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SUBJECT MARKING ON NON-SUBJECTS IN SQUALIQ ATAYAL*

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I investigate the distribution of the morpheme *qu* in Squaliq Atayal (Formosan). *Qu* normally marks the sentence-final subject, which is cross-referenced by voice morphology on the verb. I show that *qu* can optionally mark specific, non-subject arguments in cases where the actual subject is not in sentence-final position. I propose that *qu* is a marker on topics licensed in a particular structural position (Spec,TopicP). While the subject will normally be in this position, when it is not, another [+specific] DP can occupy this position and be *qu*-marked. Consequences for theories of Austronesian voice will be discussed.

1. Introduction

In this paper I investigate the distribution of the morpheme *qu* in Squaliq Atayal. *Qu* optionally marks the clause-final subject position and has been described in previous literature as a subject marker or a case marker associated with the subject. In Fuhsing Squaliq Atayal, I will show that *qu* can optionally mark a specific, non-subject argument, when the subject is not in sentence-final position.

I proposed that *qu* is a marker of *topic*, licensed in a particular structural position (Spec, TopicP), rather than a marker on the subject. In sentences with a full DP subject, the subject will occupy this topic position and be *qu*-marked. However, in derivations where the subject will not occupy Spec,TopicP, a specific DP can be base-generated there as a topic with clitic left dislocation, binding an internal argument clitic below. Evidence for this view comes from the position of *qu*-marked topics in polar questions.

Data here is primarily from three speakers in their fifties and sixties. All grew up in and live near Fuhsing township, Taoyuan county, Taiwan.

2. “Subject” and voice in Atayal

Atayal exhibits a familiar system of voice alternations, where one argument of the verb is cross-referenced by voice morphology on the verb and enjoys a privileged status. I will use the term “subject” pre-theoretically to refer to this argument.¹ Canonical Atayal word order is predicate-

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¹Other work on Austronesian has called this argument the “topic,” “trigger,” or “pivot.”

initial and subject-final. Consider the alternation between Actor Voice (AV) and Patient Voice (PV) in (1–2) below. Atayal also has a Locative Voice and a Benefactive/Instrumental Voice, but I will limit discussion here to AV and PV.

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|--|---|
| <p>(1) <i>Actor Voice (AV):</i> Cyux m-anìq sehuy (qu) Yuraw. AUX AV-eat taro QU Yuraw ‘Yuraw eats/is eating taro.’</p> | <p>(2) <i>Patient Voice (PV):</i> Cyux niq-un na Yuraw (qu) sehuy. AUX eat-PV GEN Yuraw QU taro ‘Yuraw eats/is eating taro.’</p> |
|--|---|

In the AV variant in (1) the actor *Yuraw* is in sentence-final position. In the PV variant in (2) the patient *sehuy* ‘taro’ is in this position. This sentence-final subject position is normally marked by *qu*, although this marking can optionally be dropped. Furthermore, we see in the following VOS sentences that *qu* can only appear on the sentence-final subject argument, not on the internal object, in both AV and PV:

- (3) a. Cyux m-anìq (*qu) sehuy qasa (✓qu) Yuraw.
 AUX AV-eat QU taro that QU Yuraw
 ‘Yuraw is eating that taro.’
 b. Cyux niq-un na/*qu Yuraw (✓qu) sehuy qasa.
 AUX eat-PV GEN/QU Yuraw QU taro that
 ‘Yuraw is eating that taro.’

The marker *qu*, then, seems to specifically pick out this sentence-final subject position. Previous work has therefore described *qu* as a nominative case marker (Rau, 1992; Huang, 1993, 1995, a.o.). This *qu* marking will be the empirical focus of this paper. Before moving on to the puzzle posed by *qu*, however, I will present some important properties of the subject position.

The choice of voice used in a clause has the effect of privileging one argument—the subject—over other arguments for both syntactic and semantic operations. I will present two such effects here. The first is that the subject is interpreted as the discourse topic, often constraining the choice of voice used. Consider the two contexts below:

- (4) *Context: someone asks about what Yuraw is doing* ⇒ AV:
 a. ✓ Cyux m-anìq sehuy (qu) Yuraw. b. # Cyux niq-un na Yuraw (qu) sehuy.
 AUX AV-eat taro QU Yuraw AUX eat-PV GEN Yuraw QU taro
 ‘Yuraw is eating taro.’ ‘Yuraw is eating taro.’
- (5) *Context: someone asks about the taro* ⇒ PV:
 a. # Cyux m-anìq sehuy qasa (qu) Y. b. ✓ Cyux niq-un na Y. (qu) sehuy qasa.
 AUX AV-eat taro that QU Y. AUX eat-PV GEN Y. QU taro that
 ‘Yuraw is eating that taro.’ ‘Yuraw is eating that taro.’

In the context in (4), where *Yuraw* is the discourse topic, AV must be used to communicate that *Yuraw* is currently eating taro, putting *Yuraw* in subject position. In the context in (5), where the *taro* is the discourse topic, PV must be used to communicate the same assertion, putting the *taro* in subject position. This property of the subject will be important for my analysis of *qu* later.

The second property is that \bar{A} -extractions are limited to this subject argument. Therefore actor *wh*-questions must be in AV (6), while patient *wh*-questions must be in PV (7).²

(6) *Actor extraction* \Rightarrow AV:

- a. ✓ Ima (qu) p-hapuy sehuy qani ___? b. * Ima (qu) puy-un ___ (qu) sehuy?
 who QU AV-cook taro this who QU cook-PV QU taro
 ‘Who will cook these taro?’ Int.: ‘Who will cook these taro?’

