Ability "Passives" in Hiaki: A First Look in Uto-Aztecan

Noah Nelson
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1 Background

Hiaki [(Southern) Uto-Aztecan > Taracahitic] spoken in Arizona and Sonora.

Head-final[3] agglutinating language.

SOV word order

postpositions

nearly all affixes are suffixes

[1] Where no source is provided, data comes from elicitation sessions with Maria and Santos Leyva, native speaker consultants to whom I am extremely grateful.

[2] This work was supported by NSF grant BCS-1528295 to Heidi Harley.

[3] Possible exceptions include demonstratives (left edge of a DP), the negation marker *kaa* (left edge of a NegP), and reduplication (prefixal). Whether these are true heads in Hiaki, and therefore true exceptions, is a discussion for another time.

Rich morphology for deriving one part of speech from another.

Objects and genitives receive oblique case marker *-ta*.

Many roots/morphemes have distinct free and stem forms.

2 The Hiaki Ability "Passive"

The ability passive involves the free modal *aa* 'to be able/know how to' and a verb suffixed with the verbalizer *-tu*:

(1) Merehilda aa tu'uli-tu
Merehilda MOD like-VZ
'Merehilda is someone you can warm up to.'
[*lit:* is likeable]

(2) hunu-me muun-im aa bwasa'a-tu
that-PL bean-PL MOD cook.TR-VZ
'Those beans can be cooked.' [*alt*: are cookable]

(3) aapo si kaa aa a-u nok-tu
3.SG very NEG MOD 3.SG.ACC-to talk-VZ
'He really doesn't take advice (i.e. can't be talked to).'
[*lit:* really isn't talk-to-able]

This construction is largely analogous to *-able* "passivization" in English, cf. (4):

(4) The child learned the grammar (Nevins 2002)
The grammar is learnable (*-able* passivization)
The grammar was learned (*-ed* passivization)
* The child is learnable
* The child was learned[4]

[4] Note that this is intended as the passive participle form of "learned," not the bisyllabic adjectival passive "learn-ed".

2.1 Passive-like properties

The ability passive construction "passivizes" a transitive verb, as with Passive Voice, as illustrated in (5-7):

(5) Active Voice

aapo	**uka**	mansana-**ta**	bwa'e
3.SG.NOM	the.SG.**ACC**	apple-**ACC**	eat.TR

'She is eating the apple.'

(6) Passive Voice

hunuu	mansana	bwa'a-wa-k
that.**NOM**	apple.**NOM**	eat.TR-PASS-PERF

'That apple has been eaten.'

(7) Ability passive (*aa _-tu*)

hunuu	mansana	aa	bwa'a-tu
that.**NOM**	apple.**NOM**	MOD	eat.TR-VZ

'That apple is edible (e.g., not rotten).'

Notice that the internal argument is promoted to subject, and does not receive accusative case.

Unlike passives formed with the passive marker *-wa*, ability passives *cannot* apply to intransitive verbs:

(8) * (aapo) aa hi'ibwa-tu
(3.SG) MOD eat.INTR-VZ

2.2 Properties of construction-internal arguments

The ability construction allows arguments to intervene between the modal *aa* and the base verb suffixed with *-tu*:

(9) hunu-me yeemikvaawame haiva aa
that-PL presents already MOD

Visente-ta-u vittua-tu
Vicente-ACC-to send-VZ

'Those presents are ready to be sent to Vicente.'

(10) hunua vetchi'ivo, si kaa aa
that_one for, very NEG MOD

tiiko **paan-im** hoo-ria-tu
wheat **bread-PL** make-APPL-VZ

'That man, he really can't be made wheat bread for.'

Notice that in each example, a complex predicate with multiple internal arguments is embedded in the construction. The ability passive takes scope over this entire embedded vP.

2.3 Distribution of the verbalizer -tu *in the construction*

The verbalizer *-tu* appears to be suffixed onto a verbal stem despite never appearing in this distribution otherwise.

3 On the Modal *aa* and Verbalizer *-tu* Elsewhere

The ability passive exhibits a conspiracy between the modal *aa* and the verbalizer *-tu*. The following sections note the usual uses of *aa* and *-tu* outside of this construction.

3.1 The verbalizer -tu

The verbalizing suffix *-tu* can attach productively to nouns (10) and adjectives (11)[5]:

[5] The second line of all cited glosses has been modified for consistency. The structure or interpretation of the utterances has not been altered.

