

Nominalization and WH-movement in Seediq and Tagalog*

Edith Aldridge
Cornell University

This paper proposes a structural analysis of two types of wh-question formation in the Austronesian languages Seediq and Tagalog. Wh-questions formed on arguments are pseudo-cleft constructions; the wh-word functions as a predicate taking the rest of the clause, in the form of a headless relative, as its subject. The restriction that argument wh-questions can only be formed on absolutes is accounted for by a requirement that an absolute Case feature must be checked in the C domain by the operator forming the relative clause. In contrast to this, adjunct wh-questions are formed via wh-movement. The fact that adjunct wh-words cannot appear in clause-initial position in Seediq is the result of basic word order generation in this language, which produces VOS order by fronting the predicate XP around the absolute. This prevents adjunct wh-words contained inside the fronted predicate from moving out without violating the CED. Adjunct wh-words in Tagalog do appear in clause-initial position, which can be explained because Tagalog is a VSO language, whose word order is not generated by moving the entire predicate, thus leaving adjuncts free to move.

Key words: Seediq, Tagalog, wh-question, cleft, predicate-fronting

1. Introduction

This paper undertakes structural analyses of two types of wh-question formation in the Austronesian languages Seediq and Tagalog. One type of wh-question is that formed on arguments, where the wh-word appears in clause-initial position. Sentence (1) shows a Seediq example and (2) a Tagalog example. In both cases, the wh-word is the patient of the verb and appears in clause-initial position.

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- (1) S: **Maanu** ka wada burig-un na Ape?¹
 what Abs Perf buy-Tr Erg Ape
 ‘What did Ape buy?’
- (2) T: **Ano** ang b-in-a-basa ni Maria?
 what Abs Red-Tr.Perf-read Erg Maria
 ‘What is Maria reading?’

One striking characteristic of most Austronesian languages is that the fronted wh-word must be the absolutive² of the clause. Whereas the patient can be extracted in the transitive clauses in (1) and (2), the agent cannot, as in (3) and (4):

- (3) S: ***Ima** ka wada burig-un patis-ni?
 Who Abs Perf buy-Tr book-Def
 ‘Who bought this book?’
- (4) T: ***Sino** ang b-in-abasa ang libro?
 who Abs Red-Tr.Perf-read Abs book
 ‘Who is reading the book?’

In order to extract the agent, the clause must be antipassivized, as in (5) and (6).

- (5) S: Ima ka wada **m-ari** patis-ni?
 who Abs Perf AP-buy book-Def
 ‘Who bought this book?’
- (6) T: Sino ang b-**um**-abasa ng libro?
 who Abs Red-AP.Perf-read Obl book
 ‘Who is reading the book?’

This restriction has been treated by a great number of Austronesian linguists for numerous Austronesian languages. Philippine languages have been taken up by

¹ Abbreviations include: Abs: absolutive, Act: active, AF: actor focus, AP: antipassive, App: applicative, AT: actor topic, AV: actor voice, Caus: causative, Comp: complementizer, Dat: dative, Def: definite, Emph: emphatic, Erg: ergative, Intr: intransitive, LK: linker, Neg: negation, Nom: nominative, Obl: oblique, Pass: passive, PM: person marker, Poss: possessive, Perf: perfective, Prep: preposition, Q: question particle, Red: reduplication, Top: topic, Tr: transitive, 1s: first person singular, 2s: second person singular, 3s: third person singular, 1Pl: first person plural, 2Pl: second person plural, 3Pl: third person plural.

² By those who take these languages to be accusative, the grammatical role ‘absolutive’ is generally referred to as ‘subject’. Based on my earlier work (Aldridge 1998 and 1999), I treat Seediq and Tagalog as ergative languages. In addition, De Guzman (1988), Gertds (1988), Payne (1982), among others, have advanced ergative analyses for Philippine languages.

Schachter (1976), Bell (1983), Gerdtz (1988), de Guzman (1988), Kroeger (1993), and Nakamura (1994), among others. Work on Malagasy includes Keenan (1976), Pensalfini (1995), and Rackowski & Travis (2000). A sample of the accounts of Indonesian languages are Schachter (1984), Saddy (1991), and Wechsler & Arka (1998). Chung (1994), Chung (1998), and Georgopoulous (1985) have treated this phenomenon in the Oceanic languages Chamorro and Palauan. Formosan languages are also known to have the same restriction, explanations proposed by Holmer (1996) and Chang (1997) among others.

The current paper proposes that argument wh-questions in Seediq and Tagalog are formed on pseudo-cleft constructions, composed of a predicate nominal and headless relative clause. The wh-word functions as the predicate nominal and the rest of the clause as the headless relative. The absolutive restriction on extraction is related to the formation of relative clauses in these languages, which is restricted to absolutives by a requirement that an absolutive Case feature must be checked in the C domain, an extension of the proposal by Pesetsky and Torrego (to appear) that C possesses an uninterpretable nominative Case feature.

The other type of wh-question examined in this paper is formed on adjuncts. Seediq appears to follow the absolutive constraint in this case as well. *Inu* ‘where’ cannot appear in clause-initial position.

- (7) M-n-ari **inu** patis Ape?
 AP-Perf-buy where book Ape
 ‘Where did Ape buy books?’
- (8) ***Inu** m-n-ari patis Ape?
 where AP-Perf-buy book Ape

Tagalog, however, does not exhibit this restriction in the case of adjuncts. *Saan* ‘where’ and *kailan* ‘when’ do appear in clause-initial position.

- (9) **Saan**-ka b-um-ili ng libro?
 Where-2sAbs -AP.Perf-buy Obl book
 ‘Where did you buy books?’
- (10) **Kailan**-ka pu-punta sa Maynila?
 When-2sAbs AP.Red-go Dat Manila
 ‘When will you go to Manila?’

Clearly, simply claiming that extraction in Austronesian languages is limited to absolutives is not sufficient. This paper proposes that adjunct extraction is also based

on phrase structure. Adjunct wh-questions, however, are not claimed to be clefts but rather to be formed through overt wh-movement. The difference in movement possibilities between Seediq and Tagalog is related to the structural properties of basic word order generation in the two languages. Basic word order in Seediq, a VOS language where the absolutive nominal obligatorily appears in clause-final position, is generated by moving the predicate XP to the left of the absolutive. The fronted predicate thereby becomes an island, leaving only the absolutive eligible for extraction.

Tagalog, on the other hand, is a VSO language whose verb-initial word order is generated by moving just the verb to clause-initial position. There is no XP predicate fronting to prevent adjuncts from moving outside the clause.

In this way, I propose to account for both types of wh-question formation in Seediq and Tagalog. Extraction restrictions or the lack thereof are related to the phrase structure characteristics of the clause types involved. Argument wh-questions are formed on pseudo-clefts, which involve relativization, a type of nominalization. Adjunct wh-questions are formed via more traditional wh-movement.

2. Previous analyses

Previous accounts of extraction restrictions in Austronesian languages can be divided roughly into three types. One type is simply to stipulate that extraction is the privilege of the absolutive (for those taking an ergative analysis of these languages, like Gerdtz 1988 and De Guzman 1988) or the subject (for those viewing Austronesian languages as accusative: Keenan 1976, Schachter 1976, Bell 1983, Schachter 1984, and Kroeger 1993). As for the other two, one is based on some form of agreement relation between the absolutive and verbal morphology. The other is based on the structural configuration of the clause. Both approaches will be treated in turn below.

