movement approach (Ross 1967; Williams 1977), which moves a constituent out of all the conjuncts of a coordinate structure, b) Munn's (1992) null operator approach, where an element in the second conjunct moves locally, c) the multiple dominance analysis (Goodall 1987; Citko 2003), where one constituent can be situated simultaneously inside both conjuncts, d) the sideward movement approach, where a single element moves from one conjunct to the other, and then out of the coordinate complex (Hornstein and Nunes 2002). Most important of all, the common prerequisite for all these accounts is the very

<sup>13</sup> Following this line, combinations such as *kong khuann kong* and *kong khuann kong khuann*, are also in principle possible, as shown below, though speakers might find such sentences stiff, possibly due to the redundancy and high working memory load imposed on language processing (cf. Luuk and Luuk 2011).

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<sup>(</sup>i) a. Abing long m bat mng kong khuann kong Asam beh lai bo.

Abing all NEG ever ask KONG KHUANN KONG Asam will come Q.NEG 'Abing has never asked whether Asam will come.'

b. Abing long m bat mng kong khuann kong khuann Asam beh lai bo.
Abing all NEG ever ask KONG KHUANN KONG KHUANN Asam will come Q.NEG 'Abing has never asked whether Asam will come.'

existence of a coordinate structure and, accordingly, whatever account one wishes to take, the currently proposed coordinate structure makes correct predictions on the syntax of the *khuann*'s subject. That is to say, the current analysis gives a proper characterization of the shared subject in the AC-*khuann* construction without having to hinge on any of the aforementioned alternatives.

Especially worth noting is that it is not possible to assume a *pro* to be in the subject position of the *khuann* phrase. As is widely assumed (Huang 1982b), a typical null *pro* subject as in (36) can be coindexed with the matrix subject, and it can also be coindexed with a salient referent in the discourse, namely a topic.

(36) Zhangsan<sub>i</sub> shuo [ e<sub>i/k</sub> bu renshi Lisi]. (Mandarin) Zhangsan say NEG know Lisi 'Zhangsan<sub>i</sub> said that he<sub>i/k</sub> doesn't know Lisi.'

However, unlike the more familiar sort of pro, which can have an independent referent from its preceding subject, the empty subject position preceding khuann cannot have a referent independent of the matrix subject. As already shown above, filling that gap in the AC-khuann construction renders the sentence unacceptable. Furthermore, it is untenable either to assume an analysis with khuann taking PRO as its subject co-indexed with the matrix subject as in a subject control construction. As has been demonstrated earlier, the khuann phrase can take an aspect marker; as such, this phrase is in effect finite and the PRO analysis can thus be excluded under this circumstance since PRO can only be the subject of a non-finite clause (Landau 2000). According to the PRO theorem (Chomsky 1981), having PRO in a finite clause will make this PRO governed, leading the derivation to crash. In addition, the predicates in the pre-khuann phrase are not those that select non-finite clauses. For instance, in the previous AC-khuann examples, the matrix verbs preceding khuann are verbs like phah 'hit', tsiah 'eat' and mng 'ask', none of which is a predicate that takes a non-finite complement. Since the first predicates do not select non-finite clauses, PRO cannot possibly exist as the subject of the khuann phrase. Taken together, the twofold reasons as described above contribute to dismissing the PRO subject analysis of the *khuann* phrase.

Last but not least, I would like to provide facts of  $\bar{A}$ -dependencies as corroborative evidence for the proposed conjunction structure. Restrictions on syntactic movement of arguments to non-argument positions in the periphery have been taken as indicators of clause boundaries. In this respect, Ross's (1967) Coordinate Structure Constraint, which states that no element may be extracted from conjuncts in a coordination structure, <sup>14</sup> captures the observation that the *wh*-word in (37a) can move out of some complement clauses in English, but they cannot be fronted from a conjunct as in (37b).

(37) a. What<sub>i</sub> did you say John bought t<sub>i</sub>? b. \*What<sub>i</sub> did John eat an apple and Jim drink t<sub>i</sub>?

Similar extraction restrictions are observed in the AC-khuann construction as well. As (38) shows, though it is possible to extract whphrases out of the complement clauses (38a-b), such extractions lead to ill-formedness in the AC-khuann sentences (38c-d). 15

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 $<sup>^{14}</sup>$  Across-the-board movement is known to be an exception to this constraint. That is, extraction is possible if it occurs from each conjunct:

<sup>(</sup>i) Whoi did you see [friends of ti] and [enemies of ti]?

<sup>&</sup>lt;sup>15</sup> The extraction test here only uses simple non-Discourse-linked (non-D-linked) *wh*-phrases, rather than topics and D-linked *wh*-phrases, for the following reason. It has long been noted that Chinese topics and D-linked *wh*-phrases behave in a distinct way from non-D-linked *wh*-phrases in, for instance, their absence of island effects and the ability to license parasitic gaps (Tsai 1997; Pan 2014). As such, unlike English, initial topics and D-linked *wh*-phrases in Chinese languages allow a base-generation analysis as a result of parameter-setting. Accordingly, the current discussion relies on non-D-linked *wh*-phrases in a neutral context to detect the movement property and extractability since topics and D-linked *wh*-phrases cannot exclude the possible interference of the base-generation construal. Many thanks to the reviewer for the helpful discussion.

