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Aspectual coercion and the decomposition of VP

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Zhongyang Yu & Victor Junnan Pan

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PREFACE

This volume contains regular talks and posters presented at the 14th Generative Linguistics in the Old World in Asia (GLOW in Asia XIV) 2024, Hong Kong, on March 6-8, 2024.

Following the successful hosting of GLOW in Asia VI and GLOW in Asia XIV at the Chinese University of Hong Kong in 2007 and in 2022, we are once again honored to host GLOW in Asia XIV. Thanks to the support from the colleagues, we received a substantial number of abstracts from all over the world. A total of 15 regular talks and 34 posters were presented during the three-day conference. All of the talks represented most up-to-date research findings in a wide range of subfields in generative linguistics.

We were privileged to have six distinguished scholars to present their research as the keynote speeches: Luigi Rizzi (Collège de France), Hisatsugu Kitahara (Keio University), Caterina Donati (Université Paris Cité), Rajesh Bhatt (University of Massachusetts Amherst), Roberta D'Alessandro (Utrecht University), Željko Bošković (University of Connecticut).

The conference drew over 100 participants and we had excellent discussions throughout the three days. We thank The Chinese University of Hong Kong, Faculty of Arts, Department of Linguistics and Modern Languages, and New Asia College for their generous funding; we would also like to thank Prof. Mamoru Saito from Nanzan University, Prof. Anoop Mahajan from University of California Los Angeles, and other GLOW in Asia executive committee members: Prof. Wei-Tien Dylan Tsai, Prof. Tanmoy Bhattacharya, Prof. Myung-Kwan Park, Prof. Koji Sugisaki and Prof. Yuji Takano.

Finally, we express our deepest gratitude to the abstract reviewers who have contributed to the overall quality of the conference.

The GLOW in Asia XIV Organizing Committee

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Aspectual Coercion and the Decomposition of VP

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1. Introduction*

Aspectual coercion—or aspect shift—occurs when there’s a meaning mismatch between the input conditions of a viewpoint aspect construction and the actual input. Take the English continuative aspect verb *continue*, which requires durative input (Rochette 1999:158). Selection of an achievement like *arrive* results in a conflict resolvable by iterative coercion; the only possible reading of (1) involves a plurality of ‘arrivings’.¹ Iteration coerces ‘arriving’ into stretching out over time and so the durative selectional restriction of *continue* is satisfied. For (1) to work, consider the following scenario: Kailyn wasn’t invited to the party but she showed up anyway. We refused her entry multiple times and were expecting her to give up by now, but...

(1) *Kailyn continued arriving.*

At first sight, the type of coerced reading illustrated by (1) looks to be a semantic or pragmatic repair strategy. This is the standard account of aspectual coercion (i.a., Moens & Steedman 1988; de Swart 1998; Koontz-Garboden 2007; Michaelis 2011). This paper presents novel data which suggest that there’s also a syntactic side to aspect shift. The data concern alternative ways of marking the same type of viewpoint aspect. For instance, besides *continue*, there’s also the continuative particle *on*. In general these are interchangeable: (2a) and (2b) mean the same thing. However, *on* categorically disallows coercion (2c), even given the scenario from (1). What’s crucial is that (2c) has the same meaning as (1), and is as such interpretable, but nonetheless ungrammatical. So, whatever is blocking aspectual coercion in (2c) likely isn’t semantics or pragmatics. The hypothesis pursued here therefore holds that syntax drives the coercion effects.

(2) a. *Kailyn continued reading.* b. *Kailyn read on.* c. **Kailyn arrived on.*

The contrast illustrated by (1)/(2c) is not limited to English, nor to continuative aspect.² This paper examines data from two types of viewpoint aspect in two unrelated languages: Mandarin and Dutch. To see that the contrast recurs across languages, consider continuative aspect. Mandarin has the aspectual verb *jìxù* ‘continue’ (3a) and the verbal suffix *-xiáqu* (3b), Dutch the aspectual verb *blijven* ‘stay’ (4a) and the particle *door* (4b). Within these pairs, given the context from (1), the first two allow aspect shift (3a)/(4a) while the last two block it (3b)/(4b). As a shorthand for these contrasts I will use the term **Aspectual Coercion Blocking (ACB)**

* Thanks to my informants for their judgments, and to 3 anonymous reviewers, the audiences at GLOW in Asia XIV (Hong Kong, 2024/3/8) and the Meertens Institute (Amsterdam, 2024/4/22), and to Sjeff Barbiers, Ronny Boogaart and Rint Sybesma, for insightful comments on earlier versions of this work. All errors are my own.

¹ There’s at least one other route to durativity: preparatory process coercion (Moens & Steedman 1988:18). This happens with progressive aspect—e.g., *The train is arriving at the station*. This paper is limited to iterativity.

² In Dutch, the contrast is also found with certain ingressive constructions (see Bogaards et al. 2022:§4).

effects.³

(3) **Mandarin**

- a. *Kǎilín jìxù {yuèdú/**chūxiàn**}.*
 Kailyn CONT read show.up
 b. *Kǎilín {yuèdú/***chūxiàn**}-xiaqu.*
 Kailyn read show.up -CONT
 ‘Kailyn kept reading/showing up.’

(4) **Dutch**

- a. *Kailyn bleef {lezen / **arriveren**}.*
 Kailyn CONT read arrive
 b. *Kailyn {las / ***arriveerde**} door.*
 Kailyn read arrived CONT
 ‘Kailyn kept reading/arriving.’

Previous work derives ACB effects from the concept of Distinguished Subevent (Chief 2007) and merge relative to little v/Voice (Fukuda 2012). This paper argues that the novel data and their syntactic properties show that previous analyses don’t fully explain these contrasts.

I propose that ACB effects fall out naturally from a particular style of verbal decomposition (i.a., Travis 2010; Xuán 2011; Lu et al. 2019; Woo 2021; Sybesma 2015, 2017, 2021). Specifically, aspect markers like *-xiaqu* (3b) and *door* (4b) merge within the extended projection of big VP and c-select for the syntactic articulation of their required situation type. Aspect markers such as *jìxù* (3a) and *blijven* (4a) merge after big VP is built up and s-select for situation aspect, allowing for the resolution of input violations via aspect shift (in line with standard accounts of coercion). ACB effects thus reduce to complement size—complements smaller than the inner- aspectual extension of VP block aspectual coercion, larger ones allow it.

At a more general level, this paper (i) provides independent evidence for approaches to the decomposition of VP which derive achievements from syntax; and (ii) suggests that functional projections encoding viewpoint aspect are distributed over not two but three distinct domains: not just above and below little v/Voice (as assumed by, e.g., Cinque 1999; Laca 2004; Fukuda 2012; Ramchand & Svenonius 2014), but also outside and within the articulation of big VP.

The paper outline is as follows. Section 2 provides an overview of the ACB patterns exhibited by Mandarin/Dutch continuative and prospective aspect constructions. In section 3, I contend that previous work doesn’t capture these patterns. Section 4 introduces the adopted model of verbal decomposition. Working from this model, section 5 formulates the proposal, discussing evidence from distribution, licensing and intervention effects.

2. Aspectual Coercion Blocking

This paper examines ACB effects displayed by two pairs of viewpoint aspect markers in Mandarin and Dutch. The types of viewpoint aspect under study are continuative aspect (‘keep on’) and prospective aspect (‘be about to’). The main object of study is their interaction with situation aspect, understood as the standard Vendlerian four-way classification of VPs into states, activities, accomplishments and achievements (Vendler 1967; Dowty 1979; Smith 1990, among many others). In particular: how does this interaction play out when situation type clashes with input condition—is aspectual coercion a grammatical way out?

