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On the Syntax of Null Clausal Complements in Taiwan Southern Min

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Abstract

This paper investigates the less discussed null argument – the null clausal complement in Taiwan Southern Min (TSM). The discussion issues include the derivation, status, and replacement of null clausal complements in TSM. This paper applies four tests to prove that the null clausal complement in TSM is a type of deep anaphora, which has no internal structure and is not derived through deletion. Moreover, possessing features such as not being A-bound, and possibly being but not required to be A-bar-bound, the null clausal complement in TSM is argued to have the status of a null epithet. As null clausal complements are not allowed with all kinds of verbs, in some cases where clausal complements cannot be null, an obligatory pro-S *an-ne* 'so' is then required.

Keywords

Taiwan Southern Min, null argument, null clausal complement, deep anaphora, surface anaphora, epithet

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1 Introduction

Null arguments are common among languages. In the literature discussing null arguments, the topic is often null objects. As demonstrated in (1)–(3), Mandarin Chinese, Japanese, and Korean all allow null objects.

(1) Zhangsan bu xihuan [guanyü ziji-de yaoyan]; (Mandarin Chinese)
Zhangsan not like [about self-GEN rumor
Mali ye bu xihuan [$_{NP}$ e].
Mary also not like
'Zhangsan doesn't like rumors about himself, and Mary doesn't, either.'
a. Mary does not like rumors about herself, either
b. Mary does not like rumors about Zhangsan, either
(Kim 1999)

(2) John-wa [zibun-no tegami]-o sute-ta; (Japanese)
John-TOP [self-GEN letter-ACC discard-PERF;
Mary-mo [$_{NP}$ e] sute-ta.
Mary-also discard-PERF
'John threw out his letters, and Mary did too.'
a. Mary threw out her (= Mary's) letters, too
b. Mary threw out his (= John's) letters, too
(Kim 1999)

(3) a. Jerry-nun [caki-uy ai]-lul phal-ul ttayli-ess-ta. (Korean)
Jerry-TOP self-GEN child-ACC arm-ACC hit-PAST-IND
'Jerry hit his child on the arm.'
b. Kulena Sally-nun [$_{NP}$ e] tali-lul ttayli-ess-ta.
but Sally-TOP leg-ACC hit-PAST-IND
i) But Sally hit her (= Sally's) child on the leg
ii) But Sally hit his (= Jerry's) child on the leg
(Kim 1999)

In addition to NP objects, clauses are often subcategorized for by verbs as shown in (4).

(4) a. I know him.
b. I know that he is right.

However, null clausal complements are much less discussed in the literature. This paper aims to discuss the derivation, status, and replacement of null clausal complements in Taiwan Southern Min (TSM), a Chinese language spoken by more than 80% of people in Taiwan (Cheng 1985). To illustrate, as shown in (5), the verb *tsai-iann* 'know' is subcategorized for a clausal complement, which is spelled out as *sin-long pai-kha* 'the bridegroom is crippled' in the first half, but in the second half of the sentence the clausal complement is null, marked as [$_{CP}$ e].

(5) Sin-niu tsai-iann sin-long pai-kha, mue-lang-po ma tsai-iann [$_{CP}$ e].[1]
bride know groom crippled matchmaker also know
'The bride knows that the bridegroom is crippled, and the matchmaker also knows.'

In addition to serving as complements after predicative verbs such as *tsai-iann* 'know' in (5), clauses can be complements subcategorized for by V-*kah* in TSM as in (6).

(6) Ong-e huan-lo-kah long be tsiah, Li-e ma huan-lo-kah [$_{CP}$ e].
Ong-e worry-kah all not eat Li-e also worry-kah
'Ong was so worried that he couldn't eat anything, and Li was also so worried.'

This paper discusses how the null clausal complement is derived, what its status is, and whether it can be replaced by other syntactic elements.

2 Literature Review

2.1 Anaphoric processes

Hankamer and Sag (1976) specify two anaphoric processes: surface anaphora, which results from "deletion under identity with antecedent forms", and deep anaphora, which is not derived via deletion and allows pragmatic control. They have argued that null complement anaphora demonstrates no sign of syntactic deletion and thus should be taken as deep anaphora, which can be either syntactically controlled or pragmatically controlled. Among the criteria proposed by Hankamer and Sag to distinguish deep anaphora from surface anaphora, three of them are considered more reliable by Depiante (2000) as in (7).[2]

(7) a. Deep anaphors allow a pragmatic antecedent.
b. Deep anaphors cannot contain an antecedent for a pronoun (missing antecedent).
c. Deep anaphors do not require strict syntactic parallelism with their antecedents.
(Depiante 2000: 8)

To illustrate, the omitted clausal complements in (8)–(9) should be taken as deep anaphora. In (8) the antecedent is syntactically controlled, while that in (9) is pragmatically determined.

