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HAWAIIAN RELATIVE CLAUSE STRUCTURE

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The purpose of this paper is to explore the formal aspects of Hawaiian relative clause structure. This includes a description of the formal structure of relative clauses in Hawaiian, including gap-versus-pronoun strategy in relativization and constituency tests for what I term as genitive subjects in Hawaiian relative clauses.

1. INTRODUCTION. In this paper I first outline relativization in general (§2). Then I briefly discuss modifiers in Hawaiian in §3, as modifier structure is relevant to the analysis of Hawaiian relative clauses. In §4 I discuss the gap strategy and then the pronoun strategy in Hawaiian relative clauses. What we find is that when the relativized position is the subject, then Hawaiian utilizes a gap strategy, and that in all other cases a pronoun strategy is used. In §5 I look at genitive case subjects of relative clauses so as to describe their syntax and formulation.¹

2. RELATIVIZATION. A relative clause is described by O’Grady (1996:103) as “an S that ‘modifies’ a head N by restricting the set of potential referents.” An “S” here means clause, and an “N” here means nominal.

O’Grady goes on to state that a relative clause “must contain either a ‘gap’ (empty position) or a pronoun that matches the head noun.” A gap is an empty position left in a relative clause. English uses the gap strategy in relative clauses. For example, the NP *the man who left* has the structure [the man [who ___ left]_S]_{NP}, where the gap (illustrated by the underscore ___) refers to the relativized position that is co-referential to the N being modified.

Instead of a gap strategy, some languages make use of a pronoun that is co-referential with the N being modified. This type of pronoun is commonly referred to as a resumptive pronoun. Usually the resumptive pronoun is homophonous with some personal pronoun.

In Tongan the resumptive pronoun fills the position where a gap is expected in the modifying S. In (1) below, the resumptive pronoun *ai* follows *ki*, (*ki* is a Tongan preposition that is glossed below as ‘to’), thus filling the void left by the N, *e fefine*, being modified.

(1) Tongan pronoun strategy of relativization

Ko	e	fefine	[na’e	tokoni	‘a	Sione	ki	ai].
Pred	the	woman	pst	help	Abs	John	to	AI

‘It is the woman John helped (to her).’ (Otsuka 2004)

3. MODIFIERS IN HAWAIIAN. Modifiers in Hawaiian follow the word being modified. In (2) below we find that *ka pua* ‘the flower’ is modified by an adjective *nani* ‘pretty’. In (3) we find that an adverb *nui* ‘a lot’ follows the aspect marker and the verb, *ua ‘ai* ‘ate’, and rendering the verbal complex, *ua ‘ai nui* ‘ate a lot’. It is clear through these two examples that modifiers in Hawaiian follow the words and phrases that they modify.

¹ I use the term *subject* throughout this paper to refer to the nominal (no matter what the case marking) that is the lone complement of an intransitive clause and/or agent of a transitive clause.

(2) Hawaiian modifier with noun

ka pua nani
the flower pretty
'the pretty flower'

(3) Hawaiian modifier with verb²

Ua 'ai nui mākou.
PRF eat a lot we (3+, excl)
'We ate a lot.'

4. RELATIVE CLAUSES WITH VERBAL MARKERS. The focus of this section is on relative clauses that utilize aspectual markers similar to those found in matrix clauses, e.g. the pre-verbal aspect markers *ua(i)*³ and *e/ke* and the post-verbal aspect markers *ana/nei/ala*. In §4.1 I outline aspect markers in matrix clauses. In §4.2 I outline the gap strategy used in the formulation of Hawaiian relative clauses. I then discuss the pronoun strategy in §4.3. In the pronoun strategy we will see that *ai* is a resumptive pronoun that takes the place of the post-verbal aspect marker.⁴ I choose to look at the relative clauses that utilize aspectual markers because they are formally identical to those found in matrix clauses. In the gap strategy, the aspect markers are completely identical to those found in matrix clauses.⁵

4.1 ASPECT MARKERS IN MATRIX CLAUSES. The pre-verbal aspect marker *ua* marks the event as being completed and/or realized (i.e., realis). The pre-verbal aspect markers *e/ke* mark the event as being incomplete and/or unrealized (i.e., irrealis). The post-verbal aspect markers *nei/ala* also mark the event as being complete and/or realized. However, *nei/ala* also encode deictic information. Simply stated, *nei* marks things/events as near to the deictic center, and *ala* marks things/events as far/elsewhere, or perhaps not specified as near in regards to the deictic center. An analysis of *ala* I believe still needs to be done. The post-verbal marker *ana* marks the event as being incomplete and/or unrealized (i.e., irrealis). *Ana* attributes no deictic information to the clause and/or predicate to which it belongs.

