WH-movement in Seediq and Tagalog

Edith Aldridge
Cornell University

1. Introduction

This paper discusses two kinds of restriction found in wh-question formation in the Austronesian languages Seediq and Tagalog. One type is the familiar absolutive restriction, which allows wh-questions to be formed only on absolutes. For example, the patient can be extracted from a transitive clause, as in (1), a Seediq example, and (2), from Tagalog.

(1) S: Maanu ka wada burig-un na ape? 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.Prf-read Erg Maria
“What is Maria reading?”

The agent of a transitive clause, however, cannot be extracted, as shown in (3) and (4).

(3) S: *Ima ka wada burig-un patis-ni? who Abs Perf buy-Tr book-Def
“Who bought this 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.Prf-read Obl book
“Who is reading the book?”

The absolutive restriction holds for both Seediq and Tagalog. The other constraint examined in this paper is on adjunct wh-question formation. Seediq obeys this constraint, as shown in (8), where the locative wh-word
cannot move to clause-initial position.

(7)S: M-n-ari **inu** patis ape?
    AP-Perf-buy where book Ape
    “Where did Ape buy books?”

(8)S: *Inu m-n-ari patis ape?
    where AP-Perf-buy book Ape

(9) and (10), however, show that locative wh-words can and do appear clause-initially in Tagalog.

(9)T: **Saan-ka** b-um-ili ng libro?
    Where-2sAbs -AP.Perf-buy Obl book
    “Where did you buy the books?”

(10)T: **Kailan-ka** pu-punta sa Maynila?
    When-2sAbs AP.Red-go Dat Manila
    “When will you go to Manila?”

It is typically assumed that all clause-initial wh-words in Austronesian languages have moved to [Spec, C] (e.g. Nakamura 1994 and Richards 1996 for Tagalog; Chang 1997 and Holmer 1996 for Seediq).1

The current paper, on the other hand, takes a different view. I argue in what follows that argument and adjunct wh-questions have different structural properties, and hence the two kinds of wh-question formation are constrained in different ways. Argument wh-questions take the form of pseudo-clefts. The absolutive restriction on extraction is a consequence of the formation of the headless relative clause in the cleft construction. The analysis of argument wh-questions as pseudo-clefts is given in section 2.

1 It has also been suggested for other Austronesian languages that questions are formed on clefts and therefore do not involve overt wh-movement. (C-L Chang 1996, Tsai 1997, Y-Y Chang 1998, Liu 1999, Martohardjono 1993, Georgopoulos 1991.)
In contrast to argument wh-questions, adjunct wh-questions are formed via overt movement, in the usual way. Whether adjunct wh-words appear in clause-initial position is the result of the interaction between the basic structures of the languages and familiar movement constraints. In section 3, I show that Seediq word order generation involves XP predicate fronting. VP-internal adjuncts are contained within the moved predicate and hence cannot move to clause-initial position without invoking an island constraint. Tagalog, on the other hand, is not an XP predicate fronting language, and adjunct wh-words can move freely.

2. Argument Wh-questions as Pseudo-clefts

In this section, I argue that argument wh-questions in both Seediq and Tagalog take the form of pseudo-clefts. First, note the formal similarity between wh-questions and pseudo-clefts. In the pseudo-clefts in (12) and (13), a predicate nominal, shown in italics, forms the matrix predicate, while the subject consists of a free relative, indicated by brackets (formal properties of pseudo-clefts noted by Akmajian 1970, Chomsky 1977, Knowles 1986, among others). 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.

(12) S: *Bulebun ka [b-n-ari na ape]*
banana Abs -Perf-buy Erg Ape
“A banana is what Ape bought.”

(13) T: *Isda ang [b-in-ili ni Maria]*
fish Abs -Perf.Tr-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.

(14) S: *Malu uqun ka b-n-ari na ape.*
good eat Abs -Perf-buy Erg Ape
“What Ape bought tastes good.”