(7) *Patient extraction* \Rightarrow PV:

- a. * Nanu (qu) m-aniq ___ (qu) Yuraw? b. ✓ Nanu (qu) wal niq-un (na) Y. ___?
 what QU AV-eat QU Yuraw what QU AUX eat-PV GEN Y.
 Intended: ‘What did Yuraw eat?’ ‘What did Yuraw eat?’

Other \bar{A} -extractions—left topicalization, relative clause formation, and focus movement—also exclusively target the subject, as determined by voice morphology.

3. Subject marking on non-subjects

In the previous section I presented the basics of the voice system in Atayal and the sentence-final subject position. A number of grammatical processes target this subject position: the subject is cross-referenced by the voice morphology on the verb; the subject tracks the discourse topic; the subject is the only argument that can be \bar{A} -extracted; and the subject can be *qu*-marked. Based on what we have observed so far, we would expect \bar{A} -extraction and *qu* marking to be in complementary distribution.

In this section I show that, in some situations, *qu* can mark an argument which is not the subject as determined by voice morphology. This can happen when the real subject is not in final position, either through extraction or cliticization. We begin with the case of AV clauses, where the actor subject has been \bar{A} -extracted, and is therefore not in sentence-final position. As we see in the following examples, the internal argument patient, which is normally unmarked, can be *qu*-marked. (The preverbal *qu* is expected in these constructions; see footnote 2.) This non-subject *qu* will be bolded throughout.

(8) *Actor wh-question, AV:*

- Ima (qu) wal m-aniq (**qu**) sehuy qasa?
 who QU AUX AV-eat QU taro that
 ‘Who ate that taro?’

(9) *Actor cleft, AV:*

- Iyat Yuraw (qu) m-aniq (**qu**) sehuy qani.
 NEG Yuraw QU AV-eat QU taro this
 ‘It’s not Yuraw who ate this taro.’

²Note that *wh*-argument questions in Atayal take the form of a (pseudo)cleft (Huang, 1996), as is common in Austronesian languages (Aldridge, 2002, to appear; Potsdam, 2009; Paul, 2001, a.o.). What are glossed as *wh*-words ‘who’ and ‘what’ are matrix predicates, taking the presupposed material of the question as an argument. This explains the fact that the subject marker *qu* can appear between the *wh*-word and the rest of the clause: the material following *qu* is a headless relative clause which is structurally the matrix subject. As a result, the \bar{A} -relation in question in (6–7) may be that involved in the formation of a relative clause, rather than overt *wh*-movement.

- (10) *Actor focus movement, AV:*
 Nanak Yuraw (qu) m-aniq (**qu**) yaqeh na qnaniq.
 only Yuraw QU AV-eat QU bad GEN food
 ‘Only Yuraw eats the bad food.’

Recall from (3) above that, if the subject is in sentence-final position, the internal argument cannot be *qu*-marked, making this *qu*-marking on non-subjects unexpected.

Non-subject *qu* is also licensed if a clitic pronoun is used for the subject. For the glosses of clitics, I will here use nominative alignment terminology, where the subjects of AV and PV clauses are glossed as *nominative*, the patient in AV clauses is *accusative*, the actor in PV clauses is *genitive*. However, note that Atayal only has clitic pronoun series for nominative and genitive arguments (Huang, 2006). In the following example, the subject (nominative) pronoun has cliticized to the auxiliary, the highest verbal head in the clause, allowing the internal argument patient to optionally be marked by *qu*:

- (11) *AV clause with cliticized subject (actor):*
 Wal=sami m-ita (**qu**) Tali.
 AUX=NOM.1plE AV-see QU Tali
 ‘We (exclusive) see Tali.’

The generalization so far is that a non-subject argument can be exceptionally *qu*-marked if the actual subject, as determined by voice morphology on the verb, is no longer in clause-final position. Another condition on non-subject *qu* is that it requires the non-subject argument to be specific, as observed by the following minimal pair:

- (12) *Qu-marking requires specificity:*
 a. Nyux=saku m-aniq (**qu**) yutak qani.
 AUX=NOM.1sg AV-eat QU orange this
 ‘I am eating this orange.’
 b. Nyux=saku m-aniq (***qu**) yutak.
 AUX=NOM.1sg AV-eat QU orange
 ‘I am eating oranges.’

Next we will turn our attention to PV clauses, where non-subject arguments can be exceptionally *qu*-marked under the same conditions: when the subject is not in clause-final position, due to \bar{A} -extraction or cliticization, and the non-subject argument is specific. The only difference is that non-subject *qu*-marking in PV must cooccur with a corresponding genitive clitic on the verb.

- (13) *Patient wh-question, PV:*
 Nanu (qu) cyux=*(**nya**) niq-un *na/√**qu** Yuraw?
 what QU AUX=GEN.3sg eat-PV GEN/QU Yuraw
 ‘What is Yuraw eating?’

- (14) *Patient focus movement, PV:*
 Ana knux na qnaniq (qu) niq-un=*(nya) *na/√qu Yuraw.
 even smelly GEN food QU eat-PV=GEN.3sg GEN/QU Yuraw
 ‘Yuraw eats even smelly food.’
- (15) *PV clause with cliticized subject (patient):*
 Wal=sami=*(nya) kt-an *na/√qu Tali.
 AUX=NOM.1plE=GEN.3sg see-PV GEN/QU Tali
 ‘Tali saw us (exclusive).’