In (4) below we find that the matrix clause has the aspect marker *ua* (PRF) clause initial as discussed in fn. 3 above. In (5) we find that the completed aspect marker is no longer *ua*, but rather *i*. *Ua* and *i* are in complementary distribution: *ua* is found in matrix clause-initial position and *i* elsewhere.

(4) Hawaiian matrix clause with *ua*

Ua hele au i nehinei.
PRF go I to yesterday
'I went yesterday.' (Hopkins 1992:52)

(5) Negative Hawaiian matrix clause with *i*.

'A'ole i ha'i mai 'o Māmā ia'u.
Neg PRF tell hither NOM Mom to.me
'Mom didn't tell me.' (Hopkins 1992:87)

² Similar data can be found in Elbert and Pukui 1979:90 in regards to modifiers in Hawaiian. I, however, wanted to make the examples simpler here.

³ The aspect marker *ua* (realis, complete) becomes *i* when it is not matrix-clause-initial. For example, *Ua hele au* 'I went', becomes *'A'ole au i hele* 'I didn't go'. The *ua* in front of *hele* 'go' became *i* when the negative *'a'ole* was placed matrix-clause-initial, i.e., leading off the matrix clause. See (4) and (5) below for more complete examples.

⁴ Place and/or position here means the slots around the verb where various morphemes are placed in a morphological template. The verbal complex is made up of the following slots in this order: preverbal marker, verb, modifier, periphrastic passive marker, directional, and then the post-verbal aspect marker slot.

⁵ I am ignoring for now relative clauses constructed with the gerund marker *'ana*. Although this strategy for formulating relative clauses is productive, it is not relevant to what I want to discuss specifically, i.e., the strategies utilized in relative clauses with aspectual markers.

In (6) below we find the verbal phrase *e hele ana* ‘are/will be going’. In (7) the negative, ‘*a’ole*, is used with the verbal phrase *e kali ana* ‘am/will be wait(ing)’. No variation is found here between the aspect markers *e ... ana* that is in the matrix clause-initial position and the one that follows the negative.

(6) Hawaiian matrix clause with *e ... ana*.
 E hele ana ‘oe i hea?
 IMP go IMP you (sg) to where
 ‘You are/will be going where?’ (Hopkins 1992:64)

(7) Negative Hawaiian matrix clause with *e ... ana*.
 ‘A’ole au e kali ana.
 Neg I IMP wait IMP
 ‘I was/am not waiting.’ or ‘I will not be waiting.’ (Hopkins 1992:87)

In (8) below we find the present progressive aspectual marker combination *ke ... nei*. In (9) we find the negative form of (8). In the negative the formal difference is the elimination of the initial *k* of the base form *ke* rendering it as *e*. This formal difference occurs when the *ke* is not matrix-clause-initial, similar to the situation found with the distribution of *ua* and *i*. Similarly, *ke*, as an aspectual verbal marker is limited to matrix clauses.⁶

(8) Hawaiian matrix clause with *ke ... nei*.
 Ke ho‘omākaukau nei au i ka mea ‘ai.
 IMP prepare PRF I OM Det food
 ‘I am preparing the food.’ (Hopkins 1992:125)

(9) Negative Hawaiian matrix clause with *e ... nei*.
 ‘A’ole au e ho‘omākaukau nei i ka mea ‘ai.
 Neg I IMP prepare PRF OM Det food
 ‘I am not preparing the food.’

