

Philippine-type “voice affix” as A'-agreement marker:
evidence from productive causative

1. Introduction. This paper looks at three Philippine-type Formosan languages (Puyuma, Amis, Seediq) that share the same case patterns in productive causatives (1), and makes three claims in (2) concerning the Philippine-type voice system based on novel data.

- | | AV-causative | PV-causative | CV-causative | |
|-----|-------------------|--------------|--------------|--|
| (1) | Causer [Pivot] | [Ergative] | [Ergative] | (“Ergative” = marking on non-Pivot agents) |
| | Causee [Oblique] | [Pivot] | [Oblique] | (“Oblique” = marking on AV objects) |
| | Caussum [Oblique] | [Oblique] | [Pivot] | (“Pivot” = the phrase eligible for A'-extractions) |
- (2) (a) The morphological marking on AV objects (“Oblique”) realizes structural Accusative.
 (b) “Pivot”-marking does not realize structural Absolutive, but a topic/focus marker that overrides morphological case and marks the information-structure status of a phrase.
 (c) Philippine-type “voice affixes” are better analyzed as agreement morphology that realizes an A'-agree relation obligatory in each clause (e.g. Pearson 2001, 005 for Malagasy), rather than the morphological reflex of transitive/intransitive Voice or applicative head (Aldridge 2004 *et seq.*). A phrase under the Agree relation bears Pivot-marking.

2. The puzzles. The causative case patterns (1) raise important questions to the ergative approach to Philippine-type voice systems (e.g. Payne 1982; De Guzman 1988; Mithun 1994; Aldridge 2004 *et seq.*). **First**, under the ergative approach, “Oblique” is analyzed as a lexical case that inherently licenses the internal arguments in AV clauses; however, in AV-marked causatives, obligatory “Oblique”-marking falls on the **Causee** (1), which is presumably a non-internal argument. This suggests two possible analyses: (i) the Causee is inherently licensed by a *by*-phrase or applicative head, or (ii) “Oblique” essentially realizes **structural Accusative** from the higher Voice, which licenses the Causee in an ECM-like configuration. **Second**, in CV-causatives, obligatory Pivot-marking falls on the **Caussum**, with **Oblique-marked Causee**. Under the assumption that “Pivot” marks Absolutive case from T, the case pattern in CV-causatives suggests two possible structural relations: (i) the Pivot-marked Caussum is base-generated higher than the Causee as an applied object, or (ii) the Causee is inherently licensed by a *by*-phrase or applicative head. Alternatively, if the “Oblique”-marked Causee is *structurally licensed* and *higher* than the Pivot-marked Caussum, Pivot-licensing does not respect locality.

3. Claims. In this paper, we first demonstrate that, regardless of voice type and case pattern, productive causatives in all three languages (i) involve a Causee that always **asymmetrically c-commands** the Caussum, and (ii) the Causee always behaves like a normal external argument. Based on (i) and (ii), we argue for the following analyses: (a) the “Oblique”-marking on the Causee in AV-causatives follows straightforwardly from a **structural Accusative** analysis for the Case assigned to AV objects, and (b) the observation that Pivot-marking “skips” the structurally licensed Causee and marks the Caussum in CV-causatives suggests the non-locality in Pivot-licensing, as unexpected on an Absolutive-Case analysis of Pivot-marking. Due to space limitation, we present only data from Puyuma in what follows, with the same observations obtained with Amis and Seediq.

4. Causee > Caussum. Evidence for the Causee being structurally higher than the Caussum comes from quantifier-variable binding, which shows that a quantifier Causee can always bind into a pronominal Caussum and obtains bound variable reading regardless of voice type (e.g. (3a-b)), even in CV-causatives, where an **Oblique-marked Causee** can bind into a **Pivot-marked Caussum** (3b).

- (3a) Ø-pa-deru=ku [kantu=dawa] [kana bulraybulrayan driya]. [Puyuma]
 AV-CAU-cook-1SG.ABS [3.POSS.OBL=millet] [DF.OBL girl every]
 ‘I made every girl_{<i>} cook her_{<i>} millets.’ (✓ bound variable reading)
- (3b) ku=pa-deru-anay [nantu=dawa] [kana bulraybulrayan driya]. [Puyuma]
 1SG.ERG CAU-cook-CV [3.POSS.ABS=millet] [DF.OBL girl every]
 ‘I made every girl_{<i>} cook her_{<i>} millets.’ (✓ bound variable reading)

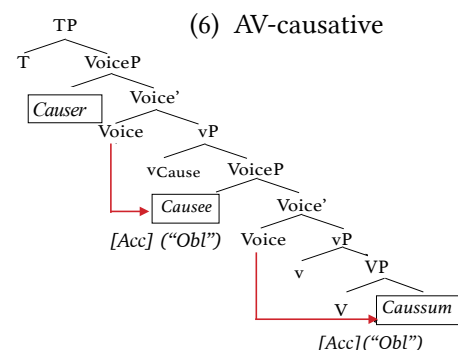
* Puyuma allows flexible word order between Causee and Caussum. In (3a)-(3b), I present instances in which the pronominal phrase precedes the quantifier phrase in linear order.