2.1 Thematic agreement

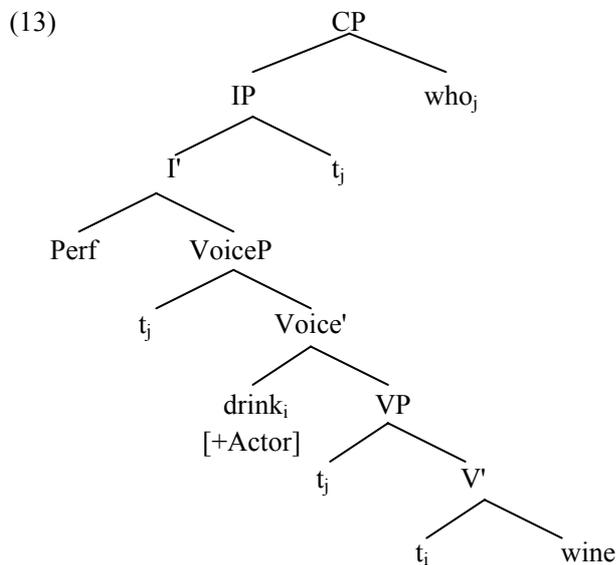
Some have accounted for the absolutive restriction on extraction by positing an agreement relationship between the absolutive nominal and morphology on the verb (Georgopoulos 1985, Chung 1994, and Chung 1998 for Oceanic languages and Chang 1997 for Formosan languages). One example of this type of analysis is Chang (1997) for Seediq and Kavalan. Chang views Austronesian languages as having a ‘voice’ system, where various verbal affixes have the function of promoting nominals with different thematic roles to the status of subject³ of the clause. Hence, antipassive is viewed as ‘actor

³ ‘Subject’ refers to the nominal identified as ‘absolutive’ in the current paper.

voice’, since the actor is the ‘subject’, and basic transitive clauses are viewed as ‘patient voice’, since the patient or theme is the privileged nominal in this case.

As for clause structure, Chang chooses an approach similar to that of Guilfoyle, Hung, and Travis (1992) and proposes that subjects must move overtly from within VP to the [Spec, IP] subject position. To account for extraction facts, Chang additionally proposes that, on their way to [Spec, IP], subjects first stop in [Spec, VoiceP], where they check ‘thematic agreement’. This ensures that only the nominals identified as subjects by the verbal morphology can move above VP. (11) is a Seediq example, where the actor has been grammatically extracted from an actor voice clause. The actor voice prefix *m-* on the verb correctly agrees with the agent thematic role of the wh-word. In (12), also from Seediq, the patient cannot be extracted, because its thematic role does not agree with the actor voice feature on the verb.

- (11) S: **Ima** ka **m-n-imah** sino?
 who Nom AV-Perf-drink wine
 ‘Who drank wine?’ (Chang 1997)
- (12) S: ***Maanu** ka **m-n-imah** ka Pawan?
 what Nom AV-Perf-drink Nom Pawan
 ‘What did Pawan drink?’ (Chang 1997)



This approach can also account for the fact that adjuncts like *inu* cannot be fronted in Seediq, since the locative wh-word does not agree with the actor voice prefix *m-* on

the verb.

- (14) S: ***Inu** **m-n-ari** patis Ape?
 where AP-Perf-buy book Ape
 ‘Where did Ape buy books?’

However, an approach based on this type of agreement encounters problems when accounting for the lack of one-to-one correspondence between ‘voice’ affixes and theta roles. In Tagalog, for instance, there are circumstances when a patient or theme absolutive can be licensed by either basic transitive verbal morphology (‘patient voice’ under Chang’s analysis) or by a locative applicative (‘locative voice’ according to Chang).

- (15) T: K-**in-ain** ko **ang** **isda**.
 -Tr.Perf-eat 1sErg Abs fish
 ‘I ate the fish.’
- (16) T: K-**in-ain-an** ko **ang** **isda**.
 -Tr.Perf-eat-App 1sErg Abs fish
 ‘I ate at the fish.’

Perhaps a case could be made that the absolutive in (16) is functioning as a locative, given the translation ‘eat at’ and the interpretation that the fish is not entirely consumed, as it is in (15). If *isda* ‘fish’ in (16) is to be understood as a locative, though, should it be treated on a par with *itong plato* ‘these plates’ in (17), which is a more typical locative?

- (17) T: Ito-ng plato na lang ang ka-kain-an natin.
 this-LK plate just Abs Red-eat-APP 1Pl
 ‘We’ll just eat off these plates.’ (Wolff 1991)

In (17), *itong plato* ‘these plates’ clearly functions as a locative, indicating where the action of eating will take place, i.e., the location of the food to be consumed. This contrasts significantly with *isda* ‘fish’ in (16), which is the thing consumed, making it difficult to conclude that it has the theta role ‘location’ rather than ‘theme’.

The situation is even more complicated in complex clauses. In the following, an embedded agent is licensed by the locative applicative *-an* in the main clause.

- (18) T: In-asah-**an** ko-ng bi-bili **si Maria** ng
 TR.PERF-expect-APP 1SERG-LK AP.RED-buy ABS Maria OBL
 libro tungkol kay Mao.
 book about DAT Mao
 ‘I expected Maria to buy a book about Mao.’
- (19) T: **Si Maria** ang in-asah-**an** ko-ng bi-bili ng
 ABS Maria COMP TR.PERF-expect-APP 1SERG-LK AP.RED-buy OBL
 libro tungkol kay Mao.
 book about DAT Mao
 ‘It was Maria I expected to buy a book about Mao.’

The same is true for Seediq. Either an embedded agent or patient can be extracted when the matrix verb is in ‘patient voice’.

- (20) **Ima** wada-su p-sulume-**un** saph?
 who Perf-2sErg Caus-build-Tr house
 ‘Who did you have build the house?’
- (21) **Maanu** wada-su p-sulume-**un** Pawan?
 what Perf-2sErg Caus-build-Tr Pawan
 ‘What did you have Pawan build?’

Additionally, Chang (1997) proposes no way of accounting for differences between languages like Seediq and other Austronesian languages with respect to whether adjuncts are allowed to front. Thematic agreement should rule out the Tagalog examples below where locatives have been extracted from ‘actor voice’ clauses.

- (22) T: **Saan-ka** b-**um-ili** ng libro?
 Where-2sAbs -AP.Perf-buy Obl book
 ‘Where did you buy books?’
- (23) T: **Sa Maynila** ako b-**um-ili** ng libro.
 Dat Manila 1sAbs -AP.Perf-buy Obl book
 ‘I bought books in Manila.’

In his analysis of Seediq and Kavalan, Chang is naturally not directly responsible for explaining corresponding phenomena in other languages. But in the interest not only of developing an account of Universal Grammar, but simply in order to deepen our understanding of the processes of Austronesian syntax, comparison should be welcomed whenever possible. Incidentally, not only Philippine languages, but also some other Formosan languages allow adjunct fronting, as in Tagalog. For instance, locative wh-words appear clause-initially in Amis, as in (24), from Huang et al. (1999),

and in Bunun, as in (25).

- (24) i **cuwa** kisu ma-futi'
 Prep where 2s.Nom AF-sleep
 'Where will you sleep?' (Huang et al. 1999)
- (25) **iza** tama-su ma-tashi'i rumah-su
 where father-2sPoss AP-build house-2sPoss
 'Where did your father build your house?'