Summarizing aspect markers in matrix clauses, the preverbal aspect markers *ua* and *ke* are replaced by *i* and *e*, respectively, when they are not matrix-clause-initial. Given that relative clauses are not matrix clauses, the aspect markers that are utilized in a position other than the beginning of the matrix clauses are the ones utilized in relative clause constructions. That is, *i* and *e* are the only preverbal aspect markers available for relative clause construction in Hawaiian.

4.2 GAP STRATEGY. In Hawaiian relative clauses where the subject is the relativized position, the gap strategy is utilized. In (10) below the subject of the relative clause [*e ai noa ana* ____] ‘were eating freely’ is interpreted as *na haole* ‘the foreigners’. The relative clause has no pronoun referring to the NP *na haole*. Moreover, the verbal markers of this relative clause (e.g. *e ... ana*) are the same ones that are found in matrix clauses. We can conclude that this is a relative clause where the gap strategy is being used because there is no pronoun and the verbal clause is simply placed in the modifier position.

(10) Relativization of subject with aspect markers *e ... ana*
 na haole [e ai noa ana ____]
 Det.Pl foreigner [IMP eat free IMP ____]
 ‘the foreigners who were eating freely’ (Dibble 1838:64)⁷

⁶ *Ke* is also found to mark infinitives and conditionals. However, infinitival and conditional clauses are not relevant here.

⁷ Some of my data that I collected were from very old texts. The reason why I did that was to obtain data of high authenticity. Given the state of Hawaiian today with the great influence that English has on it, I believe it to be imperative when studying Hawaiian that data from authentic sources be used at all times and that the researcher should state the source of the data in order to verify and authenticate them. Furthermore, in the texts that did not have macrons and glottal stops already in them, I did not add them.

The same is true for (11), where once again the subject is relativized.

- (11) Relativization of subject with aspect marker *i*
 ke 'eke kua [i ho'iho'i 'ia]
 Det bag back PRF return Pass
 'the backpack which was returned' (Hopkins 1992:224)

The N *ke 'eke kua* 'the backpack' is co-referential with the subject gap found in the relative clause. What is also interesting here is that there is no post-verbal aspect marker. This pattern is only allowed when the subject is relativized, i.e., gap strategy is being used. If some other position is relativized, as shown below, then the post-verbal marker position must be filled by one of the aforementioned post-verbal aspect markers or the pronoun *ai*—a post-verbal marker to be discussed below.

Therefore, we must conclude that the gap strategy is utilized in Hawaiian when the subject is relativized, because the post-verbal aspect marker position can be left empty, e.g., no post-verbal coreferential pronoun. When the relativized position is something other than the subject, e.g., direct object, indirect object, etc., in contrast, the post-verbal position must be filled. This will become clearer in the following section.

4.3 PRONOUN STRATEGY. I argue here that *ai* in a relative clause is a resumptive pronoun that is co-referential with the head N being modified. The *ai* assumes the same position as the post-verbal aspect marker. Elbert and Pukui (1979:96–99) give a brief history on how *ai* was treated by other scholars and they give a brief analysis to some data that they themselves put forth. As for Māori, arguably one of the closest related languages to Hawaiian, Harlow (2001:257–76) provides many examples that are similar to the relativization patterns found in Hawaiian. For example, a genitive marks the introduced subject, i.e., a subject different from the head being modified, and *ai* in the post-verbal marker position (Harlow 2001:274).⁸

In Hawaiian relative clauses where something other than the subject is relativized, the pronoun strategy is used. In this case, the pre-verbal aspect markers are the same as those found in both matrix clauses and gap strategy relativization, i.e., *i* and *e*.

The post-verbal aspect marker position must be filled when the pronoun strategy is used. At the very least the resumptive pronoun *ai* must be present. It is the default that fills in that position in the pronoun strategy. If some other aspect marker is needed in the post-verbal position for functional purposes, then the *ai* is replaced with the needed aspect marker (e.g., *ana*, *nei*, or *ala*). I propose that *ai* is a resumptive pronoun that refers to the N being modified. Consider (12) below.⁹

- (12) *Ai* in post-verbal marker position
 ka wā a Pāka'a i ha'alele aku ai iā Waipi'o
 Det time of Pāka'a PRF leave thither AI Acc Waipi'o
 'the moment when Pāka'a left Waipi'o' (Hawkins 2000:134)