This difference between AV and PV clauses—that non-subject *qu* requires a matching genitive clitic in PV but not AV—correlates with the difference between the original form of the internal arguments. In an AV clause the internal argument patient is originally unmarked, but in a PV clause the internal argument actor is originally genitive marked.³

To summarize, the morpheme *qu* is normally used to mark the sentence-final subject position. However, in this section I showed that another, non-subject argument can be exceptionally *qu* marked if it is specific and the actual subject is not in clause-final position. Finally, when a non-AV actor is exceptionally *qu*-marked, a corresponding genitive clitic must be used. To my knowledge this use of *qu* on non-subject arguments has not been documented previously. In the next section I will propose an analysis for this behavior.

4. Proposal

I argue that *qu* is a marker of *topic* licensed in a particular, high structural position. I will call this position Spec,TopicP following the work of Rizzi (1997) and others on the articulation of functional projections cross-linguistically. This position is normally occupied by the subject. However, when Spec,TopicP is not occupied by a subject, it can host a specific DP through *clitic left dislocation (CLLD)*. *Qu*-marked non-subject arguments are therefore in a higher position in the clause than regular internal arguments.

I begin by presenting my assumptions for the clausal syntax of Squaliq Atayal (§4.1) and then demonstrate how my analysis accounts for the behavior observed in the previous section (§4.2). In subsequent sections, I will present evidence for exceptionally *qu*-marked non-subject arguments being in a higher structural position than regular internal arguments (§4.3), relate my proposal to some variation observed across Atayalic (§4.4), and discuss the consequences of this behavior for theories of the Austronesian voice system (§4.5).

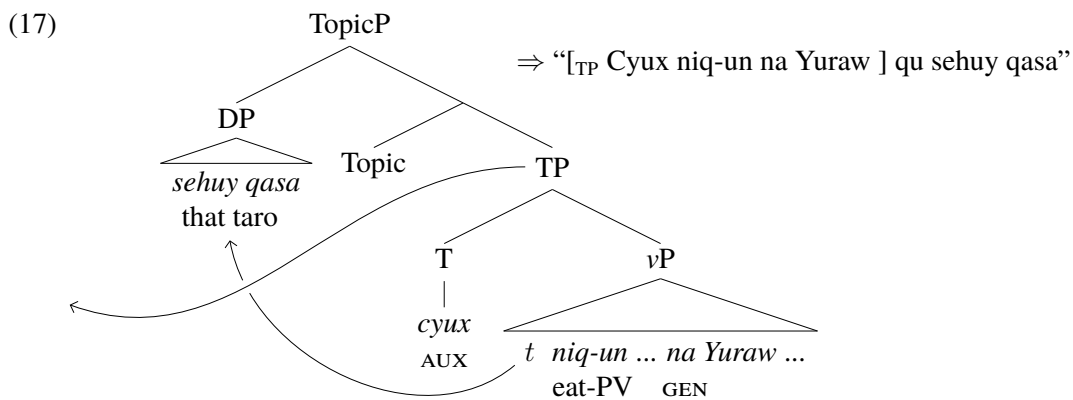
4.1. The clausal syntax of Squaliq Atayal

My approach to the clausal syntax of Squaliq Atayal will follow Aldridge’s (2004) proposal for Seediq, a related Atayalic language. Aldridge (2004) proposes that verb-initial order is derived by obligatory TP-fronting. The subject—and only the subject—moves out of TP to a topic position before TP-fronting occurs, resulting in its sentence-final subject position.

³The salient division is arguably between AV on the one hand and non-AV on the other. The internal argument actor is normally genitive marked in all non-AV clauses. Non-subject *qu* can target the internal argument actor in other voices as well, in which case a corresponding genitive clitic is required, just as we see here with PV.

Consider the derivation of the PV clause in example (3b), repeated here as (16). After the TP is built, we merge the Topic head which has an EPP feature.⁴ As the subject *sehuy qasa* is the closest DP to the Topic probe, it is attracted by Topic. TP subsequently fronts (shown only with an arrow in the tree below), yielding the desired verb-initial, subject-final word order. I propose that the DP in Spec,TopicP position is realized optionally with *qu* and only one Spec,TopicP can be generated per clause—an assumption I will return to in section 4.4.

- (16) *A standard PV clause (=3b):*
 Cyux niq-un na Yuraw (qu) sehuy qasa.
 AUX eat-PV GEN Yuraw QU taro that
 ‘Yuraw eats that taro.’



Notice how the subject is distinguished from other arguments in the above derivation. First, the subject occupies the Spec,*vP* position at the edge of the *vP* phase. Aldridge (2004) proposes that the subject is therefore the only argument which can be \bar{A} -moved out of the *vP* domain. Other arguments inside *vP* phase which have not been moved to the edge will be inaccessible to outside probing due to Phase Impenetrability, explaining the restriction of \bar{A} -extractions to the subject. Second, the subject is moved to the topic position in Spec,TopicP, where it is optionally *qu*-marked, explaining why only the subject (patient) in (16) can be *qu*-marked. Finally, because it is in a designated “topic” position, we explain why the choice of *qu*-marked argument tracks the discourse topic.