For continuative aspect, the relevant expressions in Mandarin are the aspectual verb *jìxù* ‘continue’ and the suffix *-xiaqu* (see Xiao & McEnery 2004:§5.4); in Dutch, they are the aspectual verb *blijven* ‘stay’ and the particle *door* (see Bogaards 2022:§6.2). The ACB effects

³ This paper follows the [Leipzig Glossing Rules](#), with the following additions: CONT=continuative aspect, LE=particle *le* 了, PROSP=prospective aspect, PRT=particle.

displayed by these markers were illustrated by (3)-(4): all of them select for durativity, but *jìxù* and *blijven* allow punctual-to-durative coercion via iterativity, while *-xiaqu* and *door* block it.

For prospective aspect, the relevant Mandarin expressions are the aspectual verb *jiùyào* (5a) and the adverb *kuài* (5b) (see Yan & Yuan 2024). The Dutch prospective constructions under study are *op...staan* ‘stand on’ (5c) (henceforth OP) and *op het punt staan (om) te* ‘stand on the point to’ (5d) (henceforth OHPS) (see Bogaards 2023).

- (5) a. *Fángzi jiùyào dǎotā le.* c. *Het huis staat op het punt in te storten.*
house PROSP collapse LE the house stands on the point in to collapse
b. *Fángzi kuài dǎotā le.* d. *Het huis staat op instorten.*
house PROSP collapse LE the house stands on collapse
‘The house is about to collapse.’

Prospective aspect construes some transition as imminent, so in general it’s sensitive to change of state, i.e., selects achievements. When combined with a non-punctual, atelic verb like *walk*, the mismatch can be repaired by onset coercion, profiling the onset transition (‘start walking’). This strategy is allowed with *jiùyào* (6a) and OHPS (6c) but blocked by *kuài* (6b) and OS (6d). As was the case for the ACB effects in (3b)/(4b), it’s not that (6b)/(6d) are uninterpretable; they could be understood to mean the same as (6a)/(6c), but yet they’re ungrammatical. Table 1 provides an overview of the constructions and whether they allow or block aspectual coercion.

- (6) a. *Kǎilín jiùyào zǒulù le.* c. *Kailyn staat op het punt te lopen.*
Kailyn PROSP walk LE Kailyn stands on the point to walk
‘Kailyn is about to walk.’ ‘Kailyn is about to walk.’
b. **Kǎilín kuài zǒulù le.* d. **Kailyn staat op lopen.*
Kailyn PROSP arrive LE Kailyn stands on walk

Table 1 Overview of viewpoint aspect constructions and ACB effects

Continuative aspect		Prospective aspect		Coercion?
Mandarin	Dutch	Mandarin	Dutch	
<i>jìxù</i> 继续	<i>blijven</i>	<i>jiùyào</i> 就要	<i>op het punt staan (om) te</i> (OHPS)	✓
<i>-xiaqu</i> 下去	<i>door</i>	<i>kuài</i> 快	<i>op...staan</i> (OP)	✗

3. Previous work

There are two previous analyses which touch upon Aspectual Coercion Blocking effects. This section reviews them and points out where they fall short of capturing the new data.

3.1 Distinguished Subevent

Chief (2007) observes that prospective *kuài* selects achievements (7a) but not accomplishments (7b) or activities (7c). He explains this from the meaning of *kuài*, which “modifies verbs whose DS [i.e., Distinguished Subevent] corresponds to a result state” (Chief 2007:213), where DS refers to the subevent available for modification (see Pustejovsky 1995). Accomplishments and achievements differ in allowing, respectively, modification of the process and result subevent.

- (7) a. *Fēijī kuài dào le.*
airplane PROSP arrive LE
‘The airplane’s about to arrive.’ [Chief 2007:218, (106)]

- b. **Tā kuài xiū diànshì le.*
 3SG PROSP repair TV LE
 (Intended: ‘They’re about to fix the TV.’) [Chief 2007:164, (58)]
- c. **Āmèi kuài xǐzǎo le.*
 Amei PROSP shower LE
 (Intended: ‘Amei is about to take a shower.’) [Chief 2007:214, (97)]

As noted in section 2, *jiùyào* is another Mandarin prospective marker. Like *kuài*, it construes the situation denoted by the main verb as imminent and combines with achievements (8a). But unlike *kuài*, *jiùyào* licenses both accomplishments (8b) and activities (8c) under onset coercion.

- (8) a. *Fēijī jiùyào dào le.* c. *Āmèi jiùyào xǐzǎo le.*
 airplane PROSP arrive LE Amei PROSP shower LE
 ‘The airplane’s about to arrive.’ ‘Amei is about to take a shower.’
- b. *Tā jiùyào xiū diànshì le.*
 3SG PROSP repair TV LE
 ‘They’re about to fix the TV.’

On Chief’s approach, we’d have to say that both *kuài* and *jiùyào* encode imminence and select verbs with a result state DS, but only *jiùyào* also accepts verbs whose DS is a process. While this covers the distribution in (7)-(8), it in effect amounts to postulating the selectional restrictions as part of the semantics of *kuài* and *jiùyào*. It also doesn’t explain why *jiùyào*—despite imposing looser selectional restrictions—still coerces its complement into a punctual representation (in Chief’s terms: into a result state DS). In other words, a semantic account relying on the notion of DS is not only forced to postulate the contrast, it also fails to capture the fact that both *kuài* and *jiùyào* are sensitive to achievements, differing only in whether onset coercion is allowed.

3.2 Position Relative to Little v/Voice

Fukuda (2012) analyzes the Japanese viewpoint aspect markers *hajime*- ‘begin’, *tsuzuke*- ‘continue’, *owar*- ‘end’ and *oe*- ‘finish’ as functional heads occupying different positions along the clausal spine. He observes that, out of these four, only *oe*- blocks iterative coercion with achievements:

(9) Japanese

- **Kankōkyaku-ga hoteru-ni tsuki- oe- ta.*
 tourists-NOM hotel-LOC arrive-finish-PST
 (Intended: ‘The tourists finished arriving at the hotel.’) [Fukuda 2012:985, (40)]

In the present terms, this is an ACB contrast, observed between *oe*- on the one hand, and *hajime*-, *tsuzuke*- and *owar*- on the other. Fukuda (2012) derives the contrast from merge above/below v/Voice. He calls these positions H(igh)-Asp and L(ow)-Asp, respectively.

Fukuda’s main diagnostic concerns the possible positions of the viewpoint aspect head relative to the passive morpheme *(r)are*-, assumed to head v/VoiceP. According to this evidence, the high position above v/Voice—to the right of *(r)are*—is only accessible to *hajime*-, *tsuzuke*- and *owar*-, not to *oe*-. ACB effects thus seem to correlate with low merger of the aspect head. What’s more, *hajime*- and *tsuzuke*- can optionally merge in the low position

(i.e., to the left of (r)are-), **except** under aspectual coercion—in (10), multiple ‘discovering’ events:

- (10) *Atarashii wakusei-ga mitsuke- <*tsuzuke->rare- <tsuzuke->ta.*
 new planet-NOM discover-CONT- PASS-CONT- PST
 ‘New planets continued to be discovered.’ [Adapted from Fukuda 2012:991, (59)]

New data from Dutch and, especially, Mandarin cast doubt on a one-to-one relation between merger below v/Voice and ACB effects. Let’s start with Mandarin continuative *jìxù*, which allows aspectual coercion. Transposing Fukuda’s passive test to Mandarin, we can use the position relative to the passive marker *bèi* to diagnose merger above or below v/Voice. It turns out that both positions are available for *jìxù* (11). Since *màidiào* ‘sell’ is an achievement verb, the acceptability of the low position (i.e., to the right of *bèi*) is inconsistent with the data in (10).