- (38) a. Siang<sub>i</sub> li tsit pai suanki phahsng beh tsitshi t<sub>i</sub> ?<sup>16</sup> who 2sG this time election plan want support 'Who<sub>i</sub> will you plan to support t<sub>i</sub> in this election?'
  - b. (Si) siannmih<sub>i</sub> li u tahing Abing beh khi be t<sub>i</sub>?
    be what 2SG have promise Abing will go buy
    'What<sub>i</sub> have you promised Abing to buy t<sub>i</sub>?'
  - c. \*Siang<sub>i</sub> li phah Asam khuann t<sub>i</sub> e thiann bo. who 2SG hit Asam KHUANN will ache Q.NEG Int. 'Who<sub>i</sub> you hit Asam and checked if t<sub>i</sub> will feel painful.'
  - d. \*Siannmih<sub>i</sub> li mng Abing khuann beh tsunpi t<sub>i</sub> ? what 2sG ask Abing KHUANN will prepare Int. 'What did you ask Abing and check to be prepared?'

The *wh*-phrases in (38c-d) cannot be moved out of the *khuann* phrase, in strong contrast to the patterns in (38a) and (38b). These facts indicate that the *khuann* phrase does not stand as a complement clause to the pre-*khuann* phrase, but rather the two stand in a syntactic coordination relation.

In sum, the facts from *khuann*'s behavior, subject properties, aspect markers and extraction facts unanimously all suggest that the AC-*khuann* construction is best analyzed as involving paratactic structure.<sup>17</sup> One last

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<sup>&</sup>lt;sup>16</sup> Since Huang (1982a), it has been noted that, for languages without overt *wh*-movement, it is still possible to move a *wh*-phrase overtly when the *wh*-phrase in question bears certain semantic features such as focus (see also Pan 2014). The same goes for Taiwanese. Though Taiwanese is a *wh*-in-situ language, it is possible to front a *wh*-phrase if the focus construal is intended like (38a- b). For a case like (38b), the special information structural meaning can be further strengthened by having a focus marker *si* to precede the fronted *wh*-phrase and make the sentence sound more natural.

<sup>&</sup>lt;sup>17</sup> One reviewer wonders if tone sandhi can provide further evidence supporting the current analysis. Unfortunately, however, tone sandhi phenomena in Taiwanese involve a mixture of lexical, morphosyntactic and semantic properties (Chen 1987, 2000) so that the relevant facts cannot enlighten us on the structure of the AC-khuann construction in any straightforward way. In particular, though it is known that tone sandhi is a general change affecting non-domain final tones, sandhi domain boundaries do not always match syntactic constituent edges; for instance, for biclausal structures it is possible for two clauses to form individual sandhi domains like (i) and it is also likely for two clauses to form a single sandhi domain like (ii) (examples adapted from Chen 2018). The # symbol demarcates the right edge of a tone sandhi domain and the = sign denotes the absence of # such that syllables on either side are linked together as members of the same sandhi domain.

interesting point I would like to emphasize is that the current analysis also allows us to see why *khuann* is prone to a complementizer analysis as in the literature. As can be witnessed in many Chinese languages, object drop is a widespread phenomenon as long as the discourse permits. Given this fact and given that the subject of the *khuann* clause is required to be empty, on the surface the main verb in AspP<sub>1</sub> and *khuann* in AspP<sub>2</sub> would often appear immediately adjacent to each other, which resembles the sequence of a verb preceding a complementizer. Nevertheless, as has been shown in the preceding discussion, the complementizer status of *khuann* is only apparent and thus a complementizer analysis is simply untenable.

### 4. CONCLUSION

In this paper, I have examined the distinct behavior of *kong* and *khuann* in Taiwanese and refuted the previous complementizer analysis of *khuann* in Taiwanese. It is shown that, unlike typical complementizers, *khuann* does not display selectional restrictions with its preceding predicate and is not constrained in terms of ordering among complementizers. By presenting arguments from *khuann*'s behavior, subject properties, its interaction with *kong* as well as facts of aspect markers and extractions, I argue that the *khuann* construction under investigation should be analyzed as involving conjunction. This study thus shows that, despite appearances, we need to look deeper into the linguistic data and arrive at a proper conclusion based on widely-attested grammatical patterns.

<sup>(</sup>i) Gua tsoo tsit-tshut = lokiannphinn # [lai khuann].
1SG rent one-CL video to watch

<sup>&#</sup>x27;I rent a video to watch.'

<sup>(</sup>ii) Gua siongsin = [ i be lai]. 1SG believe 3SG NEG come

<sup>&#</sup>x27;I believe he won't come.'

Since the placement of sandhi domain boundaries is not a direct mapping of syntactic information but affected by various factors, tone sandhi facts do not readily give us access to understanding the relevant syntactic structure. Further inquiry into the complexities of Taiwanese tone sandhi is definitely needed.

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## 台灣閩南語動後 khuann 之貌似補語連詞用法

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本研究從生成語法的角度探討台灣閩南語中 khuann 字具貌似補語連詞用法的句型。文中指出此種動後 khuann 與典型補語連詞不同,除與其前謂語不具選擇限制外,亦不遵守補語連詞常見之排序約束。本研究進一步論證此類 khuann 並非是補語連詞,而是處於並列結構內之詞彙動詞。

關鍵字:補語連詞、並列結構、台灣閩南語