(15) T: *Hindi-ko gusto ang b-in-ili ni Maria.*
Neg-1sErg like Abs -Perf.Tr-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 (12) and (13) above. For these to be felicitous, it should be understood by the hearer that Ape bought something in (12), and that Maria bought something in (13). 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 (12) and (13). The wh-words function as the predicate nominals and appear in initial position, followed by absolutive case markers and the same headless relatives as above.

\[(16)\text{S: } \text{Maanu} \quad \text{ka} \quad \text{[b-n-ari na ape]} \]
\[
\begin{array}{llll}
\text{what} & \text{Abs} & \text{-Perf-buy} & \text{Erg} & \text{Ape} \\
\end{array}
\]
\[\text{“What did Ape buy?”}\]

\[\text{b. } \text{Bulebun} \quad \text{ka} \quad \text{[b-n-ari na ape]} \]
\[
\begin{array}{llll}
\text{banana} & \text{Abs} & \text{-Perf-buy} & \text{Erg} & \text{Ape} \\
\end{array}
\]
\[\text{“A banana is what Ape bought.”}\]

\[(17)\text{T: } \text{Ano} \quad \text{ang} \quad \text{[b-in-ili ni Maria]} \]
\[
\begin{array}{llll}
\text{fish} & \text{Abs} & \text{-Perf.Tr-buy} & \text{Erg} & \text{Maria} \\
\end{array}
\]
\[\text{“A fish is what Maria bought.”}\]

\[\text{b. } \text{Isda} \quad \text{ang} \quad \text{[b-in-ili ni Maria]} \]
\[
\begin{array}{llll}
\text{fish} & \text{Abs} & \text{-Perf.Tr-buy} & \text{Erg} & \text{Maria} \\
\end{array}
\]
\[\text{“A fish is what Maria bought.”}\]

In the following, I show that argument wh-questions in Seediq and Tagalog also have the biclausal structure associated with pseudo-clefts, where the wh-word appears in the matrix predicate position, and the rest of the clause functions as the subject of that predicate.

\[(18)=(17) \quad \text{PredP} \quad \text{based loosely on Chomsky 1977}
\]
\[\text{whati} \quad \text{DP} \quad \text{and Bowers 1993)}\]
\[\text{ang} \quad \text{CP} \quad \text{TP} \quad \text{Maria bought } \mathbf{t_i}\]

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. (19) shows ergative agreement for the agent \textit{tama} ("father"). \textit{Tama} has been topicalized and appears in clause-final position, following the absolutive case marker. The absolutive case marker in Seediq is used not only to identify the absolutive, but can also occur with a topicalized agent. (20) shows absolutive agreement for the benefactive \textit{yaku} ("I").

\[(19)\text{S: } \text{Wada-na} \quad \text{s-bari} \quad \text{hulama laqi-na}
\]
\[\text{Perf-3sErg} \quad \text{App-buy} \quad \text{treat child-3sPoss} \]
\[\text{ka } \text{tama.} \quad \text{Top} \quad \text{father}\]
“As for the father, he bought his child a treat.”

(20) S:  Ψ:  wada-ku-na s-bari hulama
         1sAbs   Abs  Perf-3sErg  App-buy treat
         ka yaku.
         1s  Abs  “As for me, she bought me a treat.”

In a cleft, however, the nominal in initial position does not register agreement on the verb. There is no *ku (“I”) clitic in (21) inside the clause to refer to the *yaku in initial position.

(21) S:  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 (21) has the structure in (22). 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.

(22) S:  Yaku ka [CP Op, [TP wada-na s-bari ti hulama]]
         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 (23), Yo is the Seediq interrogative particle, and the 2nd person clitic *su attaches to it. In (25), the Tagalog 2nd person pronoun *ka attaches to the wh-word *kailan (“when”). I assume that interrogative particles and fronted (non-argument) wh-words are associated with the C projection. Clitics, then, appear to be able to raise as high as C or [Spec, C].

(23) 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?”

(24) S:  [CP [C’ Yo-su [TP kulaun ti, [DP seedaq […]]]]
         Q-2sErg know person
         “Do you know the person who…?”

(25) T:  Kailan-ka p-um-unta sa Maynila?
         when-2sAbs -AP.Perf-go P Maynila
         “When did you go to Maynila?”

