How Can One Kill Someone Twice in Indonesian? Causal Pluralism and the Tripartite VP Structure

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Over the last ten years or so, there have emerged two important discoveries regarding causative accomplishment verbs which have been independently developed in the lexical semantic and minimalist syntactic literature, respectively. One is the Agent Control Hypothesis/ACH on non-culminating, zero-change of state (CoS) construals of causative accomplishment verbs (Demirdache and Martin 2015; Martin 2015); the other is so-called the Tripartite VP Hypothesis posited for the traditional verb phrase (Pylkkänen 2002; Harley 2009, 2013). This paper brings together these two strands of research in a fruitful manner through an in-depth investigation of causative accomplishment verbs in Indonesian, a language which has heretofore never been studied with focus on these particular interface topics.

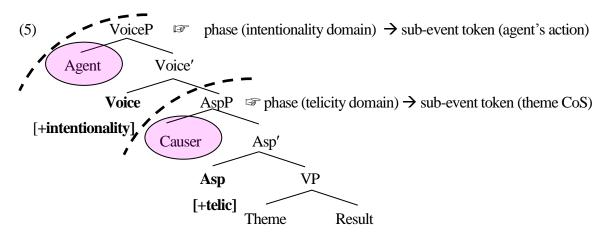
It is well-known since Tai (1984) that Mandarin Chinese accomplishment verbs such as sha 'to kill' do not necessarily entail the resulting change of state, as shown in (1); to insist on the achievement of the final endpoint, a resultative V-V compound is used instead. Indonesian accomplishment causative verbs like bunuh 'to kill' and tutup 'to close' exhibit the same behavior, as shown in (2a, b). The same verbs, however, block this zero change-of-state (CoS) reading when the agent in subject position is replaced with a non-volitional causer, as evidenced by the ungrammaticality of (3a, b). This contrast, therefore, lends further support to the ACH, defined in (4), which has already received ample cross-linguistic (e.g., Germanic, French, Salish, and East Asian language families) as well as empirical support (Demirdache and Martin 2015; Martin 2015, 2019). Following the spirit of the Tripartite VP Hypothesis, which has received wide currency in the latest minimalist literature, I propose that Indonesian causative accomplishment verbs are made up of a) the Agent-introducing Voice head, b) the Causer-introducing aspectual head Asp, and c) the lexical head denoting the resulting state, as schematically represented in (5). I assume, following Martin (2019), that the Voice and Asp layers each introduce a sub-event token serving to identify two different causation types, depending on whether the subject is an agent or causer. More specifically, the agentive causative structure introduces two sub-event tokens – the agent's action and the theme's CoS – whereas the non-agentive causative structure introduces only the second sub-event token. I propose that the nonculminating accomplishment construal is fine with an agentive causer because the negation in the second clause in (2a, b) may negate the second sub-event token introduced by Asp, but not the first event-token introduced by Voice. This 'partial negation' option is not available with a non-volitional causer, however; the only sub-event token introduced there is the Theme's CoS, so negating this single token yields contradiction, just as in the case of an intransitive causative statement as in (6).

Adapting Martin's (2015, 2019) diagnostics to identify the number of sub-event tokens in English/French to Indonesian shows that causative accomplishment verbs in this language indeed have two sub-event tokens with an agentive subject but only one token with a causer subject. Here, I only reproduce two of Martin's tests for reasons of space, noting that the other tests point to the same conclusion. Firstly, time-frame adverbial such as in one hour are known to measure the time span between the onset and the result state of a complete eventuality denoted by a particular verb. With this point in mind, consider (7a) with an agentive subject and (7b) with a causer subject. The contrast here naturally falls out from the syntactic derivation in (5). (7a) introduces two sub-event tokens so the time span of the theme's CoS may well be construed as shorter than the time span of the entire causing event which also contains another subevent token related to the agent's action. By contrast, (7b) only introduces one sub-event token related to the theme's CoS. Thus, the entire causing event would be interpreted as completed in both ten minutes and in one minute, leading to contradiction. Secondly, Martin points out that when a causative predicate is embedded under aspectual verbs such as begin, such a statement requires the CoS of the theme to start with a causer subject, but not necessarily with an agentive subject. Examples (8a, b) show that this contrast also holds in Indonesian. (8a) entails that some action by the subject has started, but no change developing toward the result state has to happen whereas (8b) entails that the fish has already started undergoing some changes which would ultimately lead to the result state. This contrast manifests itself because the agentive causation type involves two sub-event tokens, only the first of which is modified by *mulai* 'to begin': this option is not available with the causer causation type, which introduces only the second sub-event token.