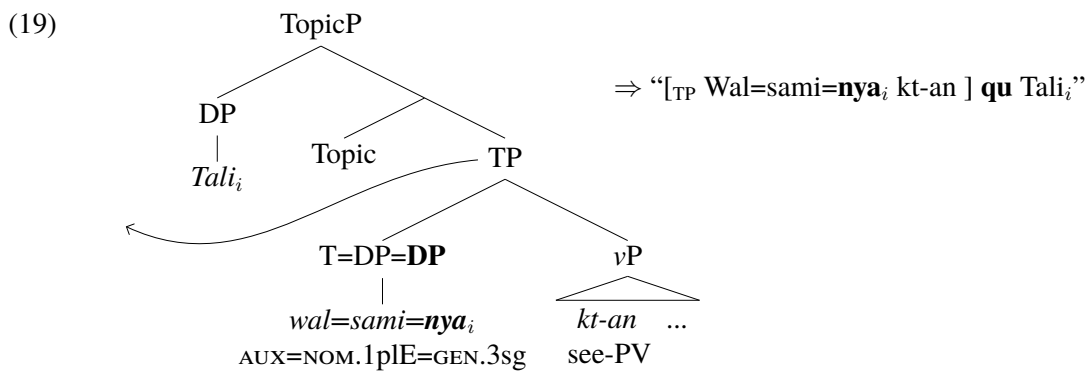
4.2. The derivation of non-subject *qu*

Now I will present my proposed derivation for clauses with non-subject *qu*-marking. I begin with the case of PV clauses where the subject has been cliticized to a verbal head, using a nominative clitic. In this case, the subject does not move to Spec,TopicP, and therefore the position can be used to host a topic with *clitic left dislocation (CLLD)*. CLLD is an operation where a DP is base-generated in a clause-peripheral position and coindexed with a lower clitic (Cinque, 1990; Iatridou, 1995; Anagnostopoulou, 1994).

⁴In Aldridge (2004), this head is simply called C, but the obligatory movement of the subject to this position is referred to as “topicalization.”

Below I illustrate the derivation of example (15), repeated here as (18). The TP is built with a first-plural-exclusive subject, cliticized to the auxiliary using a nominative clitic, and a third-singular pronoun for the internal argument actor, cliticized using a genitive clitic. The Topic functional head is then merged, and we base-generate the topic *Tali* in Spec,TopicP, which binds the genitive clitic below with matching φ -features. This relationship is the clitic left dislocation. After TP-fronting, we yield the expected word order. Finally, the DP *Tali* is in Spec,TopicP and therefore is optionally *qu*-marked. This is the source of non-subject *qu*.

- (18) *PV clause with subject clitic, with non-subject qu and matching genitive clitic (=15):*
 Wal=sami=**nya** kt-an **qu** Tali.
 AUX=NOM.1plE=GEN.3sg see-PV QU Tali
 ‘Tali saw us (exclusive).’

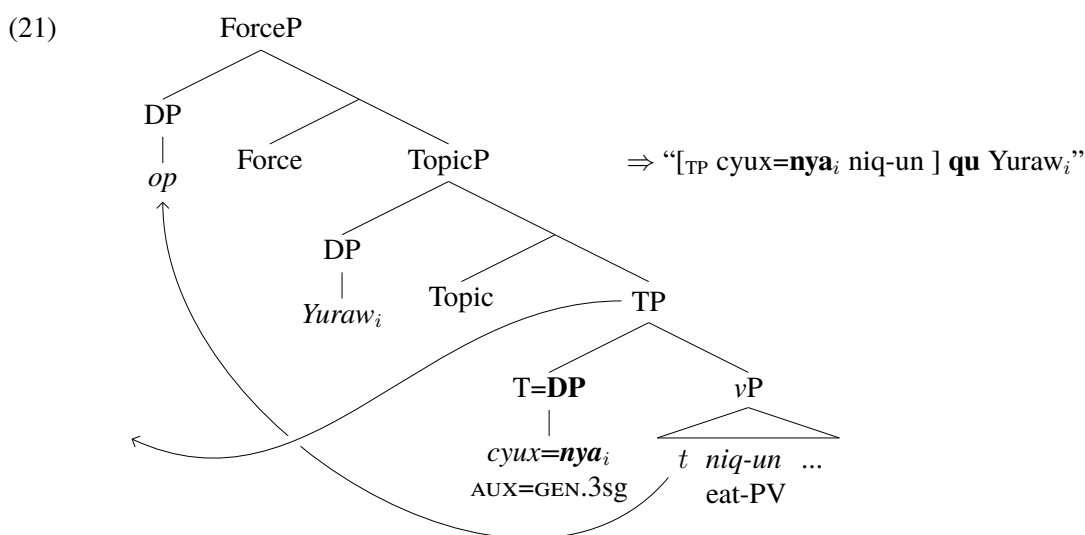


A few properties of this derivation are important to note. The DP which we originally described as an exceptionally *qu*-marked non-subject, *Tali* above, never originated within the v P. Rather, it is base-generated in a higher position via CLLD, binding a bound variable clitic within the clause. The exceptionally *qu*-marked non-subject is outside of the TP, preserving Aldridge’s (2004) idea that only the subject argument, as determined by the choice of voice morphology, is able to move out of v P. We also predict that exceptionally *qu*-marked non-subjects are structurally in a very different position than non-*qu* marked internal arguments: Spec,TopicP, as opposed to inside v P. In section 4.3, I will present evidence for this difference in structural position. Finally, because this argument is base-generated in a designated topic position, this proposal explains why non-subject *qu*-marking is incompatible with nonspecific DPs.