2.2 Predicate fronting

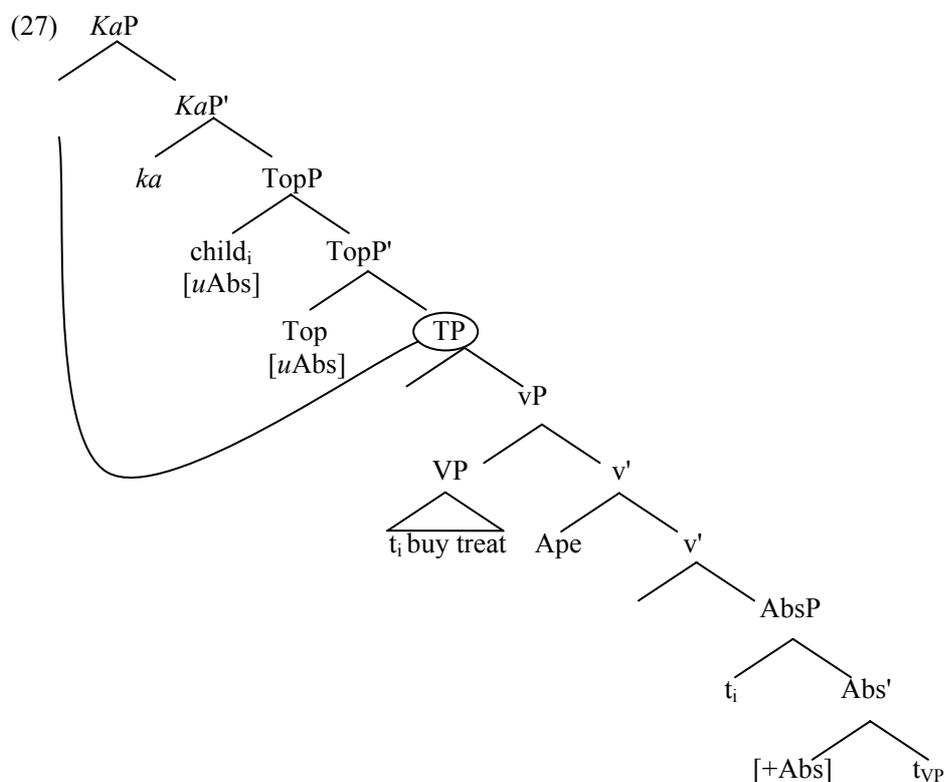
The third type of approach to extraction restrictions in Austronesian languages is based on phrase structure. The most recent trend in structural accounts of predicate-initial, absolutive/subject-final (VOS) word order in Austronesian languages is based on predicate fronting. The bulk of this work has been done on Malagasy (Pensalfini 1995, Pearson 1998, Rackowski 1998, and Rackowski & Travis 2000). Massam (2000) and (to appear) have also developed a VP fronting analysis of Niuean word order. Aldridge (1999) and Aldridge (2000) have concentrated on the Atayalic languages Seediq and Atayal.

In the following subsection, I propose a predicate fronting analyses for generating basic word order in Seediq and Tagalog. Next I propose that it is the structural configurations resulting from these processes that account for presence or absence of adjunct wh-movement in these languages.

2.2.1 TP fronting in Seediq

Basic word order under an XP predicate fronting approach is generated by first moving the absolutive to a checking position and then fronting the remnant constituent to a position higher than the absolutive. One result of this is that only the absolutive will be eligible for extraction. All other material in the clause will be contained in the fronted predicate, and movement from inside this constituent would violate the Condition on Extraction Domain (Huang 1982). Below I illustrate basic word order generation and the extraction restriction under the analysis of Seediq modified from Aldridge (2000).

- (26) Wada s-bari hulama na ape ka laqi.
 Perf App-buy treat Erg Ape Abs child
 'Ape bought the child a treat.'



The first step is for the absolutive nominal *laqi* ‘child’ to be attracted to the specifier of AbsP, where it checks absolutive Case. AbsP can be generated in different places, depending on the transitivity of the clause. For transitive verbs, AbsP is merged above VP and below vP. For intransitives with agents, specifically antipassives and unergatives, AbsP is merged above vP. For unaccusatives, AbsP is merged above VP.⁴ When Abs attracts a nominal, it attracts the closest nominal, according to the Minimal Link Condition (Chomsky 1995, chapt.4).

⁴ In effect, the default position for AbsP is above VP, which is consistent with the fact that proto-typical absolutes are patients or themes. Intransitive, including antipassive, morphology overrides this default, again in keeping with the detransitivizing function of antipassive. The concept of merging AbsP in different position is also reminiscent of the intuition of Holmer (1996, p.140) that ‘focus’ (or ‘voice’) morphology is related to structural positions within VP. Holmer claims that ‘actor focus’ selects the first argument in the VP (Holmer base-generates agents in the top-most VP specifier), ‘patient focus’ the second argument, and so on.

- (31) Wada-na biq-un **but** ka huling.
 Perf-3sErg give-Tr bone Abs dog
 ‘She gave the dog a bone/some bones.’
- (32) Wada puq-un **atak** na ape ka qutsuruh-ni.
 Perf eat-Tr chopsticks Erg Ape Abs fish-Def
 ‘Ape ate the fish with chopsticks.’

Further evidence that these objects are fronted together with the VP (and not that they undergo some type of object shift and move outside of VP) comes from their information status. Non-absolutive internal arguments in immediate post-verbal position tend to be indefinite, as can be see in the three examples above. Following Diesing’s (1992) Mapping Hypothesis, it is reasonable to assume that these indefinite objects remain inside VP and undergo Existential Closure at LF in order to obtain their indefinite interpretations.

It may be interesting to note at this point that several other Austronesian languages have a similar VP fronting process. In the Philippine language Kapampangan, absolutive direct objects appear to the right of the agent, as in (33a). However, in the dative shifted version (33b), the indefinite oblique object must appear in immediate post-verbal position to the left of the agent.

- (33) a. Binye-ne ning babai **ing libro** king anak.
 gave-she/it Erg woman Abs book Dat child
 ‘The woman gave the book to the child.’
- b. [_{VP} Dininan-ne-**ng libro**] ning babai ing anak.
 gave-she/it-Obl book Erg woman Abs child
 ‘The woman gave the child a book.’ (Rowse 1983)

Niuean is another example of this type of language. Definite direct objects appear with the absolutive case marker after the agent. When the object is indefinite, however, it must immediately follow the verb. Massam proposes that the object in this case fronts with the verb inside VP.

- (34) a. Takafaga tumau ni e ia **e tau ika**.
 hunt always Emph Erg he Abs Pl fish
 ‘He is always fishing.’
- b. [_{VP} Tagafaga **ika**] tumau ni a ia.
 hunt fish always Emph Abs he
 ‘He is always fishing.’ (Massam 1998)

In the next step of the derivation of (26), the absolutive moves from [Spec, Abs] into [Spec, Top]. Here I follow Pesetsky and Torrego (to appear) in proposing that [*u*Abs] must be checked by Top. The only way this can be done is by moving the absolutive nominal into [Spec, Top].⁵

The final step in the derivation of (26) is to front the remnant TP into [Spec, *ka*]. Following Massam (2000) and (to appear) and Rackowski & Travis (2000), I assume that *ka* contains a feature, like [*u*Pred], that attracts the XP containing the verb. This proposal that the predicate moves to the left of the absolutive correctly generates absolutive-final word order. Absolutives must appear in clause-final position in Seediq.

- (35) Wada m-ari hulama laqi **ka** **Ape**.
 Perf AP-buy treat child Abs Ape
 ‘Ape bought the child a treat.’
- (36) *Wada m-ari **ka** **Ape** hulama laqi.
 Perf AP-buy Abs Ape treat child
 ‘Ape bought the child a treat.’

This analysis also accounts for extraction facts, as mentioned above. The absolutive is then free to front in *wh*-question formation.

- (37) **Ima_i** ka wada [_{VP} s-bari hulama na Ape] **t_i**
 who Abs Perf App-buy treat Erg Ape
 ‘Who did Ape buy a treat?’

Non-absolutive nominals cannot front, however, since they are contained inside the fronted predicate. Extraction of the locative in (38), for instance, would result in a CED violation.

⁵ Pesetsky and Torrego claim that C has an uninterpretable nominative Case feature that can be checked by the nominative nominal or by the verb which checks Case against this nominal. They propose that this can account for the asymmetry below, where auxiliary verb movement occurs only in object questioning and not in subject questioning.

a. [_{CP} Who [_{t_{who}} bought the book]]

b. [_{CP} What [_C did [_{Mary} buy]]]

In (a), the subject *wh*-word can check not only the [*uwh*] feature of C, but also the nominative Case feature. In (b), on the other hand, the object *wh*-word cannot check the nominative feature of C, so the auxiliary verb must also move to C for this purpose.