(26) T:  [CP Kailan-ka, [TP p-um-unta ti, sa Maynila ]]
         when-2sAbs -AP.Perf-go P Manila
         “When did you go to Maynila?”

2 Akmajian (1970) analyzes a similar phenomenon in English clefts.
In a cleft, however, the clitic has to stay below the nominal predicate and absolutive marker which follows it. In (27), the 3rd person Seediq ergative clitic attaches to the tense auxiliary, and in (28) the Tagalog 2nd person ergative clitic attaches to the verb.

(27) S: Ima ka wada-na s-bari hulama?
who Abs Perf-3sErg App-buytreat
“Who did she buy a treat (for)?”

(28) T: Ano ang g-in-a-gawa-mo?
what Abs Red-Perf-do-2sErg
“What are you doing?”

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

(29) S: *Ima-na ka wada s-bari hulama?
who-3sErg Abs Perf App-buytreat
“Who did she buy a treat (for)?”

(30) T: *Ano-mo ang g-in-a-gawa?
What-2sErg Abs Red-Perf-do
“What are you doing?”

(31) S: *Ima ka-na wada s-bari hulama?
who Abs-3sErg Perf App-buy treat
“Who did she buy a treat (for)?”

(32) T: *Ano ang-mo g-in-a-gawa?
what Abs-2sErg Red-Perf-do
“What are you doing?”

This is not what we expect if (27) and (28) 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.

(33) S: *[CP Ima-na [C ka [TP wada s-bari
who-3sErg Abs Perf-3sErg App-buy
hulama ≈]]
treat
“Who did she buy a treat (for)?”

(34) T: *[CP Ano-mo [C ang [TP g-in-a-gawa ≈]]
What-2sErg Abs Red-Perf-do
“What are you doing?”

Clearly, this mono-clausal structure does not explain the positions of the clitics in (27) and (28). However, the bi-clausal cleft analysis given above does account for this. The wh-word and absolutive case marker in each example are not contained in the CP where the clitic originates. The highest position available to the clitic in these examples is the verb or auxiliary verb in residing in initial position in the embedded CP. In (27) this is the auxiliary
wada, as shown in (35). For (28), this is the verb ginagawa, as shown in (36). The operators in [Spec, C] are phonetically null and so cannot host clitics.

(35)S: Ima, ka [CP Op, [TP wada-na s-bari ti, hulama]]
who Abs Perf-3sErg App-buytreat
“Who did she buy a treat (for)?”

(36)T: Ano, ang [CP Op, [TP g-in-a-gawa-mo ti]]
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. As shown above, these clefts have biclausal structures and are composed of a predicate nominal and a headless relative clause, which functions as the argument of this predicate. The predicate nominal is associated with the gap inside the relative via coindexation with the null operator which moves to [Spec, C] of the relative clause. In light of this, the absolutive restriction on extraction in argument wh-questions can be accounted for in the same way as in relative clause formation. Relative clause formation in these languages shows the same absolutive restriction as argument wh-questions. For example, a patient can be relativized in a transitive clause, as in (37a), but not an agent, as in (37b). An agent can only be relativized in an antipassive, as in (37c).

(37)a. S: bulebun b-n-ari na ape
banana -Perf-buy Erg Ape
“the banana which Ape bought”

b. *seediq b-n-ari bulebun
person -Perf-ari banana
“the person who bought a banana”

c. seediq m-n-ari bulebun
person AP-Perf-buy banana
“the person who bought a banana”

Discussion of relative clause formation is a topic designated for future research and beyond the scope of the current paper.

3. Predicate Fronting and Adjunct Wh-questions

This section discusses generation of adjunct wh-questions in Seediq and Tagalog. In contrast to argument wh-questions, adjunct wh-questions do not resemble clefts. They are not composed of a predicate nominal followed by a free relative. In the Seediq example below, the wh-word appears inside the clause, immediately following the verb.

(38)S: M-n-ari inu patis ape?
AP-Perf-buy where book Ape
“Where did Ape buy books?”
Also unlike argument wh-questions, questions formed on adjuncts are mono-clausal, as can be seen by the position of clitic pronouns. Clitics attach to the fronted wh-word, showing that the wh-word is located in the same CP as the clitic’s base position.