Next consider the case of a PV clause where the subject has been \bar{A} -extracted. I adopt a Rizgian split CP system where different heads in the CP periphery host landing sites for different forms of \bar{A} -movement. In particular, the \bar{A} -movement of abstraction operators involved in the derivation of argument *wh*-questions, relative clauses, etc., do not move through Spec,TopicP, leaving Spec,TopicP open for the generation of a topic with CLLD. Here for concreteness I call the target of operator movements Spec,ForceP, and illustrate Spec,TopicP below it—both orders may in fact be possible, which will become relevant in section 4.3. An example is (13), repeated below as (20).

- (20) *PV clause with subject extraction, with non-subject qu and matching clitic (=13):*
 Nanu (qu) cyux=**nya** niq-un **qu** Yuraw?
 what QU AUX=GEN.3sg eat-PV QU Yuraw
 ‘What is Yuraw eating?’

The derivation I propose for (20) is partially illustrated in the tree below.⁵ We generate a TP with the relevant \bar{A} -operator in subject position at the edge of vP and a pronominal clitic for the internal argument actor. The topic *Yuraw* is base-generated in Spec,TopicP and binds the clitic below. This is the clitic left dislocation step. The subject \bar{A} -operator moves and then we front the TP, yielding the desired word order. Again, we have preserved the restriction that only the subject is able to be \bar{A} -moved out of the vP .



So far I’ve presented my proposal for PV clauses. AV clauses differ from PV clauses in two ways, which I will argue to be causally linked. First, the internal argument (actor) in a PV clause is genitive marked (*na*), while the internal argument (patient) in an AV clause, which we can think of as accusative, is in an unmarked form in Squaliq Atayal.⁶ Second, when the internal argument in a PV clause is *qu*-marked, the argument then must be doubled by a genitive clitic. However, when the internal argument in an AV clause is *qu*-marked, there is no corresponding clitic added to the verb.

I propose that the status of non-subject *qu*-marking is exactly the same in PV as it is in AV: a non-subject argument is base-generated in Spec,TopicP and binds a clitic pronoun. As noted previously, Atayal only has clitic pronoun series for nominative and genitive arguments. I propose that the lack of overt accusative clitics is simply a morphological gap, and therefore

⁵Here I assume that the movement of a null operator is involved in the derivation of this *wh*-question and in similar \bar{A} -constructions. The *wh*-word *nanu* will be the predicate in a higher clause, and is therefore not illustrated in (21). See footnote 2 and references therein.

⁶The lack of an overt marker for the internal argument of AV clauses seems to be a morphological gap in Squaliq Atayal. For example, there are more conservative C’uli’ dialects which have overt markers for such arguments (Huang, 2006), i.e. accusative case markers.

the same process of CLLD is operant in AV cases as well as PV cases.⁷ This is schematized in the following minimal pair of sentences with non-subject *qu* in PV and AV:

(22) *In PV, CLLD (non-subject qu) uses a genitive clitic:*

Wal=sami=**nya** kt-an (**qu**) Tali.
 AUX=NOM.1plE=GEN.3sg see-PV QU Tali
 ‘Tali saw us (exclusive).’ (=18)

(23) *In AV, CLLD uses a null accusative clitic:*

Wal=sami= \emptyset m-ita (**qu**) Tali.
 AUX=NOM.1plE=ACC.3sg AV-see QU Tali
 ‘We (exclusive) saw Tali.’ (=11)

4.3. Evidence for the high position of *qu*-marked arguments

My proposal here makes the prediction that exceptionally *qu*-marked non-subject arguments are in a structurally higher position (Spec,TopicP) than regular corresponding internal arguments (in *v*P). In this section I will present evidence for this from the syntax of polar question formation in Squaliq Atayal. Polar questions can be formed by adding the question marker *ga*, either in sentence-final or pre-subject position, but not between the verb and an internal argument:

(24) *Question marker ga can be in pre-subject or sentence-final position:*

M-wah (‘**ga**) (qu) Yuraw (‘**ga**)?
 AV-come GA QU Yuraw GA
 ‘Will Yuraw come?’

(25) *Question marker ga is not possible before the internal argument:*

Cyux m-anig (***ga**) yutak (‘**ga**) (qu) Yuraw (‘**ga**)?
 AUX AV-eat GA orange GA QU Yuraw GA
 ‘Is Yuraw eating oranges?’

The sentence-final option is well documented across Atayal (Huang, 1996), but the pre-subject option does not seem to be discussed in the literature. However, similar question markers in pre-subject position are observed in other Austronesian languages as well. Here is a Malagasy example from Pearson (2005):

(26) *Malagasy pre-subject polar question marker ve:*

Mamono ny akoho amin’ny antsy **ve** ny mpamboly?
 AT.kill Det chicken with-Det knife Q Det farmer
 ‘Is the farmer killing the chickens with the knife?’