- (11) *Méiyǒu bànfǎ chóu-dào qián jiù <jìxù> bèi <jìxù> mài-diào-le.*
 NEG way raise-arrive money so CONT PASS CONT sell-off -LE
 ‘There was no way to raise the money, so it continued to be sold.’

Second, Mandarin prospective *kuài* blocks coercion, so on Fukuda’s account, we expect it to only merge low (i.e., to the right but not to the left of *bèi*). But prospective *kuài* in fact only merges high (12a).⁴ It thus patterns with prospective *jiùyào* (12b) rather than with non-coercers like Japanese *oe-*. Fukuda’s account thus doesn’t predict *kuài*’s ACB effects.

- (12) a. *Qìchē <kuài> bèi <*kuài> huǐhuài le.*
 car PROSP PASS PROSP destroy LE
 b. *Qìchē <jiùyào> bèi <*jiùyào> huǐhuài le.*
 car PROSP PASS PROSP destroy LE
 ‘The car was about to be destroyed.’

Last, consider Dutch continuative *blijven*, which like *jìxù* and *jiùyào* displays no ACB effects. Following Fukuda, we therefore expect that, under iterative coercion, it only merges high. However, there seems to be some optionality in where to put *blijven* relative to the Dutch passive marker *worden*. In (13a)—despite the iterative coercion with the achievement *ontdekken* ‘discover’—*blijven* can be to the left or right of *worden*. This does not appear to be a trivial matter of clustering, as other (semi-)aspectual verbs like *gaan* ‘go’ (13b) and root modals like *moeten* ‘must’ (13c) categorically disallow the rightmost position. I take this to mean that there’s a low position (below v/Voice) available to *blijven* that isn’t available to *gaan/moeten*.⁵

⁴ Huang (1999:349) observes that, in general, “long-distance passives”, as he calls them (i.e., with a non-main verb in the position to the right of *bèi*), “are well-formed in Mandarin Chinese, quite unlike English passives”.

⁵ The Dutch data are weaker than the Mandarin evidence for a few reasons. First, the embedded verb in (13a-c) is a (passive) participle, which meets the selectional restrictions of passive *worden* rather than continuative *blijven* (which takes an infinitive). Second, there is some inter-speaker variation regarding the acceptability of the rightmost position, although this does clearly contrast with its categorical unacceptability in (13b-c). Third, the pattern instantiated by low *blijven* in (13a)—i.e., Long Passive—is a marginal structure in Dutch more generally, especially with aspectual verbs (see Kovač & Schoenmakers under revision and references cited).

- (13) a. *dat er nieuwe planeten <blijven> worden <%blijven> ontdekt*
 that there new planets CONT PASS CONT discovered
 b. *dat er nieuwe planeten <gaan> worden <*gaan> ontdekt*
 that there new planets go PASS go discovered
 c. *dat er nieuwe planeten <moeten> worden <*moeten> ontdekt*
 that there new planets must PASS must discovered
 ‘that new planets continue to / are going to / must be discovered’

Finally, deriving ACB effects from low merger is also incompatible with recent syntactic accounts of the English *ing*-progressive, which situate it inside v/VoiceP (i.a., Harwood 2015; Ramchand 2018:chap.2). The *ing*-progressive has no issue coercing (Boogaart 1999; Michaelis 2011)—e.g., *New planets are being discovered*—contrary to what Fukuda’s account predicts.

3.3 Interim Summary

We have seen that previous analyses of ACB either need to postulate the effects as part of the semantics of non-coercers, or make inaccurate predictions about the distribution of Mandarin and Dutch (and English) aspect markers relative to little v/Voice. The next section lays the groundwork for the new proposal by introducing the adopted decomposition model of VP.

4. The Decomposition of VP

Decompositional approaches derive inner-aspectual and/or thematic properties of the situations denoted by verbs from the syntactic articulation of VP. They assume an isomorphic mapping between situation structure and phrase structure, so that these properties can be directly read off of particular (combinations of) functional projections. Proposals in this tradition—the most influential being Borer (2005), MacDonald (2008), Ramchand (2008) and Travis (2010)—vary in the number and type of projections and how they’re ordered, but the basic idea is the same.

For the proposal made in this paper, I adopt a particular version of verbal decomposition rooted in work by Travis (2010) and Xuán (2011), developed by Sybesma (2015, 2021) and Lu et al. (2019), and spelled out most explicitly in Sybesma (2017). What sets this model apart—and is to play a key role in the proposal—is that achievements are represented one-to-one in syntax. That is, there’s a dedicated functional projection which takes an accomplishment as its complement and turns it into an achievement. By way of further exposition, this section goes over evidence from Mandarin and Dutch in support of this way of decomposing VP.

Table 2 Situation-aspectual features

	Telic	Durative
Activity	–	+
Accomplishment	+	+
Achievement	+	–

Table 2 lists the standard situation-aspectual features to be mapped to the phrase structure by any isomorphic model: telicity (whether the situation tends towards an inherent endpoint) and durativity (whether it extends over time). (14) shows how these situation types map to syntax. Activities are assumed to be the most basic

dynamic situation type. They’re articulated by a simplex VP (14a) whose V⁰ may only select a

there). Readers not convinced by the Dutch data may limit themselves to the observations on Mandarin (and those on the English progressive below), none of which are affected by the validity of the Dutch evidence.

theme internal argument which—even when quantized—does not license telicity.⁶ Accomplishments (14b) and achievements (14c) are complex situation types built out of an activity VP and one or two functional projections (Asp1P/Asp2P). Together, they form the extended projection of big VP dedicated to the computation of inner aspect. Little vP and VoiceP fall outside of this domain, reflecting the canonical view that external arguments don't affect situation aspect (e.g., Tenny's 1994:119 Non-Measuring Constraint on External Arguments).⁷

- | | | |
|------|---|----------------|
| (14) | a. [VP [V ⁰]] | Activity |
| | b. [Asp1P [Asp1 ⁰] [VP [V ⁰]]] | Accomplishment |
| | c. [Asp2P [Asp2 ⁰] [Asp1P [Asp1 ⁰] [VP [V ⁰]]]] | Achievement |

Asp1⁰ selects an activity VP and turns it into an accomplishment, or in terms of table 2, makes it telic. Asp1P has a direct counterpart in most decompositional models of VP—e.g., AspQ^{max} (Borer 2005), AspP[±q] (MacDonald 2008), ResP (Ramchand 2008) and AspP (Travis 2010)—and goes back to the concept of Small Clause (SC) in the work of Hoekstra (1984, 1988). An SC-complement is a minimal state predication (e.g., *the parents awake*) found in combinations of the type *the child cried [the parents awake]* (example from Sybesma 2021:58). In this kind of sentence, *cry* is an activity, but the SC-complement makes *cry the parents awake* an accomplishment. On the theory adopted here, SCs are a subtype of Asp1P: the result state predicate (e.g., *awake*) is in Asp1⁰ and its subject (e.g., *the parents*) in the specifier. Asp1P dominates VP as the functional projection responsible for telicity. (15a)/(16a) are examples; (15b)/(16b) show the underlying decomposition with *xǐng/wakker* 'awake' in Asp1⁰ and *fùmǔ/ouders* 'parents' in [Spec, Asp1P].⁸ (14b) generalizes this analysis to all telic predicates (e.g., (15c)/(16c)) by assuming that Asp1⁰ can be phonologically null. We thus get a uniform analysis of accomplishments with (e.g., (15b)/(16b)) and without (e.g., (15d)/(16d)) an SC.⁹

- | | | |
|------|--|--------------------------|
| (15) | a. <i>Háizi kū -xǐng -le fùmǔ.</i>
child cry-awake-LE parents
'The child cried the parents awake.' | [Sybesma 2021:58, (18j)] |
| | b. [... [Asp1P fùmǔ [Asp1 ⁰ xǐng [VP [V ⁰ kū]]]]] | |
| | c. <i>Háizi chī-le zhè -kuài bǐnggān.</i>
child eat-LE DEM-CLF cookie
'The child ate this cookie.' | |
| | d. [... [Asp1P zhè-kuài bǐnggān [Asp1 ⁰ Ø [VP [V ⁰ chī]]]]] | |

⁶ The classic example (due to Vendler 1967:100-102) is *She pushed the cart (#in one hour)*. This property has been qualified in various ways: [Spec, VP] is "[−SQA]" (Verkuyl 1972), cannot do "Measuring-Out" (Tenny 1994), "falls out from the event 'spine'" (Travis 2010:119) or is not a "Delimiter" (Fukuda 2012:981).