(39) T: Saan-ka b-um-ili ng libro?
   Where-2sAbs -AP.Perf-buy Obl book
   “Where did you buy the books?”

(40) T: [CP Saan,-ka [TP b-um-ili ng libro t ]] Where-2sAbs -AP.Perf-buy Obl book
   “Where did you buy the books?”

In what follows, I show that extraction possibilities in adjunct wh-question formation can be explained by structural differences between the two languages, specifically, whether basic word order is generated via XP predicate fronting or not. In an XP predicate fronting language, the absolutive moves to a checking position and the remnant clause fronts to its left, thereby generating VOS word order. The fact that VP-internal adjuncts cannot appear in clause-initial position is explained by the fact that extracting any nominal from the fronted remnant violates the CED (Huang 1982). I propose that Seediq is an XP predicate fronting language. Locative wh-words, contained inside the fronted predicate, never move to clause-initial position.

(41) S: M-n-ari inu patis ape?
   AP-Perf-buy where book Ape
   “Where did Ape buy books?”

(42) S: *Inu m-n-ari patis ape?
   where AP-Perf-buy book Ape

(43)

\[
\begin{array}{c}
\text{*CP} \\
\text{where,} \\
\text{C'} \\
\text{kaP} \\
\text{vP,} \\
\text{ka'} \\
\text{TP} \\
\text{bought books t} \\
\text{Ape} \\
\text{T'} \\
\text{t} \\
\end{array}
\]

Tagalog, on the other hand, I do not analyze as an XP predicate fronting language. Tagalog basic word order is VSO, nominals generally appearing in their thematic order. Adjunct wh-words in Tagalog also typically appear in clause-initial position. This is easily explained if Tagalog verb-initial word order is generated by simply moving the verb. Adjuncts are then not contained in an island and can front freely.

(44) T: Saan ka b-um-ili ng libro?
   where 2sABS -ATP.PERF-buy OBL book
   “Where did you buy the books?”

(45)

(46) S: Wada m-ari hulama laqi ka ape.
   Perf AP-buy treat child Abs Ape
   “Ape bought the child a treat.”

(47) S: *Wada m-ari ka ape hulama laqi.
   Perf AP-buy Abs Ape treat child
   “Ape bought the child a treat.”

(48) S: Wada-na s-tabu huling ka buuts rodux.
   Perf-3sErg App-feed dog Abs bone chicken
   “She fed the chicken bones to a/the dog.”

(49) S: *Wada-na s-tabu ka buuts rodux huling.
   Perf-3sErg App-feed Abs bone chicken dog
   “She fed the chicken bones to a/the dog.”

Detailed analyses of word order generation in Seediq and Tagalog are given in Aldridge (2000). The key arguments are repeated below. First is word order. Seediq absolutes must appear in clause-final position and never in medial position. This indicates that these nominals must move overtly to a fixed position.
This is not the case in Tagalog, however. Absolutives appear in their base positions in least marked word order. In the ditransitive clause shown in (50) and (51), for example, it is somewhat awkward to move the patient absolute to the right of the goal.

(50) T: 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.”

   -Tr.Perf-buy Erg woman Dat Juan Abs fish
   “The woman bought the fish from Juan.”

There are also cases where absolutives cannot appear in clause-final position. The matrix absolute in the object control construction in (52) must appear before the complement clause. Moving it to final position results in ungrammaticality.

(52) T: Na-himok ko si Pedro [na bilh-in
   Perf-persuade 1sErg Abs Pedro Comp buy-Tr
   yung libro] that.Abs book
   ‘I persuaded Pedro to buy that book.’

(53) T: *Na-himok ko [na bilh-in yung libro] si Pedro
   Perf-persuade 1sErg Comp buy-Tr that.Abs book
   Abs Pedro

The structure given for Tagalog in (45) is also supported by evidence that the ergative nominal is in a structural position c-commanding the absolutive. The ergative can bind the absolutive reflexive in (54). Interestingly, the absolutive cannot bind an ergative reflexive in (55), which indicates that the absolutive is not in a position c-commanding the ergative.