This *ga*-marking is an interrogative clause-typing marking, rather than a marker for root clauses which instantiate question speech acts. This is evidenced by its availability in embedded questions. For example, the verb *pqut*- ‘ask’ requires that its embedding be of question type,

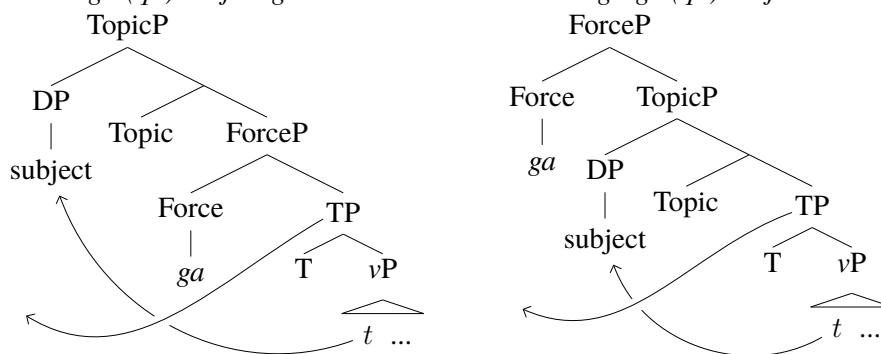
⁷To my knowledge this lack of an overt accusative clitic series is true across Atayalic. There is another gap as well: the third-person nominative clitic form is also null across Atayalic (Huang, 2006; Aldridge, 2004, p. 40).

which is satisfied in example (27) by a pre-subject *ga* in the embedded clause:

- (27) *Question marker ga in embedded question:*
 Pqut-an=maku Tali [m-wah *(ga) Yuraw].
 ask-LV=GEN.1sg Tali AV-come GA Yuraw
 ‘I asked Tali [whether Yuraw will come].’

I therefore propose that *ga* is a realization of the clause-typing Force head in the Rizzi (1997) split CP system. The two different word orders observed above—“(qu) subject *ga*” or “*ga* (qu) subject”—are the result of TopicP projecting either above or below ForceP, respectively. These two options are illustrated in the trees below. In either case, the TP will front to yield the final word order.

- (28) a. *Deriving “(qu) subject ga” order:* b. *Deriving “ga (qu) subject” order:*



This proposal for *ga* both (a) captures the word order distribution of *ga*, available before or after the sentence-final subject but not inside TP, and (b) relates the semantic function of *ga* to a clause-typing C head (Force), as expected cross-linguistically. We can use the position of the question marker *ga* as a diagnostic for the structural position of exceptionally *qu*-marked non-subjects: if *ga* must follow the *qu*-marked non-subject, it must be inside the fronted TP; if *ga* can precede it, it must be outside of the fronted TP. As expected by my proposal, exceptionally *qu*-marked non-subjects allow the question marker *ga* to precede them, indicating their position outside of the fronted TP:

- (29) *Question marker ga can precede exceptionally qu-marked non-subjects:*
 Nyux=su m-aniq (ga) qu yutak qani (ga)?
 AUX=NOM.2sg AV-eat GA QU orange this GA
 ‘Are you eating this orange?’

Recall that specificity is a condition for being exceptionally *qu*-marked as a non-subject. Descriptively, the internal argument in (29) is specific, allowing it to be exceptionally *qu*-marked and to have *ga* precede it. In contrast, example (30) below is a variant of example (29) with a nonspecific internal argument. In this example, the internal argument cannot be *qu*-marked, and the question marker *ga* cannot precede it.

- (30) *Specificity is required for non-subject to be qu-marked and to follow ga:*
 Nyux=su m-aniq (*ga) (*qu) yutak (‘ga)?
 AUX=NOM.2sg AV-eat GA QU orange GA
 ‘Do you eat/are you eating oranges?’ (cf 12b)

The contrast observed in (29–30) supports the view that exceptionally *qu*-marked non-subjects are in a higher position than regular internal arguments. Under my proposal, the internal argument *yutak qani* in (29) is in Spec,TopicP, binding a (null) clitic, via clitic left dislocation. It is outside of TP and therefore can follow the question marker *ga*. In contrast, the nonspecific internal argument *yutak* in (30) must be inside *v*P, and therefore will necessarily front past the clause-typing *ga* when the TP is fronted.

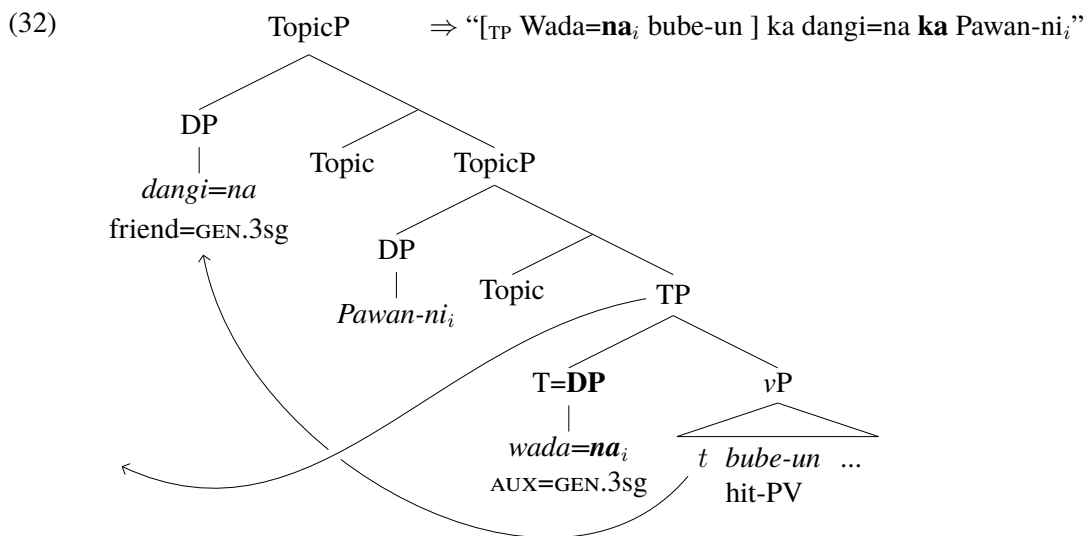
4.4. Topics with clitic left dislocation across Atayalic