⁷ I lack the space to go into the articulation of states in this type of model; they correspond to Asp1P without an underlying dynamic VP. Moreover, Sybesma (2017, 2021) argues that the inner-aspectual domain is topped off by Asp3P, headed in Mandarin by verbal *-le*. Since this projection isn't needed for the present proposal, it's outside of the scope of the present discussion. I therefore abstract away from it in structures like (15b)/(15d).

⁸ For Dutch, this yields the correct surface order; for Mandarin, the surface string can be derived by cyclic movement of *fùmǔ* and *kū-xǐng* to the inner-aspectual projection headed by *-le* (i.e., Asp3P, see fn.7) and then of *kū-xǐng-le* to v/Voice⁰, all of which is independently motivated. See Sybesma (2021:57-62) for the details.

⁹ An additional piece of evidence for the presence of Asp1⁰ in (16d) is that it can be filled with the particle *op*, which signals the endpoint of the process: *dat het kind dit koekje op-at*.

- (16) a. *dat het kind de ouders wakker huilde*
 that the child the parents awake cried
 ‘that the child cried the parents awake’
 b. [... [Asp1P de ouders [Asp1° wakker [VP [V° huilde]]]]]
 c. *dat het kind dit koekje at*
 that the child this cookie ate
 ‘that the child ate this cookie’
 d. [... [Asp1P dit koekje [Asp1° Ø [VP [V° at]]]]]

Having some implementation of a “telicizing” functional projection (Asp1P or otherwise) is pretty commonplace. Less standard is the idea of a “punctualizing” projection which takes an accomplishment as its complement and—in terms of table 2—makes it non-durative, i.e., turns it into an achievement. Sybesma (2015, 2017) and Lu et al. (2019) propose precisely this type of inner-aspectual projection: Asp2P. Asp2° selects Asp1P and makes the process leading up to the offset transition (e.g., in (15c)/(16c): a series of bites from the cookie) syntactically inaccessible. Building on work by Rappaport Hovav (2008) and Rothstein (2008), Lu et al. (2019) formalize this operation as SCALE REDUCTION: Asp2° is a function taking as its argument a multi-point scale (e.g., the series of bites above) and producing as output the corresponding two-point scale (i.e., only the onset and offset transitions, with no temporal extension in between). Following these proposals, achievements correspond to the phrase structure in (14c). Achievements are thus bigger structures than accomplishments, which are in turn bigger structures than activities.

Empirical evidence for Asp2P comes from the class of so-called “phase-complements” (Chao 1968:461-465) in Mandarin—also known as “phase RVCs” (Li & Thompson 1981:65-66)—which covers elements such as *wán* ‘finish’, *diào* ‘off’ and *dào* ‘arrive’. Lu et al. (2019:282-284) show that combinations like *zhǎo-dào* ‘lit. look.for-arrive = find’ behave differently from combinations like *kū-xǐng* ‘cry-awake’ with respect to Dowty’s (1979) *almost*- and *progressive*-tests—namely, that the former pattern with achievements and the latter with accomplishments. While Asp2P is limited to this small class of complements in Mandarin, Lu et al. (2019) show that another Chinese language—Changsha Xiang—systematically turns accomplishments into achievements by generating an aspectual morpheme in Asp2°: *ka*^{41,10}

Furthermore, Sybesma (2017) points at cases in Mandarin where phase-complements and Asp1-heads co-occur (17a), where *huài* ‘to pieces’ is in Asp1°, making the activity VP *pǎo* ‘run’ telic; and *diào* is in Asp2°, making the ‘running’ process denoted by *pǎo-huài* ‘run to pieces’ syntactically inaccessible (17b). For the present proposal, I generalize Asp2P to all achievement verbs by assuming that both Asp1° and Asp2° can be abstract functional positions. This extends the analysis to all achievement verbs, like Dutch *bereiken* ‘reach’ (18a), which buys us a uniform structural account of achievements with and without an overt phase-complement.

- (17) a. *Wǒ bǎ yùndòngxié pǎo-huài -diào-le.*
 1SG CAUS sneakers run -to.pieces-off -LE
 ‘I ran my sneakers completely to pieces.’ [Sybesma 2017: (17b)]

¹⁰Lu et al. (2019) also point at Song’s (2018) discussion of *liu* in Dongying Mandarin, which is similar to *ka*⁴¹ and hence likewise a good candidate for heading Asp2P. So, there’s a growing body of crosslinguistic evidence for Asp2P (see also the Dutch data on completive *uit-*), which is therefore deserving of further study.

- b. [... [Asp2P [Asp2° diào [Asp1P yùndòngxié [Asp1° huài [VP [V° pǎo]]]]]]]]

(18) a. *Felix bereikte z'n bestemming.*

Felix reached his destination

‘Felix reached his destination.’

- b. [... [Asp2P [Asp2° Ø [Asp1P bestemming [Asp1° Ø [VP [V° bereikte]]]]]]]]

As an aside, empirical evidence for Asp2P can be found in Dutch as well. This means that Asp2P need not be postulated based on comparative data. To illustrate this point, consider the following novel observations. There is a productive construction in Dutch built out of the preposition *uit* ‘out’ and a perfect participle,¹¹ with the meaning of ‘totally finished/done’—e.g., *uitgegeten* ‘lit. out-eaten: done eating’, *uitgezongen* ‘lit. out-sung: done singing’, etc. (see also Biggs 2021 on [*done* V-ing]). Let’s call this element completive *uit*.¹² It selects an unergative activity verb and makes it unaccusative, meaning that it predicates the ‘being done’ state of the subject, which is turned from an external into an internal argument.¹³ All of this is accounted for if there’s a covert result state predicating over the subject in [Spec, Asp1P], while completive *uit* heads Asp2P and makes the process (e.g., the ‘singing’ in the case of *uitgezongen*) structurally inaccessible. Indeed, manner adverbs modifying the ‘singing’ process—e.g., *vals* ‘off key’—are incompatible with this construction (19a). The underlying decomposition, parallel to (17b)/(18b), is shown in (19b). Two immediate predictions generated by (19b) are that the construction is incompatible with accomplishments (since Asp1P is occupied by a covert head predicating over the subject) and achievements (since Asp2P is occupied by *uit*). Both predictions are correct, see (19c)-(19d). If (19b) is on the right track, then (19d) constitutes empirical evidence for the generalized phrase structure of achievements in (18b).

(19) a. *Ik ben nu wel (*vals) uit-gezongen.*

1SG am now PRT off.key out-sing.PTCP

‘I’m all sung out (*off key) right now.’

- b. [... [Asp2P [Asp2° uit [Asp1P ik [Asp1° Ø [VP [V° gezongen]]]]]]]]

c. *Het kind is nu wel (*de ouders wakker) uit-gehuild.*

the child is now PRT the parents awake out-cry.PTCP

‘The child is all (*the parents awake) cried out now.’

d. **Felix is nu wel uit-bereikt.*

Felix is now PRT out-reached

¹¹*Uit* coinciding with participial *ge-* in Dutch is reminiscent of phase-complements coinciding with *-le* in Mandarin, especially since it’s been argued that *ge-* and *-le* in these languages are semantically identical (Sybesma & Vanden Wyngaerd 1997). As noted in fn.7, this paper abstracts away from the position of *-le*.