(8) We needed somebody to carry the oats down to the bin, but nobody volunteered.
(Hankamer and Sag 1976)

(9) [Indulgent father feeds baby chocolate bar for dinner]
Mother: I don't approve.
(Hankamer and Sag 1976)

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[1] The romanization used in this paper for Taiwan Southern Min examples is according to the Taiwan Southern Min Romanization Proposal (臺灣閩南語羅馬字拼音符號方案), which was promulgated by the Ministry of Education in Taiwan in 2006.

[2] Surface anaphors have the opposite features.

The null complement after the verb *volunteered* in (10b) does not contain an antecedent for the pronoun *it*. The null complement is again considered deep anaphora.

(10) a. He said that one of us had to give up his seat, so Sue volunteered to give up her seat, because it was too narrow for her anyway.
b. *He said that one of us had to give up his seat, so Sue volunteered, because it was too narrow for her anyway.
(Hankamer and Sag 1976)

In (11), the null complement after *volunteered* would take the form *to take the oats down to the bin*, which is not structurally identical with its antecedent.

(11) The oats had to be taken down to the bin,
a. *so Bill did.
b. so Bill did it.
c. so Bill volunteered.
(Hankamer and Sag 1976)

All the tests above prove that the null complement after the verb *volunteered* is a deep anaphor. Depiante (2000) adds one more criterion to distinguish deep anaphora from surface anaphora. That is, "deep anaphors do not allow extraction of any element out of it, as opposed to surface anaphors, which allow extraction." (p. 35) As demonstrated in (12), the null complement after *volunteered* does not allow the extraction of *which book* out of it; (12) thus involves a case of deep anaphora.

(12) *Peter volunteered to read a book but I don't know which book he volunteered Ø.
(Depiante 2000)

2.2 Sloppy reading

More recently, some scholars such as Huang (1991) and Saito (2007) take sloppy reading as evidence of deletion. To illustrate, a Mandarin Chinese example such as (13) seems to involve a missing object. However, Huang (1991) argues that as its English counterpart (14) shows, (13) actually involves VP-ellipsis for the reason that both (13) and (14) are ambiguous with strict and sloppy readings. That is, (13) and (14) have both the strict reading that John saw John's mother and Mary also saw John's mother and the sloppy reading that John saw John's mother and Mary saw Mary's mother. Since strict/sloppy ambiguity is typical of constructions involving VP-ellipsis, both (13) and (14) are argued to involve VP-ellipsis.

(13) John kanjian-le tade mama, Mary ye kanjian-le.
John see-PERF his mother Mary also see-PERF
'John saw his mother, and Mary did, too.'
(Huang 1991)

(14) John saw his mother, and Mary did [$_{VP}$ e], too.
(Huang 1991)

However, "sloppy identity is not a necessary or sufficient condition for determining whether a certain element constitutes surface anaphora or not."

(Depiante 2000: 34). Dalrymple (1991, 2005), Hoji (1998, 2003), and Kasai (2014) argue that deep anaphora may demonstrate sloppy reading as well. For instance, the null object as in (15) is allowed when no linguistic antecedent is available. This is often a case of deep anaphora (Hankamer and Sag 1976).

(15) Bill-ga *e* tataita.
Bill-NOM hit
'Bill hit *e*.'
(Kasai 2014)

In (16) the null argument as an empty pronoun without a linguistic antecedent, a case of deep anaphora, allows sloppy reading. That is, (16) could be interpreted as Hanako hits his arm or Hanako hits her arm.

(16) [Watching a boy hitting his arm]
Taroo: Hanako-mo *e* yoku tataiteru yo.
Hanako-also often hit PARTICLE
'Hanako also often hits *e*.'
(Kasai 2014)

Likewise, null clausal complement is allowed when no linguistic antecedent is available as in (17), where the null clausal complement refers to Mary's flirting with someone else. The null clausal complement thus should be taken as deep anaphora.