My proposal above predicts strict complementary distribution of a *qu*-marked subject in sentence-final position and a *qu*-marked non-subject argument. This complementary distribution holds true in Squliq Atayal. This is enforced in my proposal by (a) a requirement that full DP subjects obligatorily move to Spec,TopicP, adopted from Aldridge’s (2004) analysis of Seediq, and (b) a restriction that only one Spec,TopicP can be projected per clause. If multiple Spec,TopicP positions are made possible, we could generate clauses with multiple *qu*-marked arguments: for example, both a *qu*-marked subject and a *qu*-marked topic interpreted as another argument, via clitic left dislocation. This describes the behavior observed in Seediq, a related Atayalic language.⁸ Consider the pair of Seediq examples in (31) from (Aldridge, 2004, p. 44–45).

- (31) *Seediq non-subject topic with CLLD together with subject:*
- a. Wada bube-un na Pawan ka dangi=na.
 AUX hit-PV GEN Pawan QU friend=GEN.3sg
 ‘Pawan hit his friend.’
 - b. Wada=**na** bube-un ka dangi=na **ka** Pawan-ni.
 AUX=GEN.3sg hit-PV QU friend=GEN.3sg QU Pawan-DEF
 ‘Pawan hit his friend.’

Example (31a) is a baseline PV clause with a genitive marked actor internal argument *Pawan* and a patient subject ‘his friend’ marked by *ka*, the Seediq equivalent of *qu*. Example (31b) has two *ka*-marked DPs, both the patient subject ‘his friend’ and the actor *Pawan*, where the actor is resumed by a genitive clitic on the auxiliary. This Seediq example can be derived by minimally modifying my proposal for Squliq by allowing for multiple Spec,TopicP positions in Seediq. The structure I propose for example (31b) is in the tree below, illustrated by the presence of multiple TopicP projections.

⁸However, Aldridge (2004, p. 45) notes that Seediq does not allow the equivalent of (31b) in AV, where both an actor subject and a patient topic would be *ka*-marked. This may point to an additional difference between Seediq and Squliq Atayal. Recall that for Squliq Atayal, I analyzed the lack of overt accusative clitics as a morphological gap, therefore allowing for AV clauses with a *qu*-marked internal argument resumed by a null accusative clitic. If, in contrast, Seediq truly lacks clitic pronouns for accusative arguments, we would expect this topicalization with CLLD to be possible with genitive internal arguments in PV, but not accusative internal arguments in AV.



Recall that in Squliq, non-subject *qu*-marking (topicalization with CLLD) cannot cooccur with a clause-final subject. Example (33a) is a baseline PV clause, similar to (31a). Example (33b) is the test PV clause with both a *qu*-marked subject and a *qu*-marked topic resumed by a genitive clitic, similar to (31b). It is judged as ungrammatical in Squliq Atayal. This contrast is explained under my proposal by a restriction in Squliq Atayal that there can only be one Spec,TopicP, whereas Seediq allows the generation of multiple Spec,TopicP positions.

(33) *Squliq non-subject qu requires the subject to have moved:*

- a. Niq-un na Yuraw qu sehuy qani.
eat-PV GEN Yuraw QU taro this
'Yuraw is eating this taro.'
- b.*Niq-un=nya qu sehuy (qani) **qu** Yuraw.
eat-PV-GEN.3sg QU taro this QU Yuraw
Intended: 'Yuraw is eating (this) taro.'

4.5. The restriction on \bar{A} -extractions and consequences for theories of voice

I began this paper by describing the voice system in Atayal. The voice morphology identifies one of the arguments of the verb as the “subject.” The subject is normally in sentence-final position, marked with *qu*, and is the only argument which can be \bar{A} -extracted. In this section I will briefly review previous approaches to such voice alternations in Austronesian languages, and then present additional data from Squliq Atayal regarding \bar{A} -extraction. I show how this data is problematic for other approaches to Austronesian voice alternations, and further motivates my approach to the syntax of Atayal.

There are broadly two types of approaches to such Austronesian voice alternations in the literature. The first approach is that the morphological alternation is one of voice, akin to active and passive in Standard Average European languages. There are two further subtypes of this approach. The voice alternation in Atayalic languages has been previously described both as an ergative alignment system (Huang, 1994; Starosta, 1999; Aldridge, 2004) and as a nominative

alignment system (Egerod, 1966; Rau, 1992; Huang, 1993, 1995, 2000, 2001). Here I have used the nominative alignment terminology in the glosses of clitics and in my discussion.