¹²There seems to be a comparable element *out* in English in cases like *I’m all sung out* and *I’m totally texted out*, but it seems more restricted, and the adverb (which is optional in Dutch) appears to be obligatory. Note that this kind of “completive” adverb (*all*, *totally*, *completely*, *fully*, etc.) is a prime candidate for the specifier position of Asp2P given its semantic contribution (and assuming that adverbs are in [Spec, FP], following Cinque 1999). From this perspective, the difference between English and Dutch with respect to the obligatoriness of adverbs with completive *out/uit* could follow from grammaticalization of overt [Spec, Asp2P] and Asp2° in English, versus just Asp2° in Dutch (as well as Mandarin and Changsha Xiang).

¹³This is evident from standard diagnostics for unaccusativity in Dutch (Hoekstra 1984): perfect auxiliary selection (*ik {ben/*heb} uitgegeten* ‘I {am/*have} finished eating’, compare *ik {*ben/heh} gegeten* ‘I {am/have} eaten’), attributive participial modification (*de uitgegeten jongen* ‘the boy who’s finished eating’) and ungrammaticality of impersonal passive (**er wordt uitgegeten* ‘*there is being finished eating’).

This section has discussed independent evidence from both Mandarin and Dutch for a three-part inner-aspectual decomposition which directly derives activities [VP], accomplishments [Asp1P [VP]], and achievements [Asp2P [Asp1P [VP]]] from the phrase structure. The next section capitalizes on this decompositional model to derive the observed ACB effects.

5. Proposal

In what follows, I make a proposal for the positions of (non-)coercing viewpoint aspect markers in relation to the decomposition of VP, based on evidence from syntactic distribution, licensing and intervention effects. These positions, I will argue, better account for ACB effects.

5.1 Low continuatives and Asp1P

The continuative markers displaying ACB effects (i.e., *-xiaqu* and *door*) are in complementary distribution with Asp1P—e.g., [*bōlí gān*]/[*het glas droog*] ‘the glass dry’ in (20a)-(20b) (ex. (a) is from Lu et al. 2019:283). Their coercer counterparts (*jìxù* and *blijven*) not only allow Asp1P; they are in fact not cases of coercion, as iterative readings are not necessary in (21a)-(21b). Since this shows that (20a)-(20b) do not display ACB, I take this to mean that their ungrammaticality is purely due to level of attachment. It follows that the projections headed by *-xiaqu* and *door* are merged around the same position as Asp1P, i.e., directly above VP. On the approach laid out in section 4, this means that *-xiaqu/door* (but not *jìxù/blijven*) c-select for a projection within the articulation of VP and disrupt complex predicate formation in the inner aspect domain (22).

- | | |
|---|---|
| <p>(20) a. <i>Wǒ cā -gān(*-xiaqu)bōlí.</i>
1SG wipe-dry -CONT glass</p> <p>b. <i>Ik wreef het glas droog (*door).</i>
1SG wiped the glass dry CONT
‘I wiped the glass dry (*on).’</p> | <p>(21) a. <i>Wǒ jìxù cā -gān bōlí.</i>
1SG CONT wipe-dry glass</p> <p>b. <i>Ik bleef het glas droog-wrijven.</i>
1SG CONT the glass dry -wipe
‘I kept wiping the glass dry.’</p> |
|---|---|

- (22) [... [jìxù/blijven [... [Asp2P [Asp1P [-xiaqu/door [VP [V⁰]]]]]]]]]

5.2 Low prospectives and Asp2P

The prospective markers exhibiting ACB effects (*kuài* and OS) select specifically for Asp2P. This is easiest to show for *kuài*, which blocks achievement coercion (23a) but becomes grammatical with precisely those elements which in our theory head Asp2P—e.g., *wán* ‘finish’ (23b). For *jiùyào* and OHPS, Asp2P doesn’t need to be present (recall (6a)/(6c)). In line with (22), I conclude that *kuài* and OS (but not *jiùyào* and OHPS) c-select for Asp2P inside of the articulation of VP, participating in complex predicate formation.

- (23) a. *Tā {*kuài/jiùyào}chī zhè -kuài bǐnggān le.*
3SG PROSP eat DEM-CLF cookie LE
- b. *Tā {kuài/jiùyào} chī-wán zhè -kuài bǐnggān le.*
3SG PROSP eat-finish DEM-CLF cookie LE
‘They’re about to finish this cookie.’

- (24) [... [jiùyào/OHPS [... [kuài/OS [Asp2P [Asp1P [VP [V⁰]]]]]]]]]

5.3 Co-occurrence

One claim made by (22)/(24) is that coercers and non-coercers are in different positions. We thus expect co-occurrence to be possible. This is correct for the continuative (25a)-(25b) and prospective (25c)-(25d) constructions in both languages. While especially (25d) feels rather redundant, it isn't ungrammatical.¹⁴

- (25) a. *Tā jìxù dù -xiaqu.* c. *Tā jiùyào kuài líkāi le.*
 3SG CONT read-CONT 3SG PROSP PROSP leave LE
 b. *Die bleef door -lezen.* d. *Die staat op het punt om op vertrekken te staan.*
 3SG CONT CONT-read 3SG stands on the point COMP on leave to stand
 ‘They kept on reading.’ ‘They’re about to be on the verge of leaving.’

5.4 Argument licensing

Three aspect markers displaying ACB—*-xiaqu*, *door* and OS—also exhibit valency effects: normally transitive verbs cannot license an internal argument in these constructions, as demonstrated by (26a)-(26c).

- (26) a. *Tā hē -xiaqu (*kāfēi).* c. *Die staat op (*het spel) winnen.*
 3SG drink-CONT coffee 3SG stands on the game win
 b. *Die dronk (*de koffie) door.* ‘They’re about to win (*the game).’
 3SG drank the coffee CONT
 ‘They drank the coffee (*on).’

Given that internal arguments are licensed within big VP, (26a)-(26c) suggest that *-xiaqu*, *door* and OS interrupt thematic role assignment by imposing their own (intransitive) theta grid on the embedded verb. This is in line with Barbiers' (1995) account of low modals in Dutch, which holds that the modal “directly imposes selectional restrictions on the DP-complement” (ibid.157), similarly interrupting argument structure buildup. (26a)-(26c) thus further support the idea that these markers merge within the inner aspect domain (as in (22)/(24)). *Kuài* doesn't affect valency in this way (23a), but its position was independently motivated by c-selection of Asp2P (23b). *Jiùyào*/OHPS and *jìxù*/*blijven* don't affect argument licensing at all.

5.5 Intervention effects

Recall that both *jiùyào* and *kuài* cannot be to the right of the Mandarin passive marker *bèi* (12), which we used as a v/Voice diagnostic. This is a problem for the analysis thus far—not for *jiùyào*, which we can simply situate above v/Voice, but certainly for *kuài*, which we said is inside the articulation of VP, well below v/Voice (see (24)). However, it may be possible to maintain this analysis in view of a specific intervention effect (Cheng & Sybesma 2004; Cheng 2019).