- (38) a. [_{VP} M-n-ari **inu** patis] Ape?
 AP-Perf-buy where book Ape
 ‘Where did Ape buy books?’
- b. ***Inu**_i [_{VP} m-n-ari **t_i** patis] Ape?
 where AP-Perf-buy book Ape

As pointed out by a reviewer of this paper, there is another class of wh-word which does appear in clause-initial position in Seediq:

- (39) **H-m-uwa** beebu laqi bubu?
 -AP-why hit child mother
 ‘Why did the mother hit the child?’

However, I do not analyze this as a case of wh-movement from inside TP. First, it has been proposed by others that *why*-type wh-words are merged in a position above TP, perhaps directly in [Spec, C] (Rizzi 1990). Secondly, Chang (2000) treats *hmuwa* ‘why’ as a verbal wh-word, occupying a head position. This is reasonable, given that the root *huwa* can take verbal affixes such as *-m-*. If this is the case, then it is also reasonable to assume that *hmuwa* does not originate inside TP, as movement across the other verb *beebu* ‘hit’ would violate the Head Movement Constraint (Travis 1984).

Before closing this subsection, one word should be said about the role of *ka* in attracting TP. *Ka* is traditionally assumed to be a case marker (Li 1997, Holmer 1996, Chang 1997, among others). I break with this tradition, however, and treat it as a clausal head rather than a determiner.⁶ There are several reasons for distinguishing *ka* from determiner-type case markers in other Austronesian languages. First, there are only two such particles remaining in Seediq, i.e., the ergative *na* and absolutive *ka*. Other languages have more than two. Tagalog, for instance, has particles for absolutive, ergative, and dative/locative cases. Tagalog case markers also encode certain semantic information about the nominals they select. For instance, different markers are used for personal names as opposed to other types of nominal.

- (40) Um-iyak **si** Maria.
 Intr.Perf-cry Abs Mari
 ‘Maria cried.’
- (41) Um-iyak **ang** bata.
 Intr.Perf-cry Abs child
 ‘The child cried.’

⁶ The proposal that *ka* is a clausal head is inspired by Whitman’s (2000) analysis of the Japanese nominative particle *ga* as a clausal head.

In certain circumstances, different case particles in Tagalog can be used to indicate differences in definiteness or specificity.

- (42) K-um-ain ako **ng** isda.
 -AP.Perf-eat 1sAbs Obl fish
 ‘I ate a fish.’
- (43) K-um-ain ako **sa** isda.
 -AP.Perf-eat 1sAbs Dat fish
 ‘I ate the fish.’

The richer system of Tagalog case marking, in particular the encoding of semantic information about nominals, indicates that Tagalog case markers select the nominals that follow them. There is no semantic reason to believe this is the case in Seediq.

Another reason to believe that Tagalog case markers form a constituent with their nominals is that Tagalog case particles accompany their nominals when scrambled, focused, or topicalized.

- (44) a. Pu-punta ako **sa** **Maynila**.
 Red-go 1sAbs Dat Manila
 ‘I will go to Manila.’
- b. **Sa** **Maynila** ako pu-punta.
 Dat Manila 1sAbs Red-go
 ‘I will go to Manila.’
- (45) a. Pu-punta **si** **Maria** sa Maynila bukas.
 Red-go Abs Maria Dat Manila tomorrow
 ‘Maria will go to Manila tomorrow.’
- b. **Si** **Maria** ay pu-punta sa Maynila bukas.
 Abs Maria Top Red-go Dat Manila tomorrow
 ‘As for Maria, she will go to Manila tomorrow.’

Seediq does not have scrambling of ergative or absolutive nominals. Nor does it have focus movement of the type illustrated for Tagalog in (44). Absolutes can be topicalized, as in (46b), but they are never preceded by *ka*, as shown by the ungrammaticality of (46c).

- (46) a. Wada-na kudal-un huling **ka** **but** **rodux**.
 Perf-3sErg feed-Tr dog Abs bone chicken
 ‘She fed the chicken bones to the/a dog.’

- b. **But rodux p-n-uk-an-daha** wada-na biq-un huling.
 Bone chicken -Perf-eat-App-3Pl Perf-3sErg give-Tr dog
 ‘The bones of the chicken they ate, she gave to a/the dog.’
- c. ***ka** but rodux p-n-uk-an-daha wada-na biq-un huling.
 Abs Bone chicken -Perf-eat-App-3Pl Perf-3sErg give-Tr dog

Given these facts concerning the behavior of Seediq *ka*, I conclude that it is not a determiner-type case particle. Rather, it has grammaticalized into merely a marker of grammatical case, presumably a clause-level function, and a place marker for the predicate and absolutive. I speculate that the reanalysis of *ka* is also part of the evolution toward fixed word order in this language.

2.2.2 Verb fronting in Tagalog

In contrast to Seediq, Tagalog is not an absolutive-final language. Least marked word order adheres to the thematic hierarchy of agent, theme/patient, goal, and so on. Example (47b) is unnatural unless given certain contextual support, for instance given a context where ‘Juan’ is focused.

- (47) a. B-in-ili ng babae **ang isda** kay Huan.
 -Tr.Perf-buy Erg woman Abs fish Dat Juan
 ‘The woman bought the fish from Juan.’
- b. ?B-in-ili ng babae kay Huan **ang isda**.
 -Tr.Perf-buy Erg woman Dat Juan Abs fish
 ‘The woman bought the fish from Juan.’

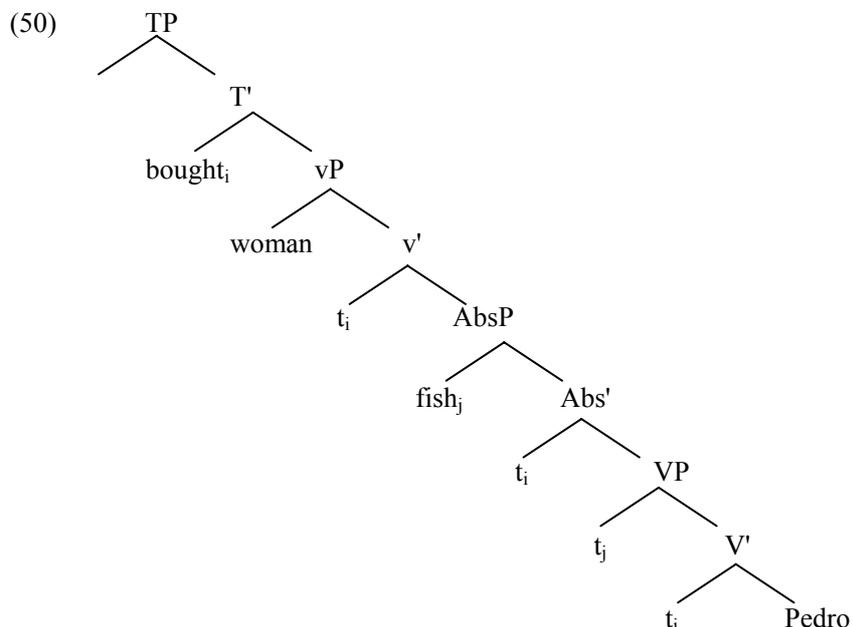
Matrix absolutives in object control constructions must always precede complement clauses. Number (48b), where the matrix absolutive has been dislocated to the right of the embedded clause, is ungrammatical.

- (48) a. Na-himok ko **si Pedro** [na bilh-in yung libro]
 Perf-persuade 1sErg Abs Pedro Comp buy-Tr that.Abs book
 ‘I persuaded Pedro to buy that book.’
- b. *Na-himok ko [na bilh-in yung libro] **si Pedro**
 Perf-persuade 1sErg Comp buy-Tr that.Abs book Abs Pedro

I propose here, as in previous work (Aldridge 1998), that word order generation in Tagalog is much simpler than in Seediq. The former is not an XP predicate fronting

language; the [*uPred*] feature is checked by simply moving the verb into T. There is no projection like Seediq's *kaP*. Absolutive Case is checked overtly by Abs, but there is no Top projection in simple declarative clauses (since there is no movement to this position), meaning that there is also no [*uAbs*] feature to be checked in [Spec, Top].