(17) [John suspects that Mary, who is his girlfriend, flirts with someone else. John and his friend happen to watch Mary's flirting with someone else.]
John: Zituwa *pro* mae-kara *e* omottetanda yonaa.
in-fact before-from thought-be PARTICLE
'In fact, I have long thought *e*.'
(Kasai 2014)

Example (18) further demonstrates that deep anaphora, a null clausal complement in this case, can involve sloppy reading as well.

(18) Hanako-wa [$_{CP}$ zibun-no teian-ga saiyoosareru to] omotte iru ga,
TOP self-GEN proposal-NOM accepted-be that think though
Taroo-wa _____ omotte inai
TOP think not
'Hanako thinks that her proposal will be accepted, but Taroo does not think that her/his proposal will be accepted.'
(Saito 2007)

3 The Proposal

3.1 Derivation

The four tests introduced in 2.1 will be applied to examine null clausal complements in TSM. First of all, null clausal complements in TSM can have a linguistic or pragmatic antecedent. Therefore, following Hankamer and Sag's (1976) proposal, this paper argues

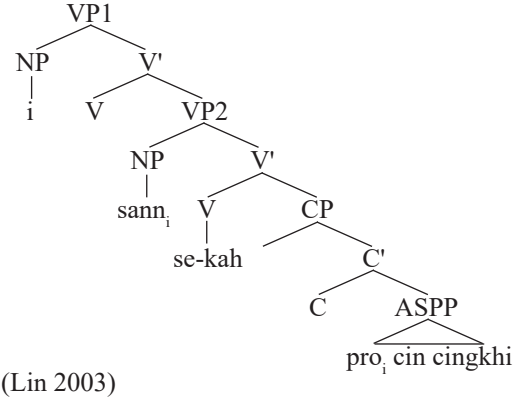
that null clausal complements in TSM are deep anaphora. To illustrate, in (5) the antecedent of the null clausal complement can be identified to be *sin-long pai-kha* 'the bridegroom is crippled' in the previous clause; that is, the null clausal complement has a linguistic antecedent in (5). However, in a context as specified in (19), the null complement takes its reference from the context. Being either syntactically or pragmatically determined, the null clausal complement in TSM is thus argued to be deep anaphora.

(19) [The bride talks about the bridegroom's being crippled with her friend.]
The bride: mue-lang-po ma tsai-iann [$_{CP}$ e]. (cf. (5))
matchmaker also know
'The matchmaker also knows.'

Another type of null clausal complement is demonstrated in (6). Before the null clausal complement in (6) is discussed, a few words on *kah* constructions in TSM are in order. As discussed in Lin (2003), V-*kah* can take three types of secondary predicate, expressing result, state, or extent. Example (20a) involves a resultative *kah* construction, where the clause after *kah*, *cin cingkhi* 'very clean', expresses the result of the event *i se sann* 'he washed clothes'. The resultative *kah*-clause as argued for by Lin (2003) is a clausal complement subcategorized for by V-*kah* with a structure as in (20b).[3, 4]

(20) a. I ciong sann se-kah tsin cingkhi.
he CIONG clothes wash-KAH very clean
'He washed his clothes clean.'
(Lin 2003)

b.



(Lin 2003)

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3 This paper only discusses resultative *kah* constructions, not the other two types of *kah* constructions, descriptive and extent, because only resultative *kah* constructions involve clausal complements and this paper focuses on null clausal complements only. Of course, the possibility is not ruled out that descriptive and extent *kah* constructions may allow omission of elements after V-*kah*. In fact, Lin (2017) talks about the omission of the postverbal secondary predicate in the three types of *kah* constructions.

4 The Mandarin counterpart of *kah* is *de*, which means 'to obtain'. Lin (2017) proposes that the meaning of the TSM *kah*, however, is not clear, and its origin is unknown (Yang 1991b). Tang (1992) proposes that *kah* has similar meaning with *kau* 'arrive'; Yang (1991a) also suggests that *kah* may have come from *kau*. But these are all only speculations.

In the second half of (6), the missing element after *kah* can be understood to be syntactically determined as the case in (5); that is, the null clausal complement is understood to refer to *long be tsiah* 'cannot eat' in the first half of (6). In a context such as (21), the missing null clausal complement is pragmatically determined. The missing element is understood to be something similar to the second half in (22), *be khun tsit* 'cannot sleep'.