(54) T: P-in-igil ng lalaki ang sarili.
   ~TRANS.PAST~control ERG man ABS self
   ‘The man controlled himself.’

(55) T: *P-in-igil ng sarili ang lalaki
   ~TRANS.PAST~control ERG self ABS man

A different situation is found in Seediq. The antecedent must be the absolutive. The antipassive in (56), where an agent absolute binds an oblique reflexive, is grammatical. This indicates that the absolutive in this language is located in a high position.

(56) S: Wada-nak m-ari rulu ka Ape.
   Perf-Ref1 AP-buy car Abs Ape
   “Ape bought herself a car.”

(57) S: *Wada-nak s-bari rulu ka Ape.
   Perf-Rfl App-buy car Abs Ape
Another indication that Seediq and Tagalog differ structurally with respect to predicate fronting comes from the case-marking system. There is reason to believe that what have traditionally been analyzed as case markers in Seediq (Li 1997, Holmer 1996, Chang 1997) are not determiner-type heads taking nominal elements as their complements but rather clause-level functional categories which attract all or part of the predicate. One way in which Seediq case markers are different from Tagalog is the fact that there are only two, absolutive *ka* and ergative *na*. Tagalog has a comparatively richer system, marking not only absolutive and ergative but additionally dative and locative.

(58) T: B-in-ilin *ng* babae *ang* isda *kay* Huan.
     -Tr.Perf-buy Erg woman Abs fish Dat Juan
     “The woman bought the fish from Juan.”

(59) T: Pu-punta *si* Maria *sa* Maynila.
    Red-go Abs Maria P Maynila
    “Maria will go to Manila.”

Tagalog markers also make certain semantic distinctions like whether the nominal it selects is a common noun or personal name.

(60) T: Um-iyak *si* Maria.
        Intr.Perf-cry Abs Mari
        “Maria cried.”

(61) T: Um-iyak *ang* bata.
        Intr.Perf-cry Abs child
        “The child cried.”

Tagalog markers can also sometimes distinguish specific from non-specific nominals.

(62) T: K-um-ain *ng* ako *isda*.
      -AP.Perf-eat 1sAbs Obl fish
      “I ate a fish.”

(63) T: K-um-ain *sa* ako *isda*.
      -AP.Perf-eat 1sAbs Dat fish
      “I ate the fish.”

This semantic connection seen in Tagalog makes it reasonable to assume that the case markers select the nominals following them. No such semantic information is encoded in Seediq “case” markers, however.

Another interesting fact is that dislocated nominals in Tagalog retain their case markers, indicating that these form a constituent together.

(64) T: Pu-punta *sa* ako *Maynila*.
        Red-go 1sAbs Dat Manila
This is not the case with Seediq, however. A “case” marker cannot appear with a fronted nominal, indicating that these do not form as constituent.

One final indication that the Seediq absolutive marker is not a case marker is the fact that it marks not only absolutives but topics, generally.

Based on the above evidence, I propose that the Seediq marker ka is a clause-level head whose function is to attract the predicate, thereby inducing predicate fronting in this language. Tagalog is not a predicate fronting language. And its case markers are D-level functional heads that select the nominals that follow them.

5. Conclusion

This paper has examined two types of wh-question in Austronesian languages. First, I have challenged the traditional assumption that all wh-questions are formed by moving the wh-word into [Spec, C] and proposed that argument wh-
questions instead take the form of pseudo-clefts. The well-known absolutive restriction on extraction can then be reduced to the constraints governing the formation of the headless relative clause portion of the pseudo-cleft construction.

On the other hand, I proposed that wh-questions formed on adjuncts do involve movement of the wh-word to [Spec, C]. The fact that adjunct wh-words appear clause-initially in Tagalog but not in Seediq can be explained by positing that Seediq is an XP predicate fronting language, while Tagalog is not.

The aim of this paper has been to clarify the structures of wh-questions in Seediq and Tagalog as well as to suggest a direction for studies in word order typology in Austronesian languages.

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Department of Linguistics
Morrill Hall, Cornell University
Ithaca, NY USA

eca3@cornell.edu