

Multiple case assignment and case-stacking in Amis

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This paper proposes an analysis of Amis (Austronesian; VSO) case-stacking, in which *nominals may receive case multiple times* (Richards 2013, Pesetsky 2014, a.o.). I show that *case-stacking tracks the derivation independent of movement* (cf. Levin 2017), *supporting the derivational nature of external merge*. I first argue that a lower level of case assignment where unmarked case is realized as genitive (GEN) underlies main clauses and gerunds. I then show that another level of case assignment where unmarked case is nominative (NOM), which often replaces the case assigned on the lower level, derives the case patterns of main clauses and gerunds. Finally, I show that when a nominal is a contrastive topic, the cases assigned on the two levels of case assignment are realized simultaneously.

Bare root DP: I posit that the case assignment in bare root DPs (1-2), DPs headed by an unaffixed verb, is also present as a lower level of case assignment in main clauses (3) and gerunds (7). I discuss properties of Amis roots which suggest that event roots, e.g. *cefos* ‘spray,’ and entity roots, e.g. *tefos* ‘sugarcane,’ belong to the same category, given parallel behavior regarding selection and case marking. This offers evidence for nominalized roots and a lower case assignment where the unmarked case is GEN. First, a variety of affixes treat both types of roots as a group, e.g. plural reduplication *cefo*<**cefo**>*s* ‘spray repeatedly,’ *tefo*<**tefo**>*s* ‘sugarcanes.’ Second, nominals in bare root DPs (1) receive case in the same way, regardless of the root type. The higher nominal (agent of ‘spray’ or possessor of ‘book’) receives GEN and the lower nominal receives accusative (ACC). (2) in addition shows that the sole argument of an unaccusative root must receive GEN.

- (1) [_{BAREROOTDP} O *cefos/codad* **no wawa** to *epah*] ko *sakafaheka* ako.
 O spray/book GEN child ACC wine NOM reason.surprised GEN.1SG
 ‘The child’s spraying wine/ the child’s book about wine is why I am surprised.’
- (2) o *leneng* **no/*to tamina**’ (3) *Mi-cefos* **ci Kolas** to *epah*.
 O sink GEN/*ACC boat IMPV.AV-spray NOM.PN PN ACC wine
 ‘(a) boat(s)’ sinking’ ‘The child is spraying wine.’

GEN/NOM as unmarked case: Amis bare roots (1) function as nominals and contrast with inflected roots, which are verbal. Bare roots and inflected roots in an imperfective clause (3) differ, among other things, in the case the highest argument receives: GEN in (1) and NOM in (3). I put aside perfectives, which show differential subject marking. I will assume, for lack of space for detailed discussion, that Amis roots uniformly lack category in the lexicon. Once saturated with arguments, a root is first nominalized by n^0 , and may be verbalized if voice morphology, e.g. Actor Voice (AV) *mi-/pi-* in (3/7), is merged in v^0 . (4) shows schematically the structure of a transitive root. The case patterns are captured if we treat ACC as the dependent case and GEN and NOM as two realizations of the unmarked case, conditioned by the category of the Spell-Out domain.

- (4) [_{vP} [_{v⁰} **mi-**] [_{nP} [_{n⁰} \emptyset]] [_{VoiceP} AGENT ... [_{RootP} \sqrt{cefos} ‘spray’ PATIENT]]]]

Case assignment rules: I propose that Spell-Out applies each time a phase head (v^0 , C^0 , D^0) is merged and the category of a Spell-Out domain (nominal or verbal) is determined by the highest category head (n^0 or v^0) in the current domain. I posit that Amis assigns case by the ordered rules in (5). Results of multiple case assignment are constrained by *One Case Rule: delete all but the outermost case*.

- (5) a. If there are two DPs in the same phase such that DP_1 asymmetrically c-commands DP_2 and if DP_1 is caseless, assign ACC to DP_2 .
 b. If a DP does not receive dependent case, assign GEN to the DP if the current Spell-Out domain is nominal, and assign NOM if the domain is verbal.