(21) [Li's business went into trouble. He was so worried that he could not sleep for a few days.]
Li's wife said to her friend: Li-e huan-lo-kah.
Li-e worry-kah
'Li-e was so worried.'

(22) Ong-e huan-lo-kah long be tsiah, Li-e ma huan-lo-kah be khun tsit.
Ong-e worry-kah all not eat Li-e also worry-kah not sleep can
'Ong was so worried that he couldn't eat anything, and Li was also so worried that he couldn't sleep.'

As to example (23), the null clausal complement can only be pragmatically determined, and its antecedent is understood through the context. A possible antecedent could be something like the second half of (24), *be kui-a king tshu* 'buy several houses'.

(23) Ong-e tso-sing-li than-tsinn than-kah [$_{CP}$ e].
Ong-e do-business make-money make-kah
'Ong made so much money out of doing business.'

(24) Ong-e tso-sing-li than-tsinn than-kah be kui-a king tshu.
Ong-e do-business make-money make-kah buy several CL house
'Ong made so much money out of doing business that he bought several houses.'

As shown in (25), the null clausal complement cannot contain an antecedent for a following pronoun. That is, the pronoun *i* 'it' cannot find an antecedent in the null clausal complement. Again, the null clausal complement is proved to be deep anaphora.

(25) *Ong-e hio-hue ka kati-e kau-a be-tiau, Li-e ma tsin
Ong-e regret ka self-ASSOC dog sell-go Li-e also very
hio-hue [$_{CP}$ e], soo-i Li-e tsin kin to ka i be tng-lai.
regret so Li-e very soon then ka it buy back
'Ong regretted that he sold his own dog. Li also regretted (that he sold his own dog), so he soon bought it back.'

The null clausal complement in TSM also is not necessarily structurally identical with its antecedent. To illustrate, the null clausal complement in (26) could be understood to be something like *tsiah sann uann png* 'eat three bowls of rice' as in (27), rather than exactly the same as its antecedent *lian sann uann png ma tsiah-loh* 'eat even three bowls of rice'.

(26) Ong-e iau-kah lian sann uann png ma tsiah-loh,
Ong-e hungry-kah even three CL rice also eat-fall
Li-e ma iau-kah [$_{CP}$ e].
Li-e also hungry-kah
'Ong was so hungry that he ate even three bowls of rice. Li was also so hungry.'

(27) Ong-e iau-kah lian sann uann png ma tsiah-loh,
Ong-e hungry-kah even three CL rice also eat-fall
Li-e ma iau-kah tsiah sann uann png.
Li-e also hungry-kah eat three CL rice
'Ong was so hungry that he ate three bowls of rice. Li was also so hungry that he ate three bowls of rice.'

Extraction out of a null clausal complement is not allowed in TSM as well. In (28), a wh-word *kui* 'how many' is not allowed in the null clausal complement. In TSM wh-words stay in-situ just like wh-words in Mandarin Chinese and they only move at LF (Huang 1982).

(28) *Ong-e iau-kah lian sann uann png ma tsiah-loh,
Ong-e hungry-kah even three CL rice also eat-fall
gua m tsai-iann Li-e iau-kah kui uann png.
I not know Li-e hungry-kah how_many CL rice
'Ong was so hungry that he ate three bowls of rice. I don't know how many bowls of rice Li ate since he was so hungry.'

One more example as in (29) proves that extraction out of the null clausal complement after the verb *hio-hue* 'regret' is not allowed.

(29) *Ong-e hio-hue khai tsin tse tsinn be tshia,
Ong-e regret spend very much money buy car
m-koh gua m tsai-iann i hio-hue lua-tse.
but I not know he regret how-much
'Ong regretted that he spent much money to buy a car, but I don't know how much he regretted.'

All the tests above prove that the null clausal complement in TSM is deep anaphora, which according to Depiante (2000), has no internal structure, and thus nothing can be extracted from it. Moreover, since deep anaphora is not derived via deletion and it is there in the underlying structure, neither PF deletion nor LF-copying is applicable to explain its derivation.

Discussing anaphora types, Kasai (2014) argues that deep anaphora, which does not involve deletion, may involve sloppy reading. Sloppy reading can also be identified in TSM examples such as (30), where the second half has the sloppy reading in which Li knows that Li's plan is good as well as the strict reading in which Li knows that Ong's plan is good. However, sloppy reading does not argue against the deep anaphora analysis proposed in this paper.

