Inner Aspect and Voice in Belait

1 Introduction. I present novel data investigating inner aspect and voice alternations in Belait, a language of north Borneo. Data is drawn from a documentary corpus of naturalistic discourse, conversational and elicited texts recorded during fieldwork in north Borneo. **Subjects** are bolded, *non-subjects* are italicized and aspectual material is underlined throughout. Null arguments are glossed according to semantic roles: A(ctor) and (U)ndergoer.

2 Background. In western Austronesian languages it is not well-understood why/how speakers choose to use one voice construction over the other(s) (Riesberg et al. 2021). At the same time, it has been noted over the years that voice and aspect in western Austronesian languages are related, although the exact nature of this relationship is unclear (Ross 2002; Travis 2010; Latrouite 2011; Teng 2024). Belait shows a striking restriction in voice and viewpoint aspect: Undergoer Voice(UV) clauses are obligatorily perfective, while Actor Voice(AV) clauses can be perfective or imperfective. Following insights from (Travis 2010; Sybesma 2017), I argue that the restriction on viewpoint aspect is mediated by features of inner aspect. More specifically, UV predicates are always telic, and this telicity restricts viewpoint aspect to perfective.

3 Obervations on Viewpoint Aspect. Lower Baram UV clauses are not compatible with progressive or future/desiderative auxiliaries (2a), (2b). AV clauses can occur with a full range of aspectual auxiliaries (1a), (1b), including the perfective auxiliary (3). **Conclusion:** UV is restricted, but there is non one-to-one mapping between viewpoint aspect and voice.

(1) a. **ø** m-akok-m-akok *segalia lukoong*
(A) AV-peck-PROG all worm
'They were pecking at all the worms.'

b. **liew** kira m-innaad *gunung*
3PL DESID AV-climb mountain
'They want to climb the mountain.'

(2) a. ***segalia lukoong** ken-akok-ken-akok *ø*
all worm UV-peck-REDUP (U)
For: 'They were pecking at all the worms.'

b. ***gunung** kira n-innaad *liew*
mountain DESID UV-climb 3PL
For: 'They want to climb the mountain.'

(3) **ø** ngaa k-u-maan *mbaie*, **ø** lakaau chiin lek Tuwarian
(A) PFV <AV>eat something (A) walk again to Tuwaran
'After eating something, we walked again to Tuwaran'.

4 Observations on Inner Aspect.

1. Voice alternations shift the semantics of epistemic verbs. The meaning of a single lexical root changes depending on voice morphology. In AV the predicate *m-ittaan* is stative and durative 'know', (4a). When the same predicate appears with UV morphology, *k-ittaan*, it is dynamic and punctual 'notice', (4b). **Conclusion:** voice alternations are related to the semantics of the predicate, showing that they are part of inner aspect (Travis 2010).

   (4) a. **Nyieh** m-itaan *kudieh war nadieh mudung*
   3SG <AV>know how.many tree not.have rubber
   'He knew how many trees didn't have rubber inside them'

   b. **kau** k-itaan *a'aal yieh*
   1SG UV-know chickens DIST
   'The chickens noticed me.'

2. Voice alternations manipulate the telicity of incremental activity predicates. In AV, predicates of consumption are atelic activities, (5a). In UV, they are telic accomplishments, (5b). **Conclusion:** Voice morphology encodes telicity.

   (5) a. **kamai** k-um-aan *mbaie*
   1PL <AV>eat what
   'we had something to eat'

   b. **segalia** k-in-aan *kau*
   everything <UV>eat 1SG
   'I ate everything up.'

3. Undergoers of UV predicates undergo an irreversible or total change of physical state (6). AV Undergoers may be partially affected. **Conclusion:** UV Undergoers measure out telicity.

   (6) **ø** g-en-iling ɸ ngan tak kajiew yieh baruu=lah
   (U) <UV>grind (A) with stick wood DIST then=PTCL
   '(The rice) was ground up with a wooden stick.'

4. Undergoers of UV incremental Activity predicates become telic Accomplishments when the Undergoer is quantized (7). **Conclusion:** UV Undergoers measure out telicity.

   (7) duniek **tellau lang sekkau** n-igiet ɸ
   earlier three CLASS stalk UV-tie (A)
   'Earlier they tied three stalks together.'

5. UV predicates of motion are augmented by a goal that serves to specify the final result location (8). Goals in AV clauses represent a temporary location (3). **Conclusion:** UV PPs measure out telicity.

   (8) **kerebien no shau nyieh mulon** n-imbet ɸ lek tak ubuur
   utensils REL use 3SG life UV-bring (A) to at grave
   'They took all his utensils he used when he was alive to his grave (and they remain there).'

6. UV incremental activity predicates can be augmented with secondary predication denoting a result state (9). **Conclusion:** UV XPs measure out telicity.

   (9) **ø** poo t-i-ppah ɸ yieh **ø** k-en-apaan ɸ chiin baruu jadiey berriey
   (U) finish <UV>pound (A) DIST (U) <UV>grind (A) again then finish rice
   'They finished pounding and grinding the plants up into rice.'

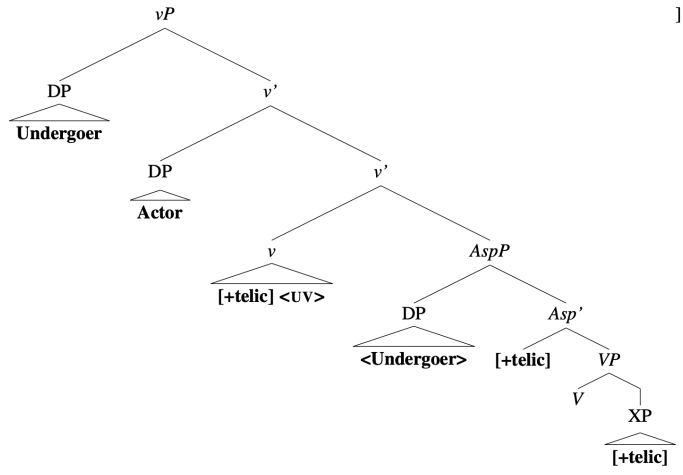

Figure 1: Undergoer Voice Derivation in Belait

5 Proposal. The data shows evidence for an articulated verbal domain with at least three positions where telicity may be computed: (i) voice morphology at *vP*, (ii) Measuring out by the Undergoer, in *AspP*, (iii) XP augmentation, see (Fig 1). I take UV voice morphology to be an inner aspect telicity marker, denoting real-world completion, along the same lines as Sybesma's (2017) analysis of Mandarin *le*. I sketch out an analysis based on previous insights on the interaction between aspect and the position/case of Undergoers in a range of languages ((Ramchand 1997; Borer 2008; Travis 2010, e.g.). Crucially, in Belait, UV clauses involve the computation of [+telic] features which require the Undergoer to raise above the Actor, see Fig 1. Note that AV clauses lack Undergoer raising and the Actor remains the highest DP in *vP*.

6 Conclusion. There is a non-trivial relationship between aspect and voice in Belait where argument structure is computed based on event structure. Work is currently in progress to confirm preliminary observations of related Lower Baram languages, which seem to show similar properties.

7 References. Borer (2008). The normal course of events * Latrouite (2011). "Voice and case in Tagalog" * Ramchand (1997). Aspect and Predication * Riesberg (2021). "Predicting voice choice in symmetrical voice languages" * Ross (2002). "Final words" * Sybesma (2017). "Aspect, Inner" * Teng (2024) "The role of prominence in Katripul Puyuma" * Travis (2010). Inner Aspect