- (49) B-in-ili ng babae ang isda kay Huan.
 -Tr.Perf-buy Erg woman Abs fish Dat Juan
 'The woman bought the fish from Juan.'



Proposing these different analyses of word order generation for Seediq and Tagalog accounts neatly for the fact that adjuncts can be extracted in Tagalog but not in Seediq. As seen in (38) above, a Seediq locative, which is contained inside the fronted *xP*, cannot be extracted without violating the CED. Tagalog adjuncts, on the other hand, are not contained within a fronted *XP* island, so they are free to undergo *wh*-movement.

- (51) **Saan_i** ka b-um-ili ng libro **t_i**
 where 2sAbs -AP.Perf-buy Obl book
 'Where did you buy books?'

Following Stroik (1996), I assume that locatives are merged inside VP; when they

appear in clause-initial position, this is the result of movement. The position of in situ locative PPs adds support. (52) shows a locative PP in situ, to the right of the verb.

- (52) Pu-punta ako sa **Maynila**.
 Red-go 1sAbs Dat Manila
 ‘I will go to Manila.’

Interestingly, adjunct PPs can also move to the left of the verb.

- (53) [**Sa Maynila**]_i ako [_{IP} pu-punta t_i]
 Dat Manila 1sAbs Red-go
 ‘I will go to Manila.’

Dative arguments can also be dislocated in this way.

- (54) Nag-bigay ako ng libro **kay Maria**.
 Perf.AP-give 1sAbs Obl book Dat Maria
 ‘I gave a book to Maria.’
 (55) **Kay Maria** ako nag-bigay ng libro.
 Dat Maria 1sAbs AP.Perf-give Obl book
 ‘To Maria, I gave a book.’

Therefore, displacement of the type seen in (51) is not limited to wh-words.⁷ I assume that the landing site for movements of the type seen in (51), (53), and (55) is a focus projection above TP,⁸ since movement to this position is licit only under a focus reading. XPs typically undergoing this type of movement are wh-words. In the case of PPs, these also must be focused.

- (56) I-p-in-akilala ko si Juan **kay Maria**.
 App-Perf-introduce 1sErg Abs Juan Dat Maria
 ‘I introduced Juan to Maria.’

⁷ It has been suggested by a reviewer that Tagalog adjunct wh-words can appear in clause-initial position, because they are directly merged there as heads taking the rest of the clause as their arguments. (54) and (56) should serve as clear evidence that phrasal material originating in VP can also move to the left of the verb.

⁸ Here I am assuming Rizzi’s (1997) division of the C domain. The focus and topic projections proposed in this paper are all located in what would traditionally be considered the C domain.

- (57) **Kay Maria** ko I-p-inakilala si Juan.
 Dat Maria 1sErg App-Perf-introduce Abs Juan
 ‘I introduced Juan to **Maria** (and not anyone else).’

To summarize this section, the TP fronting analysis for Seediq and verb fronting analysis for Tagalog account for basic word order as well as adjunct extraction facts in the two languages. However, relying on differences in predicate fronting to account for argument extraction facts will yield incorrect results. Since non-absolute arguments in a Tagalog clause are also not contained in an island, they also would be eligible for extraction under this view. But this is clearly not the case empirically.

- (58) **Ano** ang b-in-a-basa ni Maria?
 what Abs Red-Tr.Perf-read Erg Maria
 ‘What is Maria reading?’
- (59) ***Sino** ang b-in-a-basa ang libro?
 who Abs Red-Tr.Perf-read Abs Maria
 ‘Who is reading the book?’

The next section explores a different analysis for argument extraction based on based on the hypothesis that argument wh-questions are formed on pseudo-clefts.

3. Clefting

This paper develops the position that, while adjunct wh-questions are formed in the usual way via overt wh-movement, argument wh-questions are pseudo-clefts and that it is the structural characteristics of pseudo-clefts that determines the absolute restriction argument on wh-question formation. It has been suggested by more than a few linguists, especially for Formosan languages (C-L Chang 1996, Tsai 1997, Y-Y Chang 1998, and Liu 1999), that wh-questions are clefts. However, these do not offer convincing evidence of the structural properties we typically associate with clefts. This section provides evidence that argument wh-questions do have structural characteristics of clefts.

To begin this discussion, I will first point out the basic resemblance between wh-questions and pseudo-clefts in Seediq and Tagalog. (60) and (61) are generally considered to be clefts in Seediq and Tagalog. They take the form generally attributed to pseudo-clefts, in which a predicate nominal, shown in italics, forms the matrix predicate, while the subject consists of a free relative, indicated by brackets (Akmajian 1970, Chomsky 1977, Knowles 1986). Seediq and Tagalog, as is the case with most

Austronesian languages, do not have a copula; the predicate nominal alone functions as the predicate. The subject relative clause is preceded by an absolutive case marker, given in bold.

- (60) S: *Bulebun* **ka** [b-n-ari na Ape]
 banana Abs -Perf-buy Erg Ape
 ‘A banana is what Ape bought.’
- (61) T: *Isda* **ang** [b-in-ili ni Maria]
 fish Abs -Tr.Perf-buy Erg Maria
 ‘A fish is what Maria bought.’

Evidence that the constituent following the absolutive case marker is a headless relative clause is given below, where *bnari na ape* (‘what Ape bought’) and *binili ni Maria* (‘what Maria bought’) are used as NPs in argument position.

- (62) S: Malu uqun ka **b-n-ari na Ape**.
 good eat Abs -Perf-buy Erg Ape
 ‘What Ape bought tastes good.’
- (63) T: Hindi-ko gusto ang **b-in-ili ni Maria**.
 Neg-1sErg like Abs -Tr.Perf-buy Erg Maria
 ‘I don’t like what Maria bought.’

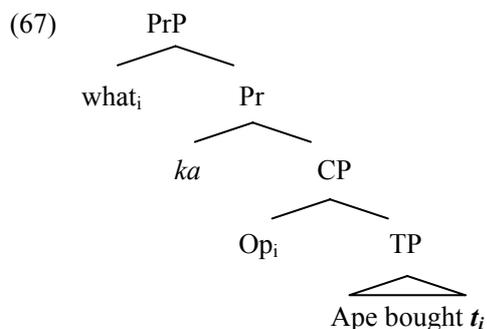
In terms of pragmatic import, the relative clause part of a pseudo-cleft typically conveys given information, while the predicate nominal provides new and focused information (Prince 1978, Bromser 1984, Kamio 1991, Collins 1991, Fitchner 1993). This is also the case with (62) and (63) above. For these to be felicitous, it should be understood by the hearer that Ape bought something in (62), and Maria bought something in (63). The predicate nominals *bulebun* (‘banana’) and *isda* (‘fish’) supply the missing information as to what it was that was bought.

The outward appearance of wh-questions is identical to the pseudo-clefts in (62) and (63). The nominals *maan* and *ano* appear in initial position, followed by absolutive case markers and the same headless relatives as above.

- (64) S: Maanu **ka** [b-n-ari na Ape]
 what Abs -Perf-buy Erg Ape
 ‘What did Ape buy?’
- (65) T: Ano **ang** [b-in-ili ni Maria]
 what Abs -Tr.Perf-buy Erg Maria
 ‘What did Maria buy?’

A basic resemblance is not sufficient, however, to prove that these are clefts. At this point, I will give some structural arguments to show that the constructions above are indeed bi-clausal. My analysis is based on the structure proposed by Chomsky (1977) for pseudo-clefts. The *wh*-word forms the matrix predicate. For Seediq, I place this in *ka*P, the projection that I propose forms the nucleus of a clause in Atayalic languages, and possibly in all VOS Austronesian languages. The complement of *ka*P is a headless relative clause containing a gap that is co-referent with the *wh*-word.

