

## The Verbal Suffix *-kan* and Event Structure in Standard Indonesian

This paper provides new empirical support for the encoding of aspectual components in verbal meaning: We argue that the resultative state (RS) is encoded in the verbal suffix *-kan* in Indonesian.

The suffix *-kan* in Indonesian gives the appearance of being multiply ambiguous. It shows properties of both causative and applicative morphemes (e.g., Kaswanti 1997, *inter alia*): *-kan* is used primarily to derive causatives (e.g., 1), and applicatives with a benefactive interpretation (e.g., 2). When *-kan* is attached, the beneficiary, which is otherwise expressed as an optional adjunct phrase (e.g., 2a), occurs as a bare NP adjacent to the derived verb (NP+NP frame), as in (2b). The applied argument in Indonesian may also occur in a prepositional phrase (NP+PP frame), despite the presence of *-kan* (e.g., 2c). While (2c) appears to have the same structure as (2a), an important difference between the two is that the PP is obligatory in (2c). The suffix *-kan* is also found in inherently ditransitive sentences which obligatorily take two internal objects (e.g., 3). The presence of *-kan* in inherent ditransitives is obligatory, and only an NP+PP frame is compatible with *-kan*, unlike the benefactives.

Previous accounts of *-kan* have assumed that the primary function of *-kan* is to increase the valence of a VP by introducing an additional argument (e.g., Postman 2002). However, a puzzling fact about *-kan* for these analyses is the obligatory presence of *-kan* in inherent ditransitives, in which no corresponding transitive verb exists. Given that *-kan* is neutral with respect to valency in the inherent ditransitive, no satisfactory account has been provided for the presence of *-kan* in the three aforementioned constructions.

The aim of this paper is two-fold: First, we offer a unified syntactic and semantic account of *-kan* that explains its uses in the seemingly unrelated constructions, causatives, benefactives and inherent ditransitives. Second, by analyzing *-kan* as an overt instantiation of a resultative head, we provide empirical support for the existence of a result-state-denoting constituent in the syntax of double-object verbs (e.g., benefactives and inherent ditransitives), as proposed by Beck and Johnson 2002, *inter alia*.

Building on Beck and Johnson's insight and following recent advocates for event decomposition in the syntax (e.g., Borer, 2000; Tenny, 1992; Travis, 2000; van Hout, 2000), we argue that despite their superficial differences, the three constructions (causatives, benefactives, and ditransitives) share certain aspectual properties and that *-kan* has a single function as the head of the Resultative Phrase (RP) (Ramchand & Svenonius 2002); these constructions contain the same aspectual components of a causing event and a result state which correspond to separate verbal projections in the syntactic structure. Therefore, the lexical semantics of double-object verbs (e.g., *memanggangkan* 'meN-bake-KAN') and causatives (e.g., *memecahkan* 'meN-break-KAN') can be represented and paraphrased in a similar form, as shown in (5). The predicate decomposition in (5) is further reflected in the syntax in which sub-eventive components are expressed by multiple syntactic projections, as shown in (6-7). The verbal head denoting resultativity then is explicitly expressed in the syntax by the verbal suffix *-kan*. Thus, the presence of *-kan* in these constructions is not accidental, given that double-object verbs are parallel in meaning and structure to apparent causatives.