⁸ However, Harlow's approach is different from mine, in that his work seems to be more descriptive than analytical. What I am trying to capture here is a formal analysis of as many facts as possible. In Harlow's analysis, he claims *ai* to be its own strategy of relativization without an analysis of what *ai* is. Here, I claim that *ai* is a resumptive pronoun that replaces the post-verbal aspect marker and is in co-reference to the N being modified. Harlow also claims that there is a possession strategy where the introduced subject of the relative clause is marked by possession. This is similar to what I claim later in this paper. However, he claims that the possessive is part of the N, not the S as I ultimately claim and provide evidence for here. I would like to see a more analytical study of Māori relative clause structure. I believe that it is more similar to Hawaiian than Harlow's description indicates.

⁹ Resumptive pronouns normally occur in "logical" positions. For example, (1) above from Tongan has the resumptive pronoun *ai* following the preposition *ki* 'to'. In Hawaiian though, the resumptive pronoun does not occur in its "logical" position; it occurs after the verb in the post-verbal aspect marker position. The resumptive pronoun of Tongan and Hawaiian are indeed cognates. The positions in which they occur are simply not the same. The *ai* in Hawaiian is only found in one position, i.e., the same position as the post-verbal aspect marker; it is never found in a nominal position as in Tongan.

If the post-verbal marker position did not contain a resumptive pronoun, then the clause would be not well-formed. For example, (13) below is not well-formed, because there is no post-verbal resumptive pronoun *ai*.

(13) Relativization with no post-verbal marker

*ka wā a Pāka‘a i ha‘alele aku Ø iā Waipi‘o
 Det time of Pāka‘a PRF leave thither Ø Acc Waipi‘o
 ‘the moment when Pāka‘a left Waipi‘o’

However, this condition can be overridden under certain circumstances. Consider (14) below. With the post-verbal aspect marker *nei* in the post-verbal marker position, the sentence is now well formed without *ai*.

(14) Relativization with *nei* in post-verbal marker position

ka wā a Pāka‘a i ha‘alele aku nei iā Waipi‘o
 Det time of Pāka‘a PRF leave thither PRF Acc Waipi‘o
 ‘the moment when Pāka‘a left Waipi‘o’

As mentioned above, the *ai* constraint is overridden at times because of the need for a specific post-verbal aspect marker. For example, the combination of the aspect markers *e ... nei* marks an event as a present progressive. Taking a functionalist’s perspective, i.e., that function drives, and/or determines, form, the *nei* will be used instead of *ai* when an event must be specifically marked as present progressive. This view is also represented in the analysis of Hawkins (1982, 2000), who claims that the *ai* is “blocked” by the use of *nei*, *ala* or *ana*.

In (15) below we find that the post-verbal position is filled with *nei*.

(15) Relativization with *nei* in post-verbal marker position superceding *ai*

ka hale āna e kūkulu nei
 Det house of.his IMP build PRF
 ‘the house he is building’ (Hawkins 1982:109)

This, in combination with the pre-verbal marker *e*, marks the event as a present progressive. The need for specification of the present progressive state of an event supercedes the need for the *ai*, thus overriding the rule. If *ai* were used in (15), the construction would still be well-formed. It would, however, not specify the event as a present progressive; the event would be interpreted as simply incomplete and/or unrealis, thus rendering some ambiguity in the English gloss as ‘is/will be building’ rather than being specific and saying something more like ‘is building’ by using the *nei* instead of the *ai*.

In summary, we have seen the structure of Hawaiian relative clauses. We have also seen the strategies used in relative clause formulation. That is, in the case of subject relativization, the gap strategy is used. In the case of non-subject relatives, in contrast, the pronoun strategy is used. The pronoun used is *ai*, homophonous with what is found in other Polynesian languages, e.g., Tongan. However, *ai* in Hawaiian goes in the post-verbal aspect marker position, unlike in Tongan, where it is takes the place of a full NP. The *ai* in Hawaiian is superceded if a more semantically functional aspect marker is needed.