- (66) S: Maanu ka b-n-ari na Ape?
 what Abs -Perf-buy Erg Ape
 ‘What did Ape buy?’



One indication that this is the correct analysis comes from pronominal agreement registered by clitics on the verb. Both examples below are from Seediq, since Tagalog does not have clitic doubling. Ergative and absolutive nominals show agreement when topicalized in Seediq. (68) shows ergative agreement for the agent *tama* (‘father’). *Tama* has been topicalized and appears in clause-final position, following the absolutive case marker. What is traditionally assumed to be the absolutive case marker in Seediq, *ka*, is used not only to identify the absolutive, but can also occur with a topicalized agent. (69) shows absolutive agreement for the topic *yaku* (‘I’). Clause-initial topics do not occur with *ka* but are followed by the topic marker *ge*.

- (68) Wada-**na** s-bari hulama laqi-na ka tama.
 Perf-3sErg App-buy treat child-3sPoss Abs father
 ‘The father bought his child a treat.’
- (69) Yaku ge wada-**ku** s-bari hulama na bubu.
 1sAbs Top Perf-1sAbs App-buy treat Erg mother
 ‘As for me, Mom bought me a treat.’

In a cleft, however, the nominal in initial position does not register agreement on the verb.⁹ There is no *ku* ('I') clitic inside the clause to refer to the *yaku* in initial position.

- (70) **Yaku** ka wada-na s-bari hulama.
 1sAbs Abs Perf-3sErg App-buy treat
 'She bought ME a treat.'

This is what we expect if (70) has the structure in (71). That is, the verb may in fact be showing agreement, but this would be with the empty operator in the relative clause, and so what appears on the verb is 3rd-person absolutive agreement, which is zero in this language.

- (71) Yaku ka [_{CP} **Op_i** [_{TP} wada-na s-bari hulama **t_i**]]
 1sAbs Abs Perf-3sErg App-buy treat
 'She bought ME a treat.'

Another indication that clefts are biclausal is the location of clitics. Pronominal clitics can float as high as C in both Seediq and Tagalog. In (72), *Yo* is the Seediq interrogative particle, and the 2nd person clitic *su* attaches to it. In (73), the Tagalog 2nd person pronoun *ka* attaches to the wh-word *kailan* ('when').

- (72) S: Yo-**su** kulaun seedaq m-n-huma bulebun-ni?
 Q-2sErg know person -Perf-plant banana-this
 'Do you know the person who planted these bananas?'
- (73) T: Kailan-**ka** p-um-unta sa Maynila?
 when-2sAbs -AP.Perf-go P Maynila
 'When did you go to Maynila?'

I assume that interrogative particles and fronted (non-argument) wh-words are associated with the C domain.¹⁰ Clitics, then, should be able to raise as high as this position.

- (74) S: [_{CP} [_C Yo-**su_i** [_{TP} kulaun *t_i* [_{DP} seedaq [...]]]]]
 Q-2sErg know person
 'Do you know the person who...?'

⁹ Akmajian (1970) analyzes a similar phenomenon in English clefts.

¹⁰ For the discussion in this section, it makes no difference whether the exact projection is FocP or TopP. For the sake of simplicity, I will just refer to it as CP.

- (75) T: [_{CP} Kailan-**ka**_i [_{TP} p-um-unta *t_i* sa Maynila]]
 when-2sAbs -AP.Perf-go Dat Maynila
 ‘When did you go to Maynila?’

In a cleft, however, the clitic has to stay below the nominal predicate and absolutive marker which follows it. In (76), the 3rd person Seediq ergative clitic attaches to the tense auxiliary, and in (77) the Tagalog the 2nd person ergative clitic attaches to the verb.

- (76) S: Ima ka wada-**na** s-bari hulama?
 who Abs Perf-3sErg App-buy treat
 ‘Who did she buy a treat (for)?’
 (77) T: Ano ang g-in-a-gawa-**mo**?
 what Abs Red-Perf-do-2sErg
 ‘What are you doing?’

These clitics cannot move up to attach to the wh-word or the absolutive case marker.

- (78) S: *Ima-**na** ka wada s-bari hulama?
 who-3sErg Abs Perf App-buy treat
 ‘Who did she buy a treat (for)?’
 (79) S: *Ima ka-**na** wada s-bari hulama?
 who Abs-3sErg Perf App-buy treat
 (80) T: *Ano-**mo** ang g-in-a-gawa?
 What-2sErg Abs Red-Perf-do
 ‘What are you doing?’
 (81) T: *Ano ang-**mo** g-in-a-gawa?
 what Abs-2sErg Red-Perf-do

This is not what we expect if (76) and (77) are mono-clausal. If this were the case, then they should have the structures below, where the wh-words have moved to [Spec, C], and the clitics should be able to attach to the wh-words or to *ka* and *ang*, which would be analyzed as complementizers under this view.

- (82) S: * [_{CP} Ima-**na**_i [_C ka [_{TP} wada s-bari hulama *t_i*]]]
 who-3sErg Abs Perf-3sErg App-buy treat
 ‘Who did she buy a treat (for)?’

- (83) T: * $[_{CP}$ Ano-**mo**_i [_C ang [_{TP} g-in-a-gawa t_i]]]
 What-2sErg Abs Red-Perf-do
 ‘What are you doing?’

Clearly, this mono-clausal structure does not explain the positions of the clitics in (76) and (77). However, the bi-clausal cleft analysis given above does account for this. The wh-word and *ka* are not contained in the CP where the clitic originates. Therefore, the highest position available to the clitic in this clause is the auxiliary *wada* in (76), as shown in (84), and the verb *ginagawa* in (77), as shown in (85). The operators in [Spec, C] are phonetically null and so cannot host clitics.

- (84) S: Ima_i ka [_{CP} Op_i [_{TP} wada-**na** s-bari hulama t_i]]
 who Abs Perf-3sErg App-buy treat
 ‘Who did she buy a treat (for)?’
- (85) T: Ano_i ang [_{CP} Op_i [_{TP} g-in-a-gawa-**mo** t_i]]
 What Abs Red-Perf-do-2sErg
 ‘What are you doing?’

This section has shown that argument wh-questions in Seediq and Tagalog take the form of pseudo-clefts. In the previous section, I showed that argument wh-questions behave differently from adjunct wh-questions. Whether adjunct wh-words can move to clause-initial position is determined by whether word order in the language is generated through X or XP predicate fronting. The XP fronting language Seediq does not allow adjunct wh-words in initial position, while the X fronting language Tagalog does.

- (86) S: M-n-ari **inu** patis ape?
 AP-Perf-buy where book Ape
 ‘Where did Ape buy books?’
- (87) T: **Saan**-ka b-um-ili ng libro?
 Where-2sAbs -AP.Perf-buy Obl book
 ‘Where did you buy books?’

I proposed that this difference be accounted for by whether or not the wh-word is contained within the fronted predicate. Wh-movement cannot take place from inside the fronted predicate without invoking a CED violation. Argument wh-movement, however, cannot be explained in the same way, since the X fronting language Tagalog would allow both absolutive and non-absolutive wh-words to front, which results in ungrammatical sentences like (89).

- (88) **Ano** ang b-in-a-basa ni Maria?
 what Abs Red-Tr.Perf-read Erg Maria
 ‘What is Maria reading?’
- (89) ***Sino** ang b-in-a-basa ang libro?
 who Abs Red-Tr.Perf-read Abs book
 ‘Who is reading the book?’

In the previous section, then, I suggested that argument wh-question formation is constrained by a different mechanism from adjunct wh-movement. This section has shown that argument wh-questions take the form of clefts and are not formed via overt wh-movement. Before leaving this discussion, I will point out that adjunct wh-questions do not have the structural characteristics of clefts. I showed above that clitics in cleft wh-questions do not attach to the wh-word, but rather attach inside the relative clause, as in (90). In adjunct wh-questions in Tagalog, however, clitics do attach to the wh-word, as in (91).