(11) aapo ya'ut-tu (Escalante 1990)
3.SG leader-VZ
'He is being leader (acting as leader).'

(12) uu sewa tutu'uli-tu-kan (Sanchez et al. 2014)
the flower pretty-VZ-PST.IMPF
'The flower was very pretty.'

A major function of *-tu* is to verbalize non-verbal predicates in order to license verbal inflection (cf. 12). *-tu* is effectively an unaccusative verbalizer.

Note that *-tu* cannot appear suffixed onto verbs:

(13) *aapo muun-im bwa'a-tu
3.SG bean-PL eat.TR-VZ

As a result, *-tu* has been characterized as a denominalizing or deadjectivizing verbalizer (Dedrick & Casad 1999).

3.2 The modal aa

The modal *aa* comes from the verb *aawe* 'to be able to' / 'to know how to' and takes a verbal complement:

(14) inepo aa vahume
1.SG MOD swim
'I can swim'

Internal arguments of the complement verb can intervene between the modal and the complement verb:

(15) haisa=ee aa **kolawaari-m** ya'a?
Q=2.SG MOD **bamboo_basket-PL** make
'Do you know how to make bamboo baskets?'

Applying tense/aspect/mood inflection to predicates with *aa* results in the suffixation of the complement verb:

(16) haisa=ee uusi-ta-kai aa vahume-**n**?
Q=2.SG child-be?-PPL MOD swim-**PST**
'Could you swim as a child?'

This inflection occurs without the verbalizer *-tu*, suggesting that the complement verb remains verbal in these contexts.

4 Analysis

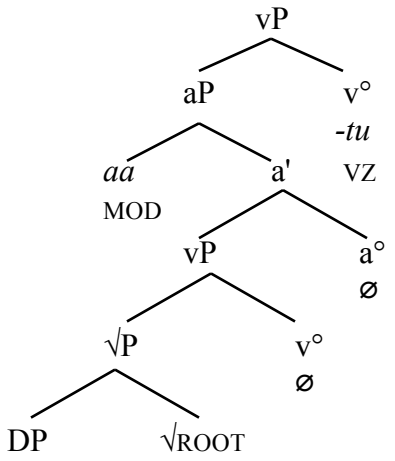
The following issues require explanation:

1. How do we account for the passive properties of the construction?
2. How do we account for the presence of the *-tu* verbalizer on an apparently verbal stem?

Proposal:

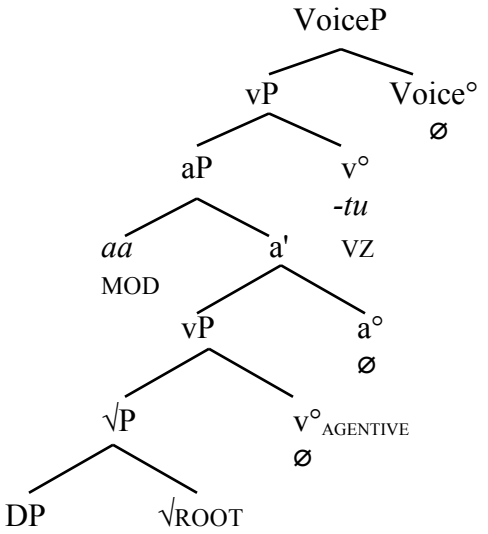
In the ability passive, *aa* realizes an adjectivizing aP with scope over the embedded vP. The resulting adjective is subsequently reverbalized by *-tu*, as illustrated in (17):

(17)



The aP is spelled out as a phase, and the agent role of the internal vP is existentially bound. Verbalization under *-tu* licenses the application of a null Voice° that does not introduce an external argument, as shown in (18):

(18)



Note that Hiaki does not have a by-phrase equivalent[6].