(30) Ong-e tsai-iann kati-e ke-ue tsin ho, Li-e ma tsai-iann [$_{CP}$ e].
Ong-e know self-GEN plan very good Li-e also know
i. 'Ong knows that his (= Ong's) plan is good, and Li also knows that his (= Ong's) plan is good.' (Strict Reading)
ii. 'Ong knows that his (= Ong's) plan is good, and Li also knows that his (= Li's) plan is good.' (Sloppy Reading)

Since null clausal complements in TSM do allow sloppy reading and Huang (1991) argues that sloppy reading entails VP-ellipsis, one may wonder why not taking null clausal complements in TSM to be surface anaphora. It should be noted that both deep anaphora and surface anaphora allow sloppy reading, but only deep anaphora can be pragmatically determined, cannot contain an antecedent for a pronoun, does not require strict syntactic parallelism, and prohibits extraction. Those four tests have proven that null clausal complements in TSM are deep anaphora.

As pointed out by Kennedy and Merchant (2000), not all verbs allow null clausal complements as illustrated in (31)–(32).

(31) The missile test had failed, but only the brass knew.
(Kennedy and Merchant 2000)

(32) *The missile test had failed, but only Prof. Hicks {said / thought / expected / predicted / admitted / wanted}.
(Kennedy and Merchant 2000)

Likewise, in TSM some verbs such as *tsai-iann* 'know' in (19) allow null clausal complements, while others such as *lin-ui* 'think' in (33) do not.

(33) *Ong-e lin-ui kati-e ke-ue tsin ho, Li-e ma lin-ui [$_{CP}$ e].
Ong-e think self-GEN plan very good Li-e also think
'Ong thinks that his plan is good, and Li also thinks [that his plan is good].'

As to what types of verbs allow null complements, Grimshaw (1979) proposes that the features have to be lexically specified for each verb. For instance, *know* has a subcategorization frame as in (34), which specifies that its clausal complement is optional.

(34) know [__(S')]

Depiante (2000) also proposes that it is a lexical matter that has to be specified in the lexical entry, and he argues against Saeboe's (1996) proposal that verbs that trigger a presupposition allow null complements. For instance, Saeboe argues that the verb *refuse* as in (35) trigger a presupposition that Mary has been asked to do something, and this type of verb allows null complements. However, as Depiante points out, Saeboe's proposal is problematic in that even verbs that do not trigger presupposition allows null complements, such as the verb *start*.

(35) Mary refused.

Li (2005, 2014) holds a different view on the selection of null complements as specified in (36).

(36) a. If a verb is subcategorized for a clausal as well as a nominal object, the object can be empty.
b. If a verb is subcategorized only for a clausal object, the object cannot be empty.
(Li 2014)

As demonstrated in (37), the verb *tingdao* 'hear' can take either a nominal object or a clausal object, and the object can be left empty. However, the verb *yiwei* 'think' in (38) takes only a clausal object, and the omission of the object is not allowed.

(37) a. Wo tingdao yi-ge yaoyan; ta ye tingdao-le.
I hear one-CL rumor he also hear-LE
'I heard a rumor; he also heard.'
b. Wo tingdao ta de-le da jiang le; ta ye tingdao-le.
I heard he get-LE big prize LE he also hear-LE
'I heard that he got a big prize; he also heard.'
(Li 2014)

(38) a. *Wo yiwei na-jian shi.
I think that-CL matter
'*I thought that matter.'
b. Wo yiwei ta hen congming; tamen ye *(zhe-me/yang) yiwei.
I think he very smart they also so think
'I thought that he was smart; they thought *(so), too.'
(Li 2014)

Cheng (2013), however, proposes that null CPs are found to follow various types of verbs in Mandarin Chinese including *houhui* 'regret', which does not take a nominal object as in (39b). Li predicts that *houhui* should not allow a null clausal complement, but it actually does as in (39c).

(39) a. Ta hen houhui mei renzhen dushu.
he very regret not diligently study
'He regretted that he did not study hard.'
b. *Ta hen houhui zhe jian shi.
he very regret this CL matter
'He regretted about this matter.'
c. Ta hen houhui.
he very regret
'He felt regretful.'

Cheng (2013) believes that CP ellipsis is very productive in Mandarin Chinese. However, even though Li's proposal cannot fully explain Mandarin data, CP ellipsis is not as productive as Cheng proposes. Just to name a few, *renwei* 'think', *yiwei* 'think', *yuce* 'predict', etc. do not take null clausal complements.