- (90) **Ano** ang g-in-a-gawa-**mo**?
 what Abs Red-Perf-do-2sErg
 ‘What are you doing?’
- (91) **Saan-ka** b-um-ili ng libro?
 Where-2sAbs -AP.Perf-buy Obl book
 ‘Where did you buy books?’

This indicates that adjunct wh-questions have a different structure from argument wh-questions. It was shown in (74)-(75) above that clitics can attach to words in C or [Spec, C]. It is reasonable to assume, then, that (91) is a mono-clausal construction where overt wh-movement places *saan* ‘where’ in [Spec, C] and the clitic moves up and adjoins to this position.

- (92) [_{CP} Saan_i-**ka** [_{TP} b-um-ili ng libro *t_i*]]
 Where-2sAbs -AP.Perf-buy Obl book
 ‘Where did you buy books?’

4. Absolutive extraction

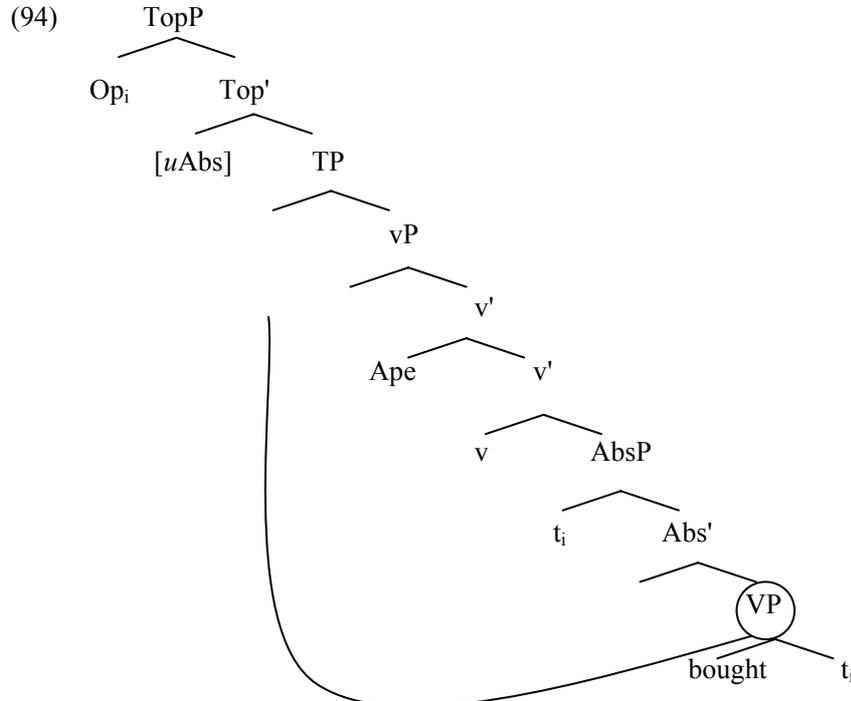
The discussion in section 3 showed that argument wh-questions take the form of pseudo-clefts in Seediq and Tagalog. They have the same outward form as constructions that perform the pragmatic function that we expect of pseudo-clefts. I have also shown that they display the bi-clausal properties that we expect of pseudo-clefts. The wh-word forms the matrix predicate, and the rest of the clause is composed

of a headless relative clause co-referent with the wh-word.

Argument wh-extraction in Seediq and Tagalog can now be related to the formation of pseudo-clefts, particularly the fact that the main body of the clause resides in a headless relative clause. Here the proposal of Pesetsky and Torrego (to appear) that an uninterpretable Case feature must be checked in the C domain is crucial. The absolutive nominal in a headless relative clause will be a null operator, which is quantificational and must move into the C domain to set its scope. Since the Case feature in Top must also be checked, it follows that the operator must also bear this feature.

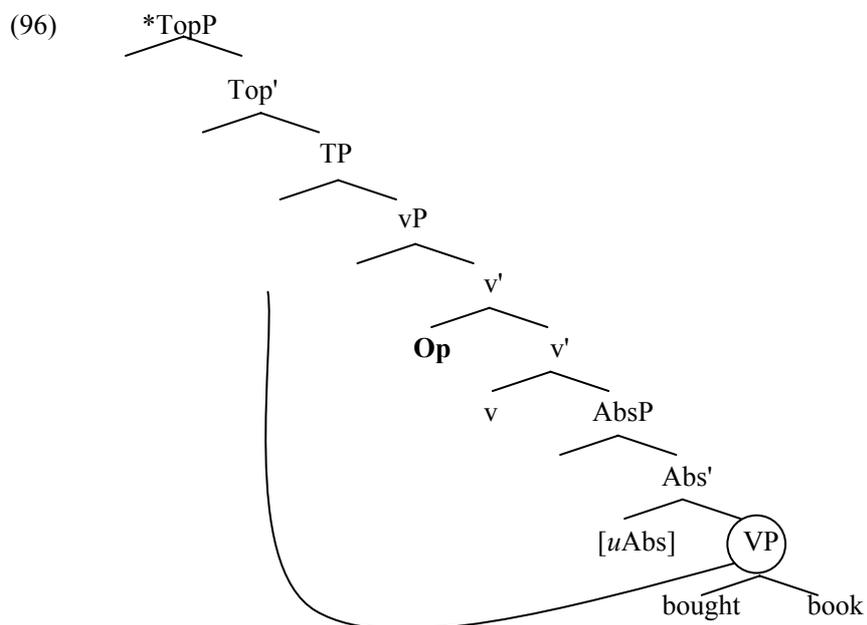
This said, the derivation proceeds as follows. I begin with a discussion of Seediq. A null operator is merged in argument position, then moved to [Spec, Abs] to check absolutive Case. It later moves again to [Spec, Top], carrying its Case feature to be checked against Top. The VP is fronted to the outer specifier of v, as in any other clause.

- (93) Maanu ka [b-n-ari na Ape]
 what Abs -Perf-buy Erg Ape
 ‘What did Ape buy?’

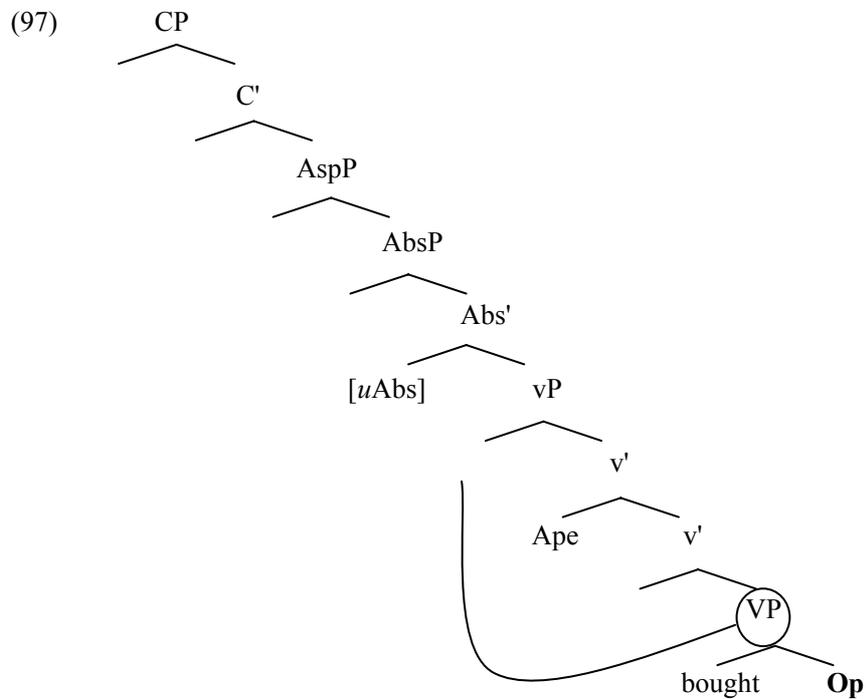


This accounts for the absolutive wh-extraction restriction in the following way. If the null operator were merged in agent position in a transitive clause, then it would not have an absolutive Case feature to check in [Spec, Top], since AbsP is merged low and therefore not accessible to the agent.

