Arrive or achieve? the morphosyntax of *dao* in Mandarin Chinese

Introduction: As a multifunctional item in Chinese, *dao* can occur in various syntactic environments. It can serve as a verb or a preposition and it can be combined with another verb to form a chunk, *V-dao*. The last usage of *dao* exhibits intriguing morphosyntactic properties: *dao* cannot occur independently. It is flexible in terms of C selection: CP or DP and the *θ* role of an DP argument can be location or a theme, see (1). In addition, this *dao* seems to be optional for some verbs but not others, both in motion and non motion events, as in (2) and (3).

Research question: Why *dao*, as the verb of 'arrive', can occur in such diversified syntactic contexts? Why *dao* is optional in some cases but not in others? Is it possible to give a unified account for the multifunctional *dao*?

(1)
  a. Xiaoming (zou-)dao xuexiao le. (DP location)
     Xiaoming (walk-)dao school SFP
     'Xiaoming walked to school.'
  b. Nana (zhao-)*dao le shouji. (DP theme)
     Nana (find-)dao PFV phone
     'Nana found the phone.'
  c. ...o dajia dou hen bunaifan. (CP)
     He cry-dao everyone all very annoyed
     'He cried everyone annoyed.'

(2)
  a. Xiaoming zou*(-dao) le xuexiao.
     Xiaoming walk-dao PFV school
     'Xiaoming walked to school.
  b. Xiaoming hui(-dao) fangjian le.
     Xiaoming return-dao room SFP
     Xiaoming returned the room.

(3)
  a. Xiaoming meng*(-dao) le NaNa.
     Xiaoming dream-dao PFV Nana
     'Xiaoming dreamt of Nana.'
  b. Xiaoming chi(-dao) le huoguo.
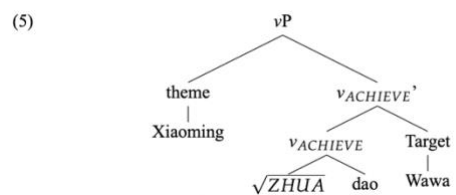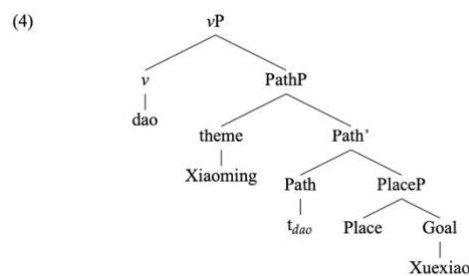   Xiaoming eat-dao PFV hotpot
     Xiaoming ate the hotpot.

In the literature, the multifunctionality of *dao* has been attributed to its different categories. *Dao* is argued to be a directional verb/preposition (Lin, 2019; Liu, 1998; Lv, 1980; Zhu, 1982; a.o), or a completive marker/particle/linker (Chao, 1965; Dong, 2017; Xuan, 2008; a.o). Such accounts are insufficient in capturing the universal semantic core among its different usages: the achievement of a target, be it a location, an entity or a state.

Proposal: Under the framework of Distributed Morphology (DM, Halle et al., 1993; Marantz, 1997), we propose dao realizes two syntactic entities: it is the PF exponent of a feature bundle [PATH, PLACE]. *Dao i*s inserted at PATH during late merge and undergoes head movement to *v*, as in (4). Such a derivation accounts for *dao*'s ability to take a locative argument and its flexibility in terms of category, compared with the intransitive 'arrive' in English. *Dao* in *V-dao* chunk is the realization of a light verb (v categorizer): $v_{ACHIEVE}$, which has the argument structure in (5).

The *v* requires a root to discharge its categorial function. That's why *dao* is involved in word formation and never occurs independently. The root names the action by adjoining to *dao* (Harley, 2005), indicating *dao*' s matrix status in the chunk. With the semantic feature 'achievement', *dao* encodes a transitive achievement event which is punctual, telic and agentiveless. The flexibility of C selection is attributed to the denotation of the target, which can be a locative DP (goal), an individual DP (theme) or a clausal CP (state). $v_{ACHIEVE}$, signifies the syntactic encoding of telicity. However, if such an endpoint is entailed in the lexical semantics of a verb, *dao* is optional.

(4)
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          vP
         /  \
        v    PathP
        |   /    \
       dao theme  Path'
            |     /   \
        Xiaoming Path  PlaceP
                 |    /    \
               t_dao Place  Goal
                            Xuexiao
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(5)
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          vP
         /  \
     theme   v_ACHIEVE'
       |     /       \
   Xiaoming v_ACHIEVE Target
            /    \     Wawa
        √ZHUA   dao
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Theoretical implications: The bipartite analysis of *dao* is a reflection of the root inertia property in Chinese (Hu, 2020). The proposal of $v_{ACHIEVE}$, shed light on the universal event template of a directed motion and a change of state event (Acedo-Matellán, 2016; Beavers, 2012, 2013; Ramchand, 2008; Snyder, 2001; Talmy, 1985). The availability of $v_{ACHIEVE}$, also accounts for the cross linguistic variation in expressing the endpoint of an event: semantic entailment or syntactic encoding. This is in line with the spirits of Borer Chomsky Conjecture (BCC, Baker, 2008) and the analyticity parameter proposed in (Huang, 2014).

Keywords: *Dao*, motion event, achievement event, analyticity, Distributed Morphology

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