Li's proposal based on Mandarin Chinese also works for some TSM data, such as predicative verbs *tsai-iann* 'know'. However, her proposal does not work for V-*kah* resultative constructions. As demonstrated below, even though *thiann-kah* 'hurt-kah' takes a clausal complement as in (40a), but not a nominal object as in (40b), *thiann-kah* still allows a null clausal complement as in (40c).

(40) a. I pak-too thiann-kah khia-be-khilai.
he belly hurt-kah stand-not-up
'His belly hurt so much that he could not stand up.'
b. *I pak-too thiann-kah hit tsiong tsong-hong.
he belly hurt-kah that CL situation
'His belly hurt so much that he was in that kind of situation.'
c. I pak-too thiann-kah [$_{CP}$ e].
he belly hurt-kah
'His belly hurt so much.'

In fact, most resultative V-*kah* can take null clausal complements whether the verb denotes activity as in (23) or state as in (21), or whether the verb is transitive as in (23) or intransitive as in (26).

3.2 Status

Depiante (2000) argues that null complement anaphora is a null pro-form, a free variable, and it is like *it* or *so* in English. Discussing null complements in Taiwanese *kah* construction, Yang (2010) proposes that "the null complement is a Pro in the Taiwanese *kah* construction." (p. 65) This paper argues that the null clausal complement in TSM is a null epithet as it has the four properties of an epithet as mentioned in Huang (1991): (a) it may not be A-bound, (b) it may be A-bar-bound, (c) it need not be A-bar-bound, and (d) it may be coindexed with an argument as long as the argument does not c-command it (pp. 61–62). To illustrate, the null clausal complement may not be A-bound as shown in (41); the antecedent of the null clausal complement cannot be in an argument position, such as the subject position.

(41) *Tse sin-long pai-kha ma tsai-iann [$_{CP}$ e]. (cf. (5))
this groom crippled also know
Intended meaning: '*That this bridegroom is crippled also knows (that this bridegroom is crippled).'

As shown in (42), the null clausal complement may be A-bar-bound, that is, referring to the topic.

(42) Tse sin-long pai-kha mue-lang-po tsai-iann [$_{CP}$ e] a. (cf. (5))
this groom crippled matchmaker know PRT
'As to the fact that this bridegroom is crippled, the matchmaker knows.'

However, it is not necessary for the null clausal complement to be A-bar-bound as in (43).

(43) Mue-lang-po tsai-iann [$_{CP}$ e]. (cf. (5))
matchmaker know
'The matchmaker knows.'

Furthermore, it may be coindexed with an argument as long as the argument does not c-command it as in (6), where the antecedent occurs in the first half and does not c-command the null clausal complement.

The null clausal complement in TSM cannot be a pro as proposed by Yang (2010). Li (2014) proposes that an empty object cannot be a pro because of "the conflicting requirements on the identification procedure for empty pronouns (pro/PRO) and the general disjointness requirement on pronouns." (p. 48) That is, if the empty object is a pro, on the one hand, it is subject to Generalized Control Rule (GCR) (Huang 1982) and has to be identified by the closet c-commanding nominal; on the other hand, obeying Binding Principle B, it has to be free in its governing category. As to the variable option, as demonstrated in (44), a null clausal complement can occur in a complex NP island; that is, no movement is involved, and therefore, a null clausal complement is not a variable.[5]

(44) Sui-jian mue-lang tsai-iann sin-long pai-kha, m-koh
though matchmaker know bridegroom crippled but
[sin-niu ma tsai-iann [$_{CP}$ e]] e tsit-e su-sit hoo tak-ke
bride also know LK this-CL fact make everyone
tsin i-gua.
really surprised
'Though it's not news that the matchmaker knows the bridegroom is crippled, everyone is really surprised by the fact that the bride also knows it.'

3.3 Replacement

For verbs that do not allow null clausal complements as in (45a), *so* can be added to rescue the ungrammatical sentence as in (45b).

(45) a. *The missile test had failed, but only Prof. Hicks thought. (cf. (32))
b. The missile test had failed, but only Prof. Hicks thought so.

A similar element in Mandarin Chinese is *zheme* as demonstrated in (46), where unlike *so* in English, *zheme* occurs before the verb (Li 2014; Wei and Li 2016).