The binding facts in (3a)-(3b) eliminate the options that (a) the Caussum is base-generated higher than the Causee as an applied object, and (b) the Causee is inherently licensed by a *by*-phrase, which is expected to be unable to bind into the Caussum, and point to two remaining options: (i) the Causee is introduced by an independent VoiceP as a normal external argument, or (ii) the Causee is inherently licensed by an applicative head. We provide further evidence for the former.

5. Causee as an external argument. Causatives that contain a Causee-introducing ApplP have been shown to be unable to license (i) agent-oriented adverbs, (ii) adverbs of frequency, and (iii) distinct temporal adjunct that modify the caused event (e.g. Pylkkänen 2002; Legate 2014), under the analysis that such structures realize mono-eventive constructions rather than bi-eventive structures. The analysis that Causees consistently behaves as an external argument is thus motivated by the availability of (i)-(iii) in productive causatives under all voice types and across the three languages, as exemplified in (4)-(5).

- (4) ku=pa-base'-anay kana walak (masal) driya tu=kiping. [Puyuma]
 1SG.ERG=CAU-wash-CV DF.OBL child (again) every 3.POSS.ABS=clothes
 'I asked every child_{-j>} to wash his_{-i/fj>} clothes (again).' (✓ bound variable reading)
- (5) Ø-pa-pukpuk=ku kan siber (masal) (pakirep) kana suwan andaman. [Puyuma]
 AV-CAU-beat=1SG.ABS SG.OBL Siber (again) (strongly) DF.OBL dog tomorrow
 'I asked Siber to beat the dog (severely)(again) tomorrow.'

6. Analysis. We argue accordingly that productive causatives in all three languages involve two independent VoicePs under all voice types, as in (6). The presence and absence of "Oblique"-marking on the external-argument Causee between AV- and PV-causatives (cf. (1)) can thus be captured under the analysis that structural Accusative is available in AV clauses, while is morphologically absent in PV clauses. Further, the observation that Pivot-marking in CV-causatives skips the external-argument Causee and marks the Caussum (e.g. (1), (4)) indicates the non-local nature of Pivot-licensing.



7. Claim. Given the invariable structural relations among arguments on the one hand and the "voice"-conditioned case patterns (1) on the other, we argue for the separation of Pivot-marking and Case, as proposed in (2b-c). This captures two phenomena at one time. First, productive causatives across the three languages as well as Tagalog (Rackowski 2002) are shown to involve two independent VoiceP; however, they involve only one "voice affix" per sentence (e.g. (3)-(5)). The absence of the embedded "voice affix" is unexpected for the ergative analysis, according to which "voice affixes" are the morphological reflex of individual Voice heads (Aldridge 2004 *et seq.*), while follows from the present analysis that "voice affixes" essentially signal an A'-agree relation that is unique per sentence. By treating "Pivot" as a topic/focus marker that overrides morphological case and indicates the phrase entering the Agree relation, the case patterns in (1) is captured under (7).

- (7) AV-causative PV-causative CV-causative The topic/focus analysis for Pivot is supported by
 Causeur "Pivot" [Nominative] [Nominative] further evidence from Puyuma, where base-
 Causee [Accusative] "Pivot" [Accusative] generated hanging topics share the same form
 Caussum [Accusative] [Accusative] "Pivot" with "Pivot"-marking, as in (8).
- (8) i pilay_i i kilengaw=ku [kana ngay [dra tu=patrakaw-ay i sayki e.c.(ERG)_i]].
 "SG.ABS" Pilay_i TOP AV.hear=1SG.ABS [DF.OBL news [C 3.ERG=slander-IV SG.ABS Sayki e.c.(ERG)_i]]
 'As for Pilay, I heard the news that (she) slandered Sayki.' [Puyuma]

8. Implications. The novel evidence from Formosan causatives lends further supports to the separation of Pivot-marking and Case (Pearson 2005; Erlewine et al. 2016) and the Accusative approach to Philippine-type voice systems (e.g. Richards 2000; Rackowski 2002; Pearson 2005). Further, it sheds light on the nature of noun/verb homophony in Philippine-type languages, in which "voice affix" and "nominalizer" essentially realize the same A'-agree relation under either verbal or nominalized CP environments.

Selected references. Aldridge, E. 2004. Ergativity and word order in Austronesian languages. Ph.D Dissertation, Cornell University. Pearson, M. 2005. The Malagasy subject/topic as an A'-element. *NLLT* 23:381-457. Rackowski, A. 2002. The structure of Tagalog: Specificity, voice, and the distribution of arguments. Ph.D Dissertation, MIT.