The rationale that the condition for the *ai* is superceded by other post-verbal markers is simple when considered from a functionalist’s perspective. That is, the need to state whether an event is present-progressive, e.g., (15) above, is more important than marking a relative clause for gap strategy in Hawaiian. From a syntactic perspective, this is rather peculiar in that something so syntactically important is overridden by discourse and/or functional requirements.

5. INTRODUCED SUBJECTS IN HAWAIIAN RELATIVE CLAUSES. In this section I will discuss the introduction of subjects in Hawaiian relative clause structures. Elbert and Pukui (1979), Hawkins (1982 and 2000), and Kamanā-Wilson (1978) all agree that there are basically two possible strategies: a nominative strategy and a genitive strategy.

In §5.1 I explain the two strategies: a nominative form occurs after the verbal complex and a genitive subject preceding the verbal complex.¹⁰ In §5.2 I discuss genitive subjects in more detail. There we find (as reported by Kamanā-Wilson (1978)) that through analogy with the general genitive system in Hawaiian a discontinuity is allowed in Hawaiian relative clause structure where the genitive occurs in the determiner position of the N.

5.1 TYPES OF SUBJECTS IN HAWAIIAN RELATIVE CLAUSES AND THEIR CONSTITUENCY. The subjects introduced in relative clauses where the pronoun strategy is used have two forms and respective positions. What we have already seen above in examples (12) through (15) is that the understood subjects of those relative clauses are the preceding genitive marked phrases. For example, (12) is repeated below.

(12) *Ai* in post-verbal marker position

ka wā a Pāka‘a i ha‘alele aku ai iā Waipi‘o
 Det time of Pāka‘a PRF leave thither AI Acc Waipi‘o
 ‘the moment when Pāka‘a left Waipi‘o’ (Hawkins 2000:134)

I will discuss this strategy in more detail later. The strategy that I first want to look at is the introduction of subjects in a relative clause in nominative case following the verbal complex. This strategy is formulaically more similar to matrix clause structure in that the subject is introduced in the nominative case and follows the verbal complex rendering a V S type structure.

For example, in (16) we find the NP *ka po‘ohiwi* ‘the shoulders’ following the verbal complex *e luhi ‘ole ai* ‘did not tire’.

(16) Relative clause with new subject in nominative form

kekahi hana e luhi ‘ole ai ka po‘ohiwi
 a activity IMP tired Neg AI Det shoulder
 ‘an activity from which the shoulders did not tire’ (Hawkins 2000:131)

Ka po‘ohiwi is understood as the subject of the verbal complex *e luhi ‘ole ai*. It is obvious here that *ka po‘ohiwi* and the verbal complex *e luhi ‘ole ai* are constituents because *ka po‘ohiwi* is a dependant of the *e luhi ‘ole ai* and it is in nominative case following the verbal complex, exactly as in the matrix clause structure. (See Hawkins 2000 for statistics on the distribution of the strategies of subject introduction.)

The other strategy of marking subjects in Hawaiian relative clauses that I will discuss involves genitive case. The phenomenon of genitive-case-marked subjects of Hawaiian relative clauses is an interesting phenomenon. It is interesting because of their genitive marking and how they seem to be and, in fact, are constituents of the verbal complex rather than the N. It is evident that the genitive phrases are indeed the subjects of the relative clauses via a test of constituency as discussed by Radford (1988, 1997). The test that I will use is one of constituency. I will then give an example from Hawkins 2000 that involves two postposed genitives, where one is clearly a possessor and the other a genitive marked subject.

Coordination provides evidence that the genitive phrase and the verbal complex are constituents. If two or more strings of words (or phrases) can be coordinated, then those strings of words must be constituents (Radford 1997:104-5). Consider (17), which involves an N *ka hale* ‘the house’ and the coordination of two relative clauses *a‘u i kūkulu ai* ‘that I built’ and *āna i pena ai* ‘that he painted.’ The two relative clauses are coordinated by *a* ‘and’.

(17) Coordination of relative clauses

[ka hale [a‘u i kūkulu ai]_S a [āna i pena ai]_S]_{NP}
 Det house of.me PRF build AI and of.him PRF paint AI
 ‘the house that I built and he painted’

¹⁰ Notice that when I write “genitive subject” I mean “subjects in the genitive case form.”