Cheng (2019) assumes that Mandarin verbal *-le* occupies two positions: (i) close to V⁰, where it's spelled out (see fn.7); and (ii) above v/Voice, where O(uter)-Asp(ect)P is standardly taken to be interpreted. She supports this analysis using intervention effects with the *wh*-adverbial *zěnmē* ‘how’ (first noted by Tsai 2008). In general, *zěnmē* can get a manner or causal (‘how come?’) reading. But when *-le* is present, only the causal reading is possible (27). Given

¹⁴The relative acceptability of (24d) becomes even clearer when we consider the reverse: **Die staat op [op het punt staan om te vertrekken]*, which is totally out. The same goes for (24c): **Tā kuài jiùyào líkāi le*.

that manner corresponds to low merger (around *v/Voice*) and the causal reading to high merger of *zěnme*, Cheng argues that *-le* blocks manner because its two positions form a chain that functions as an intervener for covert feature movement from *zěnme*'s low position to CP.

- (27) *Akīu zěnme qù-le Táiběi?*
 Akiu how go-LE Taipei
 'How come Akiu went to Taipei?' (Not: 'In what way...?') [Cheng 2019:242, (3)]

Dutch *hoe* 'how' has the same manner/causal ambiguity as *zěnme*, so we can apply this test to compare Mandarin and Dutch.¹⁵ It turns out that *kuài* (28a) and OS (29a) both block manner.¹⁶ *Jiùyào* (28b) and OHPS (29b) don't. For Mandarin, the high/low position tied to causal/manner readings is visible because *zěnme* stays in-situ (28); the manner position is ungrammatical with *kuài* (28a) but not *jiùyào* (28b). In Dutch, *hoe* moves to CP, so here the contrast is interpretative: the manner reading is unavailable with OS (29a) but not OHPS (29b). Building on Cheng (2019), I therefore generalize the manner blocking associated with the *-le*-chain to *kuài* and OS (30): all are interveners for (covert feature) movement of *zěnme/hoe* to CP due to their dual positions.

- (28) a. *Tā <zěnme>_L kuài <*&zěnme>_R líkāi le?*
 3SG how PROSP how leave LE
 b. *Tā <zěnme>_L jiùyào <zěnme>_R líkāi le?*
 3SG how PROSP how leave LE
 L: 'How come they're about to leave?' / R: 'In what way are they about to leave?'

- (29) a. *Hoe staat die op vertrekken?*
 how stands 3SG on leave
 'How come they're about to leave?' (Not: 'In what way...')
 b. *Hoe staat die op het punt te vertrekken?*
 how stands 3SG on the point to leave
 'How come they're about to leave?' / 'In what way are they about to leave?'

- (30) [CP ... [O-AspP **le/kuài/OS**] [... [v/VoiceP *zěnme/hoe* [Asp3P **le/kuài/OS**] [Asp2P ... [VP V⁰]]]]]]]
-

Since *kuài* can only appear in the higher position to the left of passive *bèi* (recall (12)), this chain is the mirror image of the type instantiated by verbal *-le*, which is spelled out low. If this analysis is on the right track, then chains may vary with respect to which of the two positions is overt.

5.6 Conclusion

Bringing all evidence from this section together, (31) indicates the proposed positions of the coercing (prospective *jiùyào* and OHPS; continuative *jìxù* and *blijven*) and non-coercing (prospective *kuài* and OS; continuative *-xiāqu* and *door*) aspect markers along the clausal spine.

¹⁵Causal *hoe* seems to be associated with younger speakers of Dutch (late 20s, early 30s); my Dutch informants around the age of 60 preferred the unambiguous wh-word *hoezo* 'how come' for causal questions.

¹⁶This is not due to *le* in (30a), because it's not verbal but sentence-final *le*. This is clear from its clause-final position in, for instance, *Tā kuài xǐ-wán zǎo le* 'they're about to finish showering' (Chief 2007:6) and in (30a).

- (31) $[j\dot{i}\dot{u}\dot{y}\dot{a}o/OHPS \text{ } [_{v/VoiceP} [j\dot{i}\dot{x}\dot{u}/blijven \dots [ku\dot{a}i/OS \text{ } [_{Asp2P} [_{Asp1P} [-xiaqu/door \text{ } [_{VP} V^0]]]]]]]]]$
 H-Asp L-Asp Inner Aspect
 s-selection (Coercion) c-selection (Aspectual Coercion Blocking)

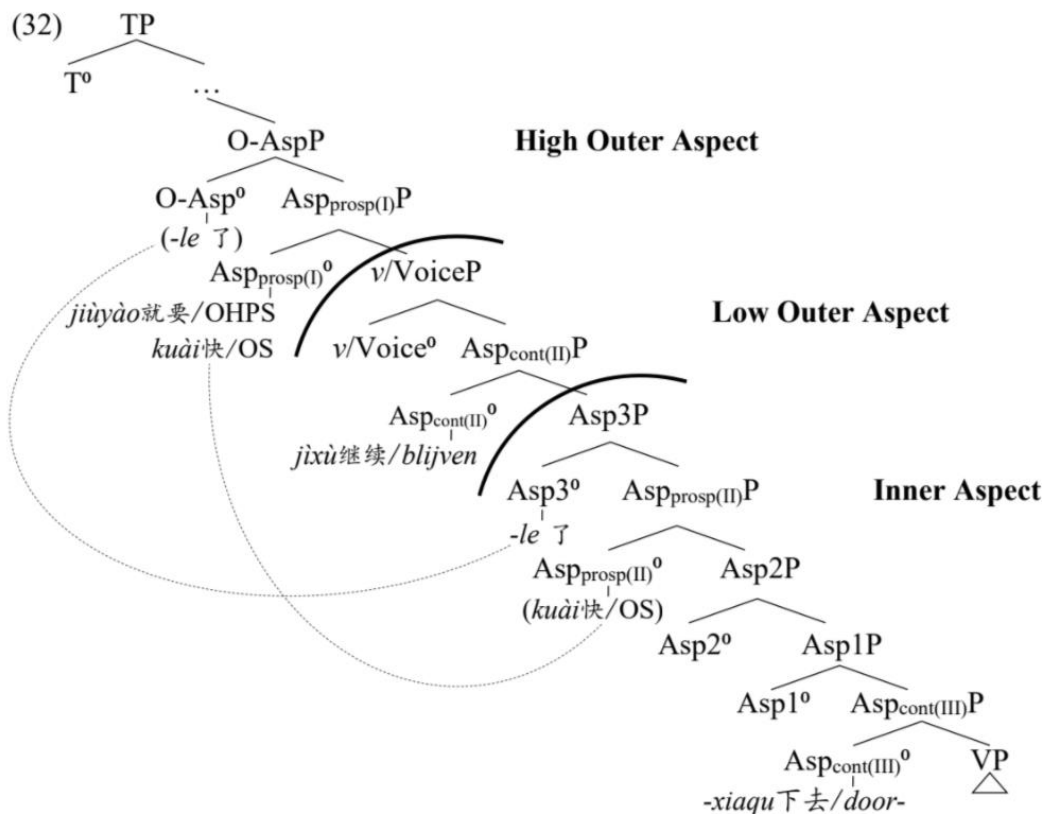
Using Fukuda’s (2012) terminology, I’m arguing that ACB effects are independent from H-Asp and L-Asp, both of which s-select for situation type and, hence, may coerce. Instead, I propose that ACB effects are a reflex of merge inside the inner aspect domain, when the syntactic correlates of situation structure are still visible to the viewpoint aspect marker. *Kuài*, OS, *-xiaqu* and *door* thus c-select for situation type and block coercion, regardless of interpretability, exactly as we have seen.¹⁷

A novel general claim underlying (31) is that there’s a “privileged boundary” (Ramchand 2018:43) not just at the vP edge, but also within vP: a cutoff point between the internal articulation of big VP, where a configuration of functional projections computes situation type, and an intermediate domain, where little *v* has not yet merged, but the inner-aspectual phrase structure is no longer visible for viewpoint aspect constructions entering the derivation. This reduces ACB to complement size: coercers select minimally the full, computed extension of big VP; non-coercers select one or more subtrees responsible for part of that computation.