The second approach is often called a “*wh*-agreement” approach, and views the position I refer to here as “subject” as an obligatory \bar{A} -position, akin to the first-position topic in V2 languages. The “voice” morphology observed on the verb is a type of agreement with the argument which is in this designated topic-like position (Richards, 2000; Pearson, 2005). \bar{A} -extraction of all types is required to pass through this position, thereby deriving the restriction that \bar{A} -extractions target the argument cross-referenced by voice morphology on the verb. Because the “subject” is actually a topic position, we expect it to track the discourse topic or be restricted to specific or definite arguments, as we observed in Atayal.

The approach I take here, following Aldridge’s (2004) analysis of Seediq, is a hybrid approach with aspects of both of these primary approaches to voice. It is formally a voice alternation system, where the subject DP occupies a particular A-position in both AV and PV, the specifier of ν P. However, if this subject is a full DP, it is obligatorily \bar{A} -moved to a designated topic position. There are therefore two structural positions which contribute to the different “subjecthood” properties observed.

In this paper I showed that one of these “subjecthood properties” can target non-subject arguments in Sqliq Atayal. Specifically, when the subject is not in sentence-final position, *qu* can be used to mark a specific non-subject argument. In this section I will extend this discussion to the subject restriction on \bar{A} -extraction. Recall that Atayalic languages obey the generalization that only subjects can be \bar{A} -extracted. However, in this paper I’ve shown that certain non-subjects can be exceptionally *qu*-marked, and thereby are realized in a form normally associated with the subject. Does that mean they can then be extracted? The examples below show that, no, non-subject *qu* does not feed extraction.

(34)a. *AV baseline: specific patient can be qu-marked*

Nyux=saku m-aniq (**qu**) yutak qani.

AUX=NOM.1sg AV-eat QU orange this

‘I am eating this orange.’ (=12a)

b. *Patient extraction from AV:*

*Nanu (qu) cyux=su m-aniq?

what QU AUX=NOM.2sg AV-eat

Intended: ‘What are you eating?’

(35)a. *PV baseline: specific actor can be qu-marked, with clitic*

Wal=saku=nya kt-an (**qu**) Tali.

AUX=NOM.1sg=GEN.3sg see-PV QU Tali

‘Tali saw me.’

b. *Actor extraction from PV:*

*Ima (qu) wal=saku=nya kt-an?

who QU AUX=NOM.1sg=GEN.3sg see-PV

Intended: ‘Who saw me?’

There are therefore two different kinds of subjecthood properties in Atayal. \bar{A} -extraction strictly tracks the grammatical subject, as determined by voice morphology, but *qu*-marking is licensed on specific, non-subject arguments if the subject is not in sentence-final position. This is summarized in the following table.

(36) *Divergent subjecthood properties in Atayal:*

| | Subject | Non-subjects |
|-----------------------------|---------|----------------------------------|
| Tracked by voice morphology | ○ | × |
| \bar{A} -extraction | ○ | × |
| <i>Qu</i> -marking | ○ | ○, but competes with the subject |

These facts are problematic for both the voice-based approaches and the *wh*-agreement approaches as applied to Atayal. In purely voice-based systems, *qu* would be analyzed as a Case marker for the subject (nominative or absolutive, depending on the alignment assumed) and \bar{A} -extraction will be limited to arguments with this Case. On the other hand, the agreement-based approaches predict that all \bar{A} -extraction must progress through a particular topic position. However, the evidence above shows that (a) *qu*-marking and being in a topic position and (b) the ability to be \bar{A} -extracted are not one-to-one in Sqliq Atayal. Therefore such agreement-based approaches cannot be extended to Sqliq Atayal.

In contrast, my proposal is able to capture the diverging subjecthood properties observed in Sqliq Atayal. The \bar{A} -extraction restriction tracks whether the position is inside the ν P phase or not, while *qu*-marking tracks the topic position in Spec,TopicP. \bar{A} -operators are quantificational, not specific, and therefore are not able to be generated in Spec,TopicP via CLLD. Therefore \bar{A} -extraction is strictly restricted to the subject and *qu*-marking does not feed \bar{A} -extraction.

5. Conclusion

The notion of “subject” has been a topic of much debate in the formal analysis of Austronesian languages. In many Austronesian languages, morphology on the verb tracks which argument is in the clause-final *subject* position. In Atayal, \bar{A} -extraction is limited to this subject argument, and in sentences with canonical word order, only this sentence-final subject argument can be marked by *qu*. I showed here that in the variety of Sqliq Atayal spoken in Fuhsing township, *qu* can also mark specific non-subjects when the subject is not in sentence-final position, either through \bar{A} -extraction or cliticization.

I proposed that *qu* is a marker of *topic*, licensed in a particular structural position (Spec, TopicP). In sentences with a full DP subject, the subject will occupy this position, as proposed previously by Aldridge (2004) for Seediq, a related Atayalic language. However, in derivations where the subject will not occupy Spec,TopicP, a specific DP can be base-generated there as a topic with clitic left dislocation, binding an internal argument clitic below. Evidence from *qu*-marking in polar questions shows that non-subject arguments are in a higher position in the clause when *qu*-marked, supporting this proposal.

This evidence from Fuhsing Sqliq Atayal shows that two distinct notions must be maintained: *subject*, as determined by the voice morphology on the verb, and *topic*, licensed in a particular structural position (Spec,TopicP). \bar{A} -extraction is strictly limited to the subject, and is not one-to-one with the ability to be *qu*-marked. I argue that this interaction can be modeled following Aldridge’s (2004) proposal for the syntax of Seediq, but is problematic for purely voice-based or agreement-based approaches to Austronesian voice systems.

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