I have consulted both native speakers and other scholars of Hawaiian and they all agree that this is a well-formed phrase.¹¹ We must then conclude that the genitive phrases as in (17), and those already seen, must be constituents with the verbal complexes that follow them. Therefore, I conclude that the genitive phrases that are interpreted as subjects of relative clauses are indeed genitive marked subjects of the relative clauses, hence genitive subjects.

Further evidence for the current analysis of genitive subjects is provided in Hawkins 2000, where she introduces the data found in (18). These data illustrate that the genitive subject is indeed a constituent of the S, because there are two genitive-marked nouns, *ou* ‘of yours’ and *āna* ‘of his.’ The first, *ou*, is a true possessive of the N being modified, while the later, *āna*, is the genitive subject of the relative clause.

- (18) Two genitives within one NP containing a relative clause
 [kēia mau pono kino ou [āna i mālama ai]_S]_{NP}
 this pl need body of.you of.him/her PRF care for AI
 ‘these personal goods of yours which he cared for’ (Hawkins 2000:137)

Hawaiian does not allow two genitives in one phrase. Consider (19) below. (19a) is not well formulated, because there are two genitive marked phrases. However, (19b) is well formulated, because the second genitive of (19a) was changed to an object marker, i.e., *i*.

- (19) Two genitives with one NP not containing a relative clause; not well formulated
 a. Two genitives, one NP and no relative clause; not well formulated
 *i ke ku‘i ‘ana a‘u o ka hoa paio
 upon Det strike GER of.me of Det opponent
 ‘upon my striking of the opponent’
 b. One genitive, one NP; well formulated
 i ke ku‘i ‘ana a‘u i ka hoa paio
 upon Det strike GER of.me OM Det opponent
 ‘upon my striking of the opponent’

In summary of §5.1, we have seen two types of introduced subjects that a relative clause may have, a nominative or genitive case marked subjects. We have also seen two key pieces of evidence that prove the genitive subject to truly be interpreted as a subject of the verbal complex. The evidence comes from a coordination test (e.g., (17)) and the fact that two genitive phrases are allowed with one N, the first being a true possessive and the second a genitive subject of the relative clause (e.g., (18)).

5.2 DISCONTINUITY IN HAWAIIAN RELATIVE CLAUSE STRUCTURE. In this section I will discuss the more general genitive marking system in Hawaiian, as it is relevant to relative clause formulation.

In the Hawaiian genitive system there are two strategies of expressing possession. The first is to place the possessor after the possessed noun marked with either an *a*- or *o*-class genitive case marker. This possession strategy is formally similar to the English *of* construction. In Table 1 below I list the singular pronominal genitive forms and other nominals. This genitive case marking strategy is commonly referred to as the *k*-less strategy, because the possessive marker does not begin with a *k*. The reason will soon be more apparent.

¹¹ I must confess that this example is unlikely to be encountered in natural discourse, regardless of the acceptability judgments given to me.

TABLE 1. Postposed possessives.

Type of nominal	<i>A class</i>	<i>O class</i>
1 sg pronoun	a'u of.mine	o'u of.mine
2 sg pronoun	āu of.yours	ou of.yours
3 sg pronoun	āna of.his/hers	ona of.his/hers
1 pl. pronoun excl	a mākou of ours	o mākou or ours
Proper noun	a Kaliko of Kaliko	o Kaliko of Kaliko
Common noun	a ke kumu of the teacher	o ke kumu of the teacher

The other strategy for expressing possession is to place the possessor in the front of the possessed nominal. In this strategy, though, a *k-* is prefixed to the possessive. This possession strategy is similar to the English *-s* strategy, wherein the genitive marked phrase/nominal precedes the possessed. The genitives that precede the possessed noun function as the determiner of the phrase as well. This form is generally known as the *k-form* because there is a *k* prefixed to the possessive marker.

TABLE 2. Preposed possessives.