The overview structure in (32) demarcates the three domains for viewpoint aspect in a broader structural context, indicating where our continuative and prospective constructions merge relative to clausal waymarks such as TP, v/VoiceP and verbal *-le*. The representation in (32) adopts Sybesma’s (2017) Asp3P for the spell-out position of verbal *-le* and Cheng’s (2019) second position of verbal *-le* in O-AspP, and marks the manner-blocking intervention chains between dual positions with dotted lines (following Cheng 2019).¹⁸

¹⁷On the assumption that grammaticalization is correlated with upward movement (Roberts & Roussou 1999), corpus data on Dutch prospectives from Bogaards & Wierenga (submitted) offer converging evidence for the lower position of OS vs. OHPS in (33). On standard proxy measures for grammaticalization (types÷tokens) and productivity (hapaxes÷tokens), OS measures considerably lower than OHPS: 12.3% (OS) vs. 61% (OHPS) on grammaticalization; 6.7% (OP) vs. 45.7% (OHPS) on productivity. An interesting empirical question is whether the same pattern holds for the other Dutch and Mandarin constructions, and—abstracting away from these languages—whether there’s a general correlation between ACB effects and these measures.

¹⁸Labels for the viewpoint aspect projections are in the style of Cinque (1999, 2001), who labels projections above and below v/Voice, respectively, Asp_(I)P and Asp_(II)P. Since I’m arguing for two distinct continuative projections below v/Voice, (32) features a third continuative projection: Asp_{cont(III)}P.



From bottom to top, I term the domains in (32) Inner Aspect (following Travis 2010), Low Outer Aspect and High Outer Aspect (in the spirit of Fukuda’s 2012 L-Asp and H-Asp).

In essence, the designation of a distinct inner aspect domain for viewpoint aspect markers boils down to a formal restatement of the 19th-century idea that verbal particles modify Aktionsart; it’s also reminiscent of Slavic aspectual morphology, which has been characterized as “grammatical Aktionsart” (see Boogaart 2004). It’s an open question whether this account can extend to these languages—and more generally.

The present proposal is predicated on a specific style of verbal decomposition that derives achievements from syntax (Sybesma 2017, i.a.). Otherwise, the proposal doesn’t account for the non-coercing prospectives, in particular *kuài*. The “unique selling point” of this model of decomposition is thus Asp2P, for which there is a growing body of crosslinguistic evidence.

References

- Barbiers, Sjef. 1995. The syntax of interpretation. Doctoral dissertation, Leiden University.
- Beek, Janneke ter. 2008. Restructuring and infinitival complements in Dutch. Doctoral dissertation, University of Groningen.
- Biggs, Alison. 2021. The *done*-state derived stative: A case study in building complex eventualities in Syntax. *Syntax* 24:297-333. DOI: [10.1111/synt.12219](https://doi.org/10.1111/synt.12219)
- Bogaards, Maarten. 2022. The discovery of aspect: A heuristic parallel corpus study of ingressive, continuative and resumptive viewpoint aspect. *Languages* 7:158. DOI: [10.3390/languages7030158](https://doi.org/10.3390/languages7030158)
- Bogaards, Maarten. 2023. Prospectief aspect in het Nederlands. [Prospective aspect in Dutch.]

- Nederlandse Taalkunde/Dutch Linguistics* 28:104-116. DOI: [10.5117/nedtaa2023.1.004.boga](https://doi.org/10.5117/nedtaa2023.1.004.boga)
- Bogaards, Maarten, Ronny Boogaart, and Sjef Barbiers. 2022. The syntax of progressive and ingressive *aanhiet*-constructions in Dutch. In *Linguistics in the Netherlands 2022*, ed. by Jorrig Vogels and Sterre Leufkens, 2-20. Amsterdam: John Benjamins. DOI: [10.1075/avt.00058.bog](https://doi.org/10.1075/avt.00058.bog)
- Bogaards, Maarten, and Roné Wierenga. Submitted. Aspectual cognate constructions in Afrikaans and Dutch: A language contact approach to prospective and ingressive aspect. Ms., Leiden University/North-West University/Ghent University.
- Boogaart, Ronny. 1999. Aspect and temporal ordering. Doctoral dissertation, Vrije Universiteit Amsterdam.
- Boogaart, Ronny. 2004. Aspect and Aktionsart. In *Morphology: An International Handbook on Inflection and Word-Formation*. Vol. 2, ed. by Geert Booij, Christian Lehmann, Joachim Mugdan, Stavros Skopeteas and Wolfgang Kesselheim, 1165-1180. Berlin: De Gruyter Mouton. DOI: [10.1515/9783110172782.2.14.1165](https://doi.org/10.1515/9783110172782.2.14.1165)
- Borer, Hagit. 2005. *Structuring Sense*. Vol. 2. *The normal course of events*. Oxford: Oxford University Press. DOI: [10.1093/acprof:oso/9780199263929.001.0001](https://doi.org/10.1093/acprof:oso/9780199263929.001.0001)
- Chao, Yuen Ren. 2011 [1968]. *A grammar of spoken Chinese*. Beijing: The Commercial Press.
- Cheng, Lisa L.-S. 2019. On the interaction between modals and aspects. *English Linguistics* 35:241-260. DOI: [10.9793/elsj.35.2_241](https://doi.org/10.9793/elsj.35.2_241)
- Cheng, Lisa L.-S., and Rint Sybesma. 2004. Postverbal ‘can’ in Cantonese (and Hakka) and Agree. *Lingua* 114:149-445. DOI: [10.1016/S0024-3841\(03\)00067-6](https://doi.org/10.1016/S0024-3841(03)00067-6)
- Chief, Liancheng. 2007. Scalarity and incomplete event descriptions in Mandarin Chinese. Doctoral dissertation, State University of New York at Buffalo.
- Cinque, Guglielmo. 1999. *Adverbs and functional heads: A cross-linguistic perspective*. Oxford: Oxford University Press.
- Cinque, Guglielmo. 2001. “Restructuring” and functional structure. In *University of Venice Working Papers in Linguistics*. Vol. 11, ed. by Laura Brugè, 45-127. Venice: Università Ca' Foscari, Centro Linguistico Interfacoltà.
- Dowty, David. 1979. *Word meaning and Montague Grammar: The semantics of verbs and times in Generative Semantics and in Montague's PTQ*. Dordrecht: Springer. DOI: [10.1007/978-94-009-9473-7](https://doi.org/10.1007/978-94-009-9473-7)
- Fukuda, Shin. 2012. Aspectual verbs as functional heads: Evidence from Japanese aspectual verbs. *Natural Language & Linguistic Theory* 30:965-1026. DOI: [10.1007/s11049-012-9171-7](https://doi.org/10.1007/s11049-012-9171-7)
- Harwood, William. 2015. Being progressive is just a phase: Celebrating the uniqueness of progressive aspect under a phase-based analysis. *Natural Language & Linguistic Theory* 33:523-573. DOI: [10.1007/s11049-014-9267-3](https://doi.org/10.1007/s11049-014-9267-3)
- Hoekstra, Teun. 1984. *Transitivity: Grammatical relations in Government-Binding Theory*. Dordrecht: Foris. DOI: [10.1515/9783112327241](https://doi.org/10.1515/9783112327241)
- Hoekstra, Teun. 1988. Small clause results. *Lingua* 74:101-139. DOI: [10.1016/0024-3841\(88\)90056-3](https://doi.org/10.1016/0024-3841(88)90056-3)
- Huang, C.-T. James. 1999. Chinese passives in comparative perspective. *Tsing Hua Journal of Chinese Studies* 29:423-509.
- Koontz-Garboden, Andrew. 2007. Aspectual coercion and the typology of change of state predicates. *Journal of Linguistics* 43:115-152. DOI: [10.1017/S0022226706004464](https://doi.org/10.1017/S0022226706004464)
- Kovač, Iva, and Gert-Jan Schoenmakers. Under revision. An experimental-syntactic take on