(46) Zhangsan renwei Mali hen congming, Lisi ye zheme renwei.
Zhangsan think Mary very smart Lisi also so think
'Zhsangsan thinks Mary is smart; Lisi also thinks so.'
(Wei and Li 2016)

The TSM counterpart is *an-ne* as demonstrated in (47). The clausal complement cannot be omitted in (33), and the addition of *an-ne* turns the ungrammatical

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5 I would like to thank one of the reviewers for pointing this out and providing this example.

sentence (33) into a grammatical one (47). This shows that the clausal complement of the verb *lin-ui* 'think' is obligatory. Either the clausal complement or its pro-form has to be present.

(47) Ong-e lin-ui kati-e ke-ue tsin ho, Li-e ma lin-ui an-ne. (cf. (33))
Ong-e think he-GEN plan very good Li-e also think so
'Ong thinks that his plan is good, and Li also thinks so.'

Among the various usages of *so* in English, *so* in (48) functions similarly as *an-ne*. Ross (1972) argues that this *so* is a pro-S. However, against Ross's proposal, Hankamer and Sag (1976) propose that unlike regular clauses, *so* cannot take the subject position, and thus *so*-anaphora should be surface anaphora.

(48) Is the moon out? -I believe so.
(Hankamer and Sag 1976)

In fact, unlike *so* in English, TSM *an-ne* can take the subject position as in (49). Cheng (1989) proposes that in addition to being an adverb as in (50), *an-ne* can function as a pro-form to refer to a certain action or method. For verbs such as *lin-ui* 'think', a clausal complement is obligatory. Either the clausal complement as in (51) or its pro-form as in (47) has to be present.

(49) An-ne ho-m-ho?
so good-not-good
'Is it ok to do it this way?'
(Cheng 1989)

(50) Tsit kiann tai-tsi to an-ne pan looh.
this CL matter then this-way handle PRT
'This matter then can be handled this way.'
(Cheng 1989)

(51) Ong-e lin-ui kati-e ke-ue tsin ho,
Ong-e think self-GEN plan very good
Li-e ma lin-ui kati-e ke-ue tsin ho. (cf. (33))
Li-e also think self-GEN plan very good
'Ong thinks that his plan is good, and Li also thinks that his plan is good.'

An adverb *an-ne*, however, is optional as in (52). Moreover, *an-ne* can co-occur with the recovered missing element as in (53), which proves that *an-ne* in (53) is indeed an adverb, not a pro-S.

(52) Ong-e huan-lo-kah long be tsiah,
Ong-e worry-kah all not eat
Li-e ma huan-lo-kah (an-ne). (cf. (6))
Li-e also worry-kah so
'Ong was so worried that he couldn't eat anything, and Li was also so worried.'

(53) Ong-e huan-lo-kah long be tsiah,
Ong-e worry-kah all not eat

Li-e ma huan-lo-kah (an-ne) long tsiah be loh. (cf. (52))
Li-e also worry-kah so all eat not down
'Ong was so worried that he couldn't eat anything, and Li was also so worried that he couldn't eat anything.'

4 Concluding Words

This paper looks into the null argument that has drawn much less attention in the literature – the null clausal complement in Taiwan Southern Min (TSM). Not only clausal complements subcategorized for by predicative verbs such as *tsai-iann* 'know' but also clausal complements peculiar to TSM – those subcategorized for by V-*kah* – are discussed.

This paper applies four tests to prove that the null clausal complement in TSM is a type of deep anaphora. As to the status of the null clausal complement in TSM, it is argued to be a null epithet as it possesses the features of an epithet. Lastly, in some cases where clausal complements cannot be null, the addition of the pro-S *an-ne* 'so' turns the ungrammatical sentence into a grammatical one.

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台灣閩南語空補語子句的句法研究

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提要

本文探討過去少為人討論的空論元——台灣閩南語的空補語子句。探討的議題包括其衍生方法、身份及取代方式。本文採用四種測試證明台灣閩南語的空補語子句為一深層照應，未有內部結構，非經由刪略衍生。此外，其具有不受論元約束、可能但非必要受非論元約束等特點，因此被視為小名。並非所有類型的動詞皆允許空補語子句，在某些不允許空補語子句的例子裡，該補語子句可由代詞按呢代替。

關鍵詞

台灣閩南語，空論元，空補語子句，深層照應，表層照應，小名