Type of nominal	<i>A class</i>	<i>O class</i>
1 sg pronoun	ka'u my	ko'u my
2 sg pronoun	kāu yours	kou yours
3 sg pronoun	kāna his/hers	kona his/hers
1 pl pronoun excl	kā mākou ours	ko mākou ours
Proper noun	kā Kaliko Kaliko's	ko Kaliko Kaliko's
Common noun	kā ke kumu the teacher's	ko ke kumu the teacher's

Given that there are two possessive strategies and that the introduced genitive subjects in the above relative clauses are indeed constituents of the S, one could imagine that if the *k*-formed possessive is utilized to express a relative clause subject, then there would be a discontinuity within the larger noun phrase, where the subject of the relative clause precedes the N being modified, as in (19) below.

- (20) Hawaiian relative clause with preposed subject
 ko Kekeleiaiku wa e ola ana
 Gen Kekeleiaiku time IMP live IMP
 ‘the time when Kekeleiaiku was living’ (Akana 2004:50)

Examples like (20) above is exactly what Kamanā-Wilson (1978) described in her essay on relative clauses. She claimed that the fronting of the genitive phrase renders a discontinuity in the noun phrase because by doing so the subject of the relative clause is separated from the clause within which it is a constituent. This separation renders the genitive subject of the relative clause as a non-syntactic constituent of the relative clause. However, there is still conceptual constituency between the genitive subject and the relative clause as discussed below in regards to (21).

In (21) we find two ways of saying the same thing, i.e. ‘the book that Pua wrote’.¹² In (21a) the genitive subject is where we expect it to be, near the verbal complex with which it is a constituent in an S. In (21b) the genitive subject comes before the N being modified.

- (21) Hawaiian relative clauses with postposed (*k*-less possessive) and preposed (*k*-possessive) genitive subjects.
- a. Hawaiian relative clause with postposed subject
 ka puke a Pua i kākau ai
 Det book of Pua PRF write AI
 ‘the book that Pua wrote’ (Hopkins 1992:233)
- b. Hawaiian relative clause with preposed subject
 kā Pua puke i kākau ai
 Gen Pua book PRF write AI
 ‘the book that Pua wrote’ (Hopkins 1992:233)

I believe that (21b) is possible only through analogy with the general system of possession. That is, in the canonical possessive construction, e.g., with nouns, the possessor can occur before or after the nominal being possessed with the appropriate genitive marking, i.e., form (*k*-less- or *k*-form) and class (*a*- or *o*-class). There are usually no interpretational problems in the canonical usage. However, when the canonical possessive construction framework is analogously mapped onto the introduction of subjects in relative clause constructions, there can be times when this discontinuity inhibits interpretation.

For example, in (21b) above, if we look at the construction from a linear perspective, i.e., left to right, we see that *kā Pua* might be the possessor of the *puke*. It is well-formed, i.e., the class of possessive is correct, *a*-class, the *kā* precedes the possessor *Pua*, and the possessive phrase, *kā Pua*, precedes the possessed nominal, *puke*, just like what we would expect in the canonical possessive constructions (see Elbert and Pukui 1979:115–18 for their discussion of general possession in Hawaiian). However, (21b) has the verbal complex *i kākau ai* following the N. The interpreter must conclude that the genitive marked NP *Pua* is the subject of the relative clause that includes the aforementioned verbal complex. (21b) cannot be interpreted as ‘Pua’s book that (somebody) wrote’.

In summary of §5.2, we have seen how relative clauses can become discontinuous (as reported in Kamanā-Wilson 1978) when the genitive subject, through analogy with the more general genitive system,

¹² Of course, there are those who insist that a different form renders a different meaning. I wouldn’t argue against this. However, the subtle, if any, difference in meaning here is not relevant to this discussion. This might be an example of the subject of the relative clause being omitted because of its mention as the possessor of the N. This area needs further research.

fronts the N being modified. Moreover, I have illustrated that the fronted genitive subject is still interpreted as the subject of the relative clause. A genitive subject when located immediately to the left of the verb (e.g., (21a)) is a constituent within the verbal complex under an S. A genitive subject that precedes the N being modified (e.g., (21b)), even though the syntactic constituency between it and the verbal complex is not apparent, or even likely, still is interpreted as the subject, rendering what I have called conceptual constituency.