The analysis proposed represents a successful integration of the two recent developments independently pursued in the fields of lexical semantics and syntax of causatives, drawing on both Martin's (2015, 2019) tokenization-based theory of causation types and the Tripartite VP Hypothesis. There are three important take-aways from the study conducted here. Firstly, the paper adds novel data points from Indonesian, a language which has not been studied in this connection, to a growing body of comparative work on the syntax and semantics of non-culmination in causative predicates. Secondly, the results of this paper add further syntactico-semantic support from Indonesian for a grammaticalized distinction between agents and causers within syntactic representations from a new angle of non-culminating construal, a

distinction that has been primarily motivated morphologically in the previous literature (see Harley 2009, 2013). Finally, the overall result of this paper vindicates the emerging consensus in the syntax-semantics literature that event structure is isomorphic to syntactic structure in non-trivial ways (Travis 2000, 2010).

- (1) Zhangsan {sha-le /* sha-si-le} Lisi liangci, Lisi dou mei si. Zhangsan kill-PERF kill-die-PERF Lisi twice Lisi **QUANT** NEG die 'Zhangsan killed Lisi twice, but Lisi didn't die.' (Tai 1984:291)
- (2)a. Budi membunuh Ali, tapi dia tidak mati. b. Esti mentutup pintu tapi tidak tertutup. Budi kill Ali but he NEG dead 'Budi killed Ali, but he didn't die.' Esti closed the door, but it didn't close.'
- (3)a. * Gempa bumi membunuh Ali, tapi dia tidak mati. b. * Angin mentutup pintu, tapi tidak tertutup. quake earth kill Ali but he NEG dead wind close door but NEG close 'The earthquake killed Ali, but he didn't die.' 'The window closed the door, but it didn't close.'
- (4) The availability of non-culminating construals for accomplishments correlates with the control of the agent over the described event: whenever an accomplishment...admits a non-culminating construal, this is the case only if we can ascribe agenthood to the subject. If the subject of the very same verb is a (pure) causer, culminating cannot be cancelled. (Demirdache and Martin 2015:187)



- (6) a.* Ali mati, tapi dia tidak mati. b. * Pintu tertutup, tapi tidak tertutup.

 Ali die but he NEG die door closed but NEG close
 'Ali died, but he didn't die.' 'The door closed, but the door didn't close.'
- (7) a. Pak Iwan mebunuh ayam dalam waktu sepulu menit, tapi sebenarnya Mr Iwan kill chicken in time ten minute but actually mati hanya dalam ayam-nya waktu satu menit. chicken-the dead only in tim one minute 'Mr. Iwan killed the chicken in ten minutes, but actually the chicken died only in one minute.
 - bumi ayam b.# Gempa membunuh dalam waktu sepulu tapi sebenarnya menit, quake earth kill chicken in time ten minute but actually ayam-nya mati dalam menit. hanya waktu satu chicken-the dead only in time one minute "The earthquake killed the chicken in ten minutes, but actually the chicken died only in one minute."
- (8) a. Pak Iwan mulai membakar ikan. b. Api mulai membakar ikan. Mr Iwan start burn fish fire start burn fish 'Mr. Iwan started burning the fish.' 'The fire started burning the fish.'

Selected References [1] Demirdache, H., & F. Martin. 2015. Agent control over non-culminating events. In *Verb classes and aspect.* John Benjamins. [2] Martin, F. 2015. Explaining the link between agentivity and non-culminating causation. *SALT* 25. [3] Martin, F. 2019. Aspectual differences between agentive non-agentive uses of causative predicates. Ms., Humboldt-Universität zu Berlin. [4] Harley, H. 2013. External arguments and the mirror principle. *Lingua* 125. [5] Travis, Lisa. 2010. *Inner aspect.* Springer.