Nonetheless an agent is implied, just as in the English translations, as seen in (2), repeated here as (19):

(19)	hunu-me	muun-im	aa	bwasa'a-tu
	that-PL	bean-PL	MOD	cook.TR-VZ
	'Those beans can be cooked.'			[*alt*: are cookable]

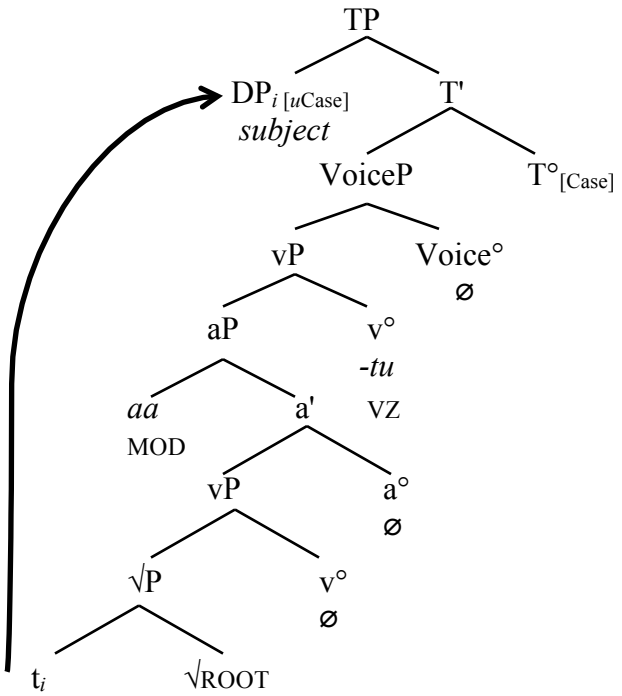
This suggests existential binding of the agentive semantics associated with the embedded verb.

[6] There is no way to express an agent or other external argument that was not explicitly introduced in the derivation (Escalante 1990).

I assume agentive semantics are introduced by v°, but saturated only by an argument introduced by Voice (cf. Harley 2013). Since a° selects for vP, not VoiceP, no syntactic argument is available to saturate the agentive semantics.

The highest internal argument is subsequently raised to Spec T to receive Case, unless it received Case from a case-assigning postposition. This is illustrated in (20):

(20)

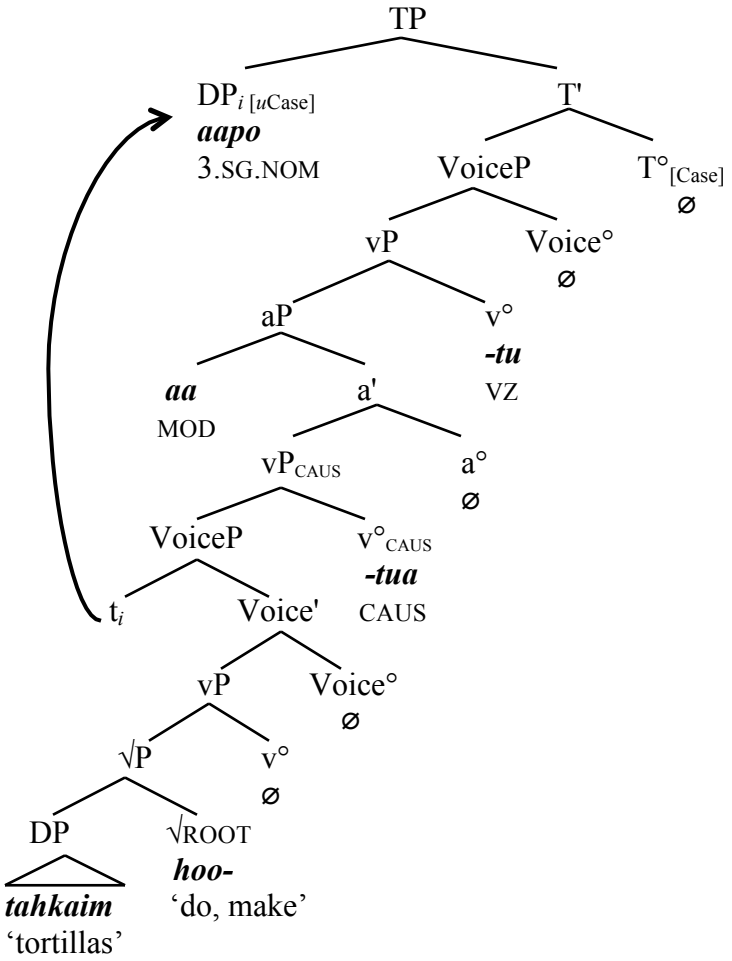


This buys us some important advantages:

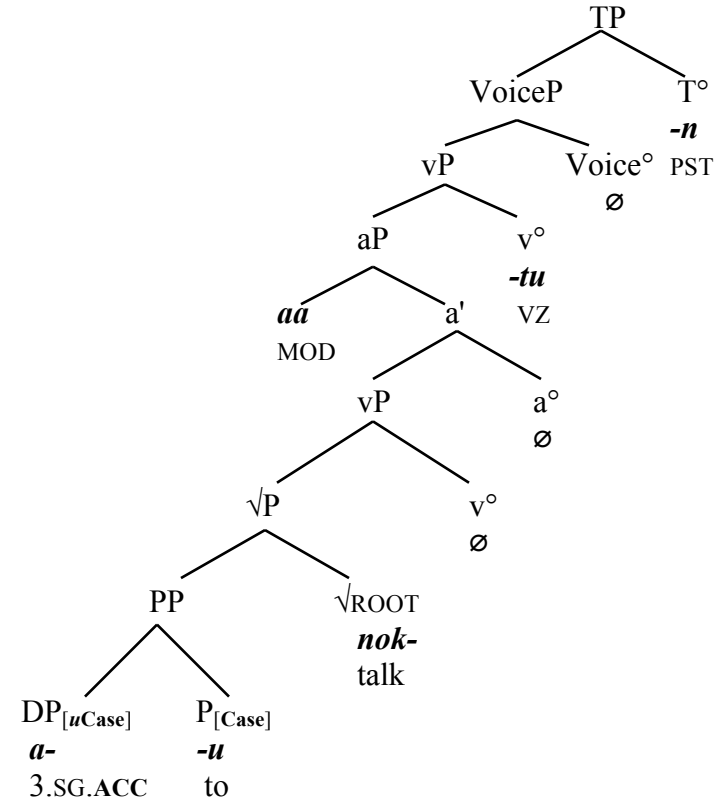
1. The passive properties are accounted for by Voice, just like in a normal passive.
2. The verbalizer *-tu* is not attaching structurally to a verbal element at all, but rather an adjectival one.

The whole derivation is illustrated with examples in (21)-(22):

(21) *aapo aa tahkaim hoo-tua-tu*
'she can be made to make tortillas'



(22) *aa a-u nok-tu-n*
'he was someone you could talk to'



Here, the postposition *-u* assigns Case to the internal argument, and so it is not raised to Spec T.

4 Discussion

This analysis relates the present construction to similar constructions in a number of other languages:

- English (*-able*; Nevins 2002, a.o.)
- Icelandic (*-anlegur*; Wood & Sigurdsson 2014)
- Portuguese (*-vel*; Moreira 2015)
- Greek (*-tos*; Anagnostopoulou & Samioti in press)
- Basque (*-garri*; Artiagoitia 2003)
- As well as other Germanic and Romance languages and possibly Japanese (*-rare*; Ishizuka & Koopman 2014).

These constructions involve a morpheme of ability, capacity, or potentiality and a deverbal adjective, as proposed here for Hiaki. In all cases, the construction results in an abilitative, capacitative, or potential passive interpretation.

Unlike in analyses proposed for these other languages, the Hiaki deverbal adjective is reverbalized in order to receive Unaccusative Voice.

4.1 Building words in the syntax

The conspiracy between a free modal and a bound suffix provide evidence against a lexicalist approach to word formation. If words are not built in the syntax, how is *-tu* licensed to attach to a verbal stem?

4.2 Unresolved issues and future directions

Recall (3), repeated below as (23):

(23) aapo$_i$ si kaa aa a$_i$-u nok-tu
3.SG very NEG MOD 3.SG.ACC-to talk-VZ
'He really doesn't take advice (i.e. can't be talked to).'
[*lit:* really isn't talk-to-able]

In (23), *aapo* 'he' is co-referenced with the internal argument (*a-*), which receives Case from *-u*.

In (22), however, *aapo* is not present at all, and only the "down-stairs" argument remains.

This, together with the presence of both a full and a clitic form in (23), suggests that this may be a topic/comment construction.

But if this is the case, why does *aapo* appear in nominative case?

What are the limits to what can be contained within the ability passive construction? For example, can it take relativized arguments?

5 Conclusion

Prima facie evidence of the verbalizer *-tu* attaching to a verbal stem actually involves a complex derivation in which *-tu* attaches to an aP with scope over an embedded vP.

This analysis situates the Hiaki ability passive in a cross-linguistic context of deverbal adjectival ability constructions with passive-like properties.

The conspiracy between free and bound elements provides evidence for building words in the syntax, along the lines of DM or other syntactico-centric frameworks.

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