6. CONCLUSIONS. We have seen in this paper that the gap strategy is used in relative clauses wherein the head nominal is co-referential with the subject of the relative clause. We have also seen that if the N being modified and the subject of the relative are not co-referential, then the pronoun strategy is used. The pronoun used is *ai* and is unique in that it takes the post-verbal aspect marker position instead of its more usual position in the clause.

We have also seen that subjects in Hawaiian relative clauses can be expressed in two ways: one, in a nominative form following the verbal complex of a relative clause, and two, as a genitive-case-marked subject pre-posing the verbal complex of the relative clause. I have shown here that the genitive subjects of relative clauses are indeed constituents of their relative clauses by applying a coordination test (e.g., (17)), and by the fact that two genitives are allowed within a single NP containing a relative clause and a subject with a single nominal where the first is a true possessive of the nominal and the second is the genitive subject of the relative clause (e.g., (18)).

In future research I plan to explain the distinction found in selecting the appropriate genitive class when formulating genitive subjects in relative clauses. That is, either *a*- or *o*-class genitive subjects can be formulated. There are rules that govern the variation. Those rules are what I plan to explore and explicitly explain. I plan to expand on the work of Wilson 1976a and 1976b, Hawkins 1982 and 2000, and Elbert and Pukui 1979.

Consider (22) below, which is exactly the same as (12) above except for the genitive class of the genitive subject. In (22) it is an *o*-class genitive. I plan to argue in future work that the *o*-class genitive subject does not specify a subject's agentivity; *a*-class does. Thus, the difference between (22) and (12) is that in (22) the agentivity is not specified. (23) includes an unaccusative/stative verb and an *o*-class subject.

(22) *O*-class genitive subject of (12)

ka wā o Pāka'a i ha'alele aku ai iā Waipi'o
 Det time of Pāka'a PRF leave thither AI Acc Waipi'o
 'the moment when Pāka'a left Waipi'o'

(23) *O*-class genitive subject with an unaccusative/stative verb

ka lā ona e make ai
 Det. day of.his IMP dead AI
 'the day that he would die' (Pukui and Green 1994:140)

My hunch is that the choice between *a*- and *o*-class genitives has something to do with ergativity. It remains to be seen whether this hypothesis is on the right track and if so to what degree. I plan to argue that *a*-class subjects specify the genitive subject as agentive (similar to the A and S_a in Dixon 1994). What is unclear is exactly how *o*-class genitive subjects work.

Why does Hawaiian allow for *a*- and *o*-class alteration? Is there analogy with the N (here *wā* 'time' is always possessed with an *o*-class genitive)? Or, does *o*-class simply not specify agentivity, thus allowing for various marking of syntactically similar examples?

It is the case though that an *a*-class genitive subject could not replace the one in (23) above. It would not be well formulated. The reason is that *a*-class genitive subjects are specified as having agentive qualities, unlike the subject of (23) where the subject is more in the thematic role of theme. As for example (22), the subject does have agent qualities and that is why we find in (12) that the *a*-class genitive subject is utilized and is well formulated. The beauty of this system is that agentivity does not have to be specified in certain cases, hence rendering the *o*-class well formulated in (22).

This is why I suggest that perhaps *o*-class doesn't specify agentivity, because *o*-class genitive subjects can be used to express both agentive and non-agentive subjects while *a*-class genitive subjects are only used when the subject is agentive. Perhaps there are other reasons, ones that will capture broader generalizations. There is a definite need though for linguistic inquiry here.

ABBREVIATIONS

Abs	Absolutive marker
Acc	Accusative marker
AI	<i>Ai</i> , anaphoric particle, argued here to be resumptive pronoun
Det	Determiner
excl	Exclusive
Gen a/o	<i>A</i> class genitive case marker, <i>O</i> class genitive case marker
Ger	Gerund, nominalizer
IMP	Imperfect aspect, irrealis
Loc	Locative
N	Nominal
Neg	Negative
NP	Noun Phrase
OM	Object markers
Pass	Passive marker
pl	Plural
PRF	Perfect aspect, realis
Pred	Predicate marker
pst	Past tense marker
S	1. Sentence, Clause
sg	Singular
VP	Verb Phrase

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