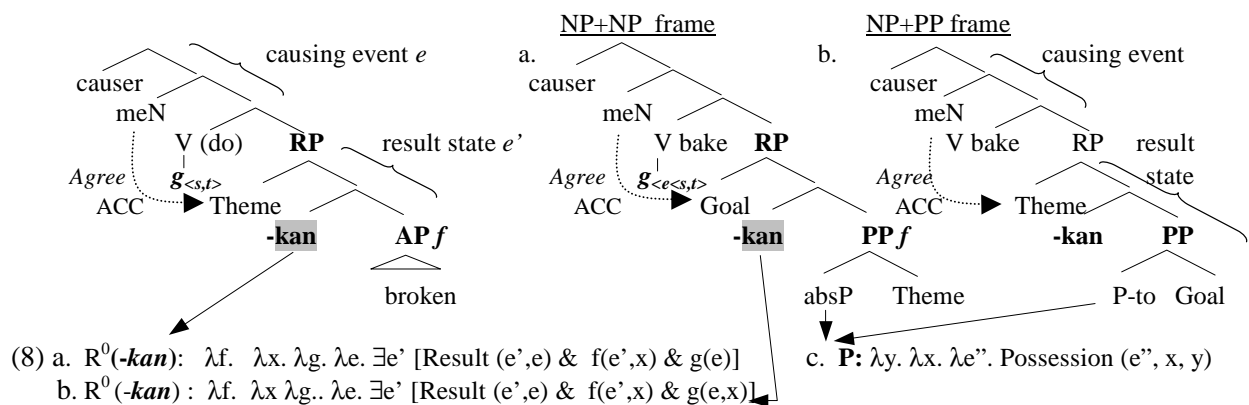
We further propose that *-kan* is interpreted as building a relation between two events, a causing event *e* and a result state *e'*, as represented in (8a-b). Result is defined as 'for all eventualities *e*, *e'*, Result(*e'*, *e*)=1 iff *e'* is a result state of *e*': the RS in the apparent causative is expressed by AP which describes a change of the state that the theme undergoes (e.g., *the cup's being broken*), as in (6). The RS in the benefactive/inherent ditransitive denoted by PP involves a necessary possession relation between the goal and the theme, regardless of different argument structure (e.g., 7). This denotation is reflected in the semantics of P, as in (8c). We further show that the optional presence of *-kan* in goal-PP constructions in (4) supports our claim that *-kan* is an overt realization of a resultative head by analyzing these constructions as a type of resultatives (cf. Beck and Snyder 2001).

The postulation of RP as an isolable aspectual component in the syntax (e.g., Ramchand 2003) is claimed to be grammatically substantial since it is shown to be motivated by semantic and syntactic facts with regard to adverbial modification (e.g., the ambiguity of *again*, von Stechow 1996). The current proposal for the analysis of *-kan* thus provides important empirical support for postulating separate verbal projections designating sub-aspectual components, in particular, result states.

- (1) a. Cangkirnya pecah                      b. Janet memecah-**kan**                      cangkirnya  
       cup-3                      break                      Janet    meN-break-KAN                      cup-3  
       'The cup is broken'                      'Janet broke her cup.'
- (2) a. Tika memanggang roti itu (**untuk** Eric)  
       Tika    meN-bake                      bread    the                      for                      Eric  
       'Tika baked the bread for Eric'
- b. Tika memanggang-**kan** Eric roti    itu                      c. Tika memanggang-**kan** roti itu \*(**untuk** Eric)  
       Tika    meN-bake-KAN                      Eric bread    the                      Tika    meN-bake-KAN                      bread    the                      for                      Eric  
       'Tika baked Eric the bread.'                      'Tika baked Eric the bread.'
- (3) John memberi-**kan** surat itu kepada Peter  
       John    meN-give-KAN                      letter    the                      to                      Peter  
       'John gave a letter to Peter.'
- (4) a. Wim menuang                      air                      b. Wim menuang-(**kan**) air                      ke dalam ember itu  
       Wim    meN-pour                      water                      Wim    meN-pour-KAN                      water    to                      in                      bucket    the  
       'Wim poured water.'                      'Wim poured water into the bucket.'
- (5) a. [<sub>VoiceP</sub> Janet VOICE [<sub>VP</sub> V - do something [<sub>RP</sub> **RESULT** : the cup is broken]]  
       = Janet's activity (doing something) brought out a result state where the cup is broken.
- b. [<sub>VoiceP</sub> Tika VOICE [<sub>VP</sub> bake (the bread) [<sub>RP</sub> **RESULT** : Eric had the bread]]  
       =Tika's baking (the bread) brought about a result state where Eric possesses the bread.

(6) Causative

(7) Dative Alternation Verbs (Benefactive/Inherent Ditransitive)



Selected References

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