- (95) *Ima ka wada burig-un patis-ni?
 who Abs Perf buy-Tr book-Def
 ‘Who bought this book?’

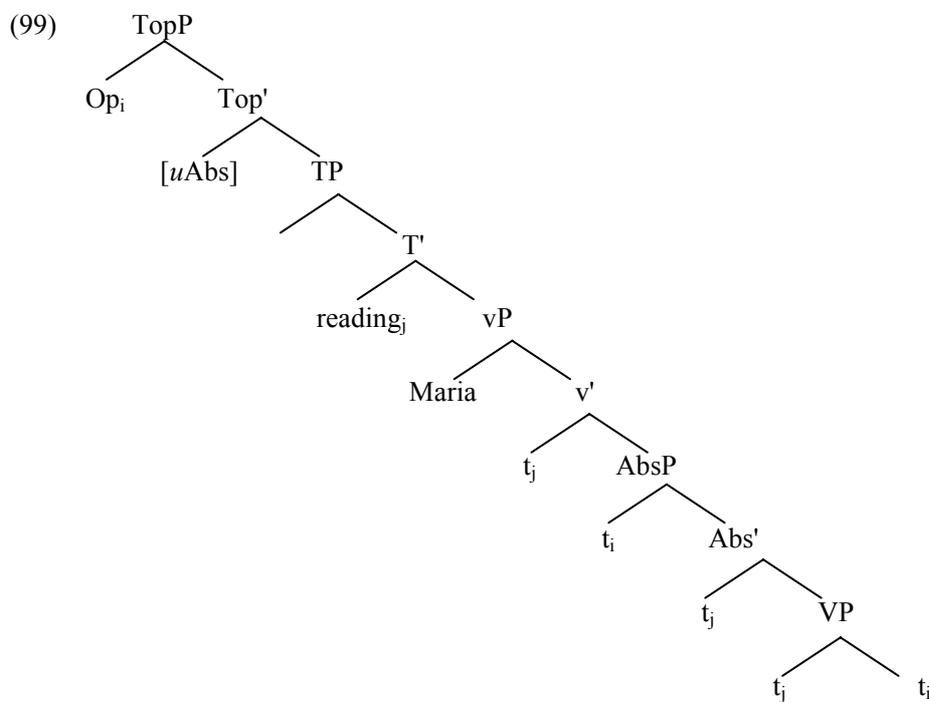


This account also rules out patient operators in antipassives. Here, AbsP is merged high, just above vP. It can only attract the agent, since the patient is inside the fronted VP.



The analysis for Tagalog wh-movement works in basically the same way. Since the operator is quantificational and must move into the C domain, Top will be merged with a $[uAbs]$ feature. This ensures that what moves into this projection will be the absolutive, just as in Seediq.

- (98) Ano ang b-in-a-basa ni Maria?
 what Abs Red-Tr.Perf-read Erg Maria
 ‘What is Maria reading?’

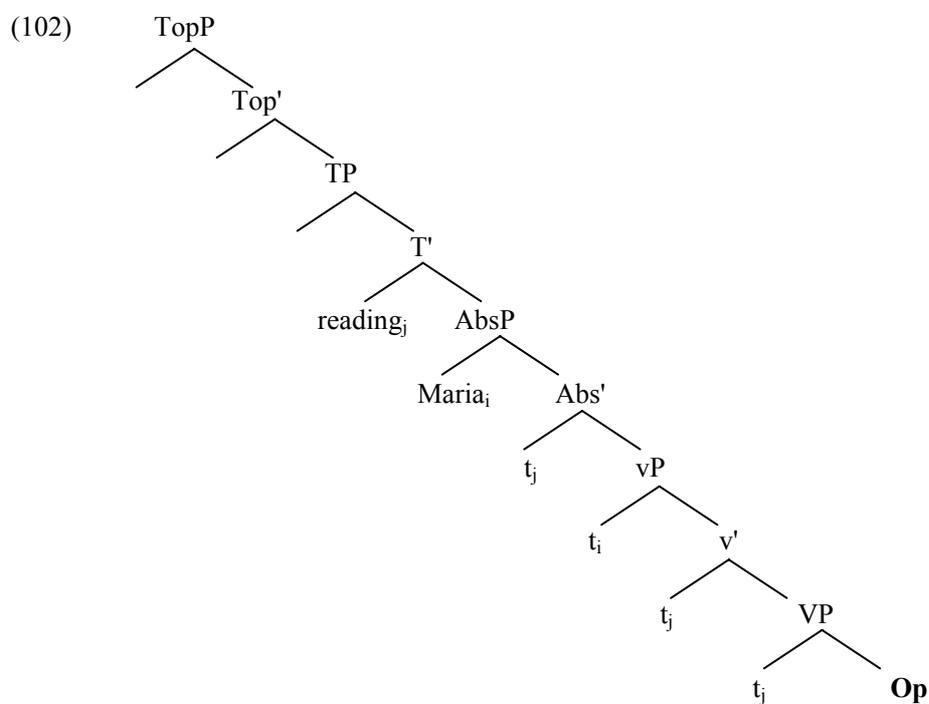


Extraction of the agent in a transitive clause is accounted for in the same way as in Seediq. An operator merged in agent position, above AbsP, will not be able to pass through this projection and check the [uAbs] feature in Top.

- (100) *Sino ang b-in-abasa ang libro?
 who Abs Red-Tr.Perf-read Abs book
 ‘Who is reading the book?’

Likewise, an operator merged in patient position will not be attracted to [Spec, Abs] in an antipassive. This is because AbsP in antipassives is merged high and will attract the agent, which is closer, and not the patient (according to the Minimal Link Condition).

- (101) *Ano ang b-um-abasa si Maria?
 what Abs Red-AP.Perf-read Abs Maria
 ‘What is Maria reading?’



5. Conclusion

This paper has developed analyses of the two kinds of *wh*-question found in the Austronesian languages Seediq and Tagalog. The two languages exhibit the same behavior, i.e., the absolutive restriction on extraction, with respect to argument question formation. I have proposed to account for this by analyzing argument *wh*-questions as pseudo-clefts. Under this view, *wh*-movement is not overt but rather involves the formation of a headless relative clause. The absolutive restriction is accounted for because the null operator in the headless relative must check an absolutive Case feature in its landing site in the C domain.

With respect to adjunct *wh*-questions, Seediq and Tagalog behave differently. I have proposed to account for this within the general process of word order generation in the two languages. If a language has X-level predicate fronting, as in Tagalog, then it will allow movement of adjuncts to clause-initial position. If the language has XP-level predicate fronting, as in Seediq, then this moved XP will become an island to movement, and adjuncts contained within this island will not be allowed to move to clause-initial position.

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206 Fairmount Ave., #2
Ithaca, NY 14850
USA
eca3@cornell.edu

賽德克語和塔加拉語名物化及疑問句探究

李 琦

Cornell University

本文主要探討賽德克語 (Seediq) 和塔加拉語 (Tagalog) 語中的兩種疑問句。句中的論元當做疑問詞時，句子通常形成分裂句，疑問詞成爲分裂句的謂語。其餘句子成分形成無頭關係子句，並且當做分裂句的主語。因此，主語優勢現象（只有主語能在句首出現）也可以歸因於關係子句的特質。相對之，附加詞疑問句通常不形成分裂句。塔加拉語中的附加詞當做疑問詞時必須移位到句首。與此相反，賽德克語中的附加詞當做疑問詞時留在原位。我們將此差異性分析成兩種語言之間的不同結構。

關鍵詞：賽德克語，塔加拉語，疑問句，分裂句，謂語提前