Case derivation: I illustrate the rules first with a transitive imperfective clause (3). First, merger of v^0 triggers Spell-Out of nP (see (4)). (5a) assigns ACC to the patient and (5b) assigns GEN to the agent given that n^0 is the highest category head in this domain. Next, in a main clause, merger of C^0 triggers another Spell-Out (of vP). (5a) again assigns ACC to the patient, but this time, (5b) assigns NOM to the agent given that v^0 is the highest category head in this domain. (6a-b) summarize these two levels of case assignment. By the *One Case Rule*, only the cases assigned in (6b) are pronounced.

(6)	Domain	IMPV clause	Domain	Gerund
a.	vP	GEN.agent ACC.PATIENT	c. vP	GEN.agent ACC.PATIENT
b.	CP	NOM.agent ACC.PATIENT	d. DP	GEN.agent ACC.PATIENT

Gerunds: Gerunds (7) have the external syntax of a DP in Amis: they receive case and can be headed by a demonstrative. I posit that gerunds are derived by nominalizing the verbalized structure in (4) by another n^0 . The first Spell-Out in a gerund is identical to the one in a main clause. Both are triggered by merger of v^0 . Next, in a gerund, merger of D^0 triggers Spell-Out of the higher nP . (5a) assigns ACC to the patient and (5b) assigns another GEN to the agent, given n^0 is still the highest category head in this domain. (6c-d) summarize the two assignments. The *One Case Rule* applies vacuously in (7).

- (7) Faheka kako [GERUND (to-)ya pi-'ari **ni** **Kolas** to kaysing].
 surprised NOM.1SG (ACC-)that AV-break GEN.PN PN ACC bowl
 'I'm surprised at Kolas' breaking bowls.'

Case-stacking: When a nominal is a contrastive topic (CT), the cases assigned on the two Spell-Outs in (6) are realized simultaneously. In (8), the CT-marked agent of an imperfective clause surfaces with NOM external to GEN, the two cases assigned to the agent in (6a-b). In (9a), the CT-marked agent of a gerund surfaces with stacked GEN-GEN, the two cases assigned to it in (6c-d). Moreover, this agent can raise into the matrix clause and receive ACC when the matrix clause is imperfective. (9b) shows that when this raised agent is CT-marked, triple case-stacking (ACC-GEN-GEN) is licensed.

- (8) Mi-epah **ko-no** **ising**. Kirami caay ho pi-epah **ko-ni** **Kolas**.
 IMPV.AV-wine NOM-GEN doctor but NEG yet AV-wine NOM-GEN.PN PN
 '[The doctor]_{CT} is drinking wine, but [the teacher]_{CT} isn't drinking wine yet.'
- (9) a. Faheka kako [to pi-'ari **no-ni** **Kolas** to kaysing].
 surprised NOM.1SG ACC AV-break GEN-GEN.PN PN ACC bowl
 b. Faheka kako **to-no-ni** **Kolas** [to pi-'ari ___ to kaysing].
 surprised NOM.1SG ACC-GEN-GEN.PN PN ACC AV-break ACC bowl
 'I'm surprised at [Kolas']_{CT} breaking bowls (but not Panay's breaking bowls).'

Case-stacking in Amis resists marking exhaustive answers and non-referential quantified nominals, e.g. *few doctors*, both of which are hallmarks of CT (Constant 2014). This correlation between case-stacking and information structure is also found in other languages, e.g. Korean (Schütze 2001). I propose *CT Case Preservation Constraint: a case attached to a CT-marked nominal cannot be deleted*. This constraint is ranked higher than the *One Case Rule*. Thus, when a nominal is CT-marked, all cases assigned to it will surface. Note that *case-stacked nominals in Amis may remain in situ and the stacking patterns track a nominal's derivational path that does not necessarily involve movement* (8-9a). Although case-stacked nominals tend to scope above negation whereas non-stacked nominals are ambiguous, this can be explained by their CT status. Last, the data above show that GEN and NOM have two allomorphs in Amis: *ni/ci* before a personal name and *no/ko* elsewhere. In a case-stacked nominal, only the inner case undergoes this allomorphy. I propose that this is a result of morphological locality: the allomorphy applies only when a case is attached directly to a nominal.

Selected references: Levin, T. 2017. Successive-cyclic case assignment: Korean nominative-nominative case-stacking. *NLLT* 35:447-498. Richards, N. 2013. Lardil "case stacking" and the timing of case assignment. *Syntax* 16:42-76.