- long passive in Dutch: Unraveling the patterns underlying its (un)acceptability. Ms., University of Vienna/Utrecht University.
- Laca, Brenda. 2004. Romance “aspectual” periphrases: Eventuality modification versus “syntactic” aspect. In *The Syntax of Time*, ed. by Jacqueline Guéron and Jacqueline Lecarme, 425-440. Cambridge, MA: MIT Press. DOI: [10.7551/mitpress/6598.003.0018](https://doi.org/10.7551/mitpress/6598.003.0018)
- Li, Charles, and Sandra Thompson. 1981. *Mandarin Chinese: A functional reference grammar*. Berkeley, CA: University of California Press.
- Lu, Man, Anikó Lipták, and Rint Sybesma. A structural account of the difference between achievements and accomplishments: Evidence from Changsha Xiang Chinese. *Journal of East Asian Linguistics* 28:279-309. DOI: [10.1007/s10831-019-09196-2](https://doi.org/10.1007/s10831-019-09196-2)
- MacDonald, Jonathan. 2008. *The syntactic nature of inner aspect: A minimalist perspective*. Amsterdam: John Benjamins. DOI: [10.1075/la.133](https://doi.org/10.1075/la.133)
- Michaelis, Laura. 2011. Stative by construction. *Linguistics* 49:1359-1399. DOI: [10.1515/ling.2011.038](https://doi.org/10.1515/ling.2011.038)
- Moens, Marc, and Mark Steedman. 1988. Temporal ontology and temporal reference. *Computational Linguistics* 14:15-28.
- Pustejovsky, James. 1995. *The Generative Lexicon*. Cambridge, MA: MIT Press. DOI: [10.7551/mitpress/3225.001.0001](https://doi.org/10.7551/mitpress/3225.001.0001)
- Ramchand, Gillian. 2008. *Verb meaning and the lexicon: A first phase syntax*. Cambridge: Cambridge University Press. DOI: [10.1017/CBO9780511486319](https://doi.org/10.1017/CBO9780511486319)
- Ramchand, Gillian, and Peter Svenonius. 2014. Deriving the functional hierarchy. *Language Sciences* 46:152-174. DOI: [10.1016/j.langsci.2014.06.013](https://doi.org/10.1016/j.langsci.2014.06.013)
- Ramchand, Gillian. 2018. *Situations and syntactic structures: Rethinking auxiliaries and order in English*. Cambridge, MA: MIT Press. DOI: [10.7551/mitpress/10911.001.0001](https://doi.org/10.7551/mitpress/10911.001.0001)
- Rappaport Hovav, Malka. 2008. Lexicalized meaning and the internal temporal structure of events. In *Theoretical and crosslinguistic approaches to the semantics of aspect*, ed. by Susan Rothstein, 13-42. Amsterdam: John Benjamins. DOI: [10.1075/la.110.03hov](https://doi.org/10.1075/la.110.03hov)
- Roberts, Ian, and Anna Roussou. 1999. A formal approach to “grammaticalization”. *Linguistics* 37:1011-1041. DOI: [10.1515/ling.37.6.1011](https://doi.org/10.1515/ling.37.6.1011)
- Rochette, Anne. The selection properties of aspectual verbs. In *Beyond Principles and Parameters*, ed. by Kyle Johnson and Ian Roberts, 145-165. Dordrecht: Springer. DOI: [10.1007/978-94-011-4822-1_6](https://doi.org/10.1007/978-94-011-4822-1_6)
- Rothstein, Susan. 2008. Telicity, atomicity and the Vendler classification of verbs. In *Theoretical and crosslinguistic approaches to the semantics of aspect*, ed. by Susan Rothstein, 43-77. Amsterdam: John Benjamins. DOI: [10.1075/la.110.04rot](https://doi.org/10.1075/la.110.04rot)
- Smith, Carlota. 1990. Event types in Mandarin. *Linguistics* 28:309-336. DOI: [10.1515/ling.1990.28.2.309](https://doi.org/10.1515/ling.1990.28.2.309)
- Song, Chenchen. 2018. Severing telicity from result: On two types of resultative compound verb in Dongying Mandarin. *Journal of East Asian Linguistics* 27:275-307. DOI: [10.1007/s10831-018-9170-8](https://doi.org/10.1007/s10831-018-9170-8)
- Sybesma, Rint. 2015. Layers in the Verb Phrase: Inner aspect and affected arguments. Paper presented at the Affectedness Workshop 2015: Verb classes and the scale of change in affected arguments, Nanyang Technological University, Singapore, 13-14 August.
- Sybesma, Rint. 2017. Aspect, Inner. In *Encyclopedia of Chinese Language and Linguistics*, ed. by Rint Sybesma, Wolfgang Behr, Yueguo Gu, Zev Handel, C-T. James Huang and James Myers, 186-193. Leiden: Brill. DOI: [10.1163/2210-7363_ecll_COM_000294](https://doi.org/10.1163/2210-7363_ecll_COM_000294)
- Sybesma, Rint. 2021. Voice and little v and VO–OV word-order variation in Chinese languages.

- Syntax* 24:44-77. DOI: [10.1111/synt.12211](https://doi.org/10.1111/synt.12211)
- Sybesma, Rint, and Guido Vanden Wyngaerd 1999. Realizing end points: The syntax and semantics of Dutch *ge* and Mandarin *le*. In *Linguistics in the Netherlands 1997*, ed. by Jane Coerts and Helen de Hoop, 207-218. Amsterdam: John Benjamins. DOI: [10.1075/avt.14.20syb](https://doi.org/10.1075/avt.14.20syb)
- Swart, Henriëtte de. 1998. Aspect shift and coercion. *Natural Language & Linguistic Theory* 16:347-385. DOI: [10.1023/A:1005916004600](https://doi.org/10.1023/A:1005916004600)
- Tenny, Carol. 1994. *Aspectual roles and the syntax-semantics interface*. Dordrecht: Kluwer. DOI: [10.1007/978-94-011-1150-8](https://doi.org/10.1007/978-94-011-1150-8)
- Travis, Lisa. 2010. *Inner aspect: The articulation of VP*. Dordrecht: Springer. DOI: [10.1007/978-90-481-8550-4](https://doi.org/10.1007/978-90-481-8550-4)
- Tsai, W.-T. Dylan. 2008. Left periphery and how-why alternations. *Journal of East Asian Linguistics* 17:83-115 DOI: [10.1007/s10831-008-9021-0](https://doi.org/10.1007/s10831-008-9021-0)
- Vendler, Zeno. 1967. *Linguistics in Philosophy*. Ithaca, NY: Cornell University Press. DOI: [10.7591/9781501743726](https://doi.org/10.7591/9781501743726)
- Verkuyl, Henk. 1972. *On the compositional nature of the aspects*. Dordrecht: Springer. DOI: [10.1007/978-94-017-2478-4](https://doi.org/10.1007/978-94-017-2478-4)
- Woo, I-hao. 2021. On the syntax of *wan* ‘finish/complete’ in Mandarin Chinese. *Australian Journal of Linguistics* 41:408-433. DOI: [10.1080/07268602.2021.1995698](https://doi.org/10.1080/07268602.2021.1995698)
- Xiao, Richard, and Tony McEnery. 2004. *Aspect in Mandarin Chinese: A corpus-based study*. Amsterdam: John Benjamins. DOI: [10.1075/slcs.73](https://doi.org/10.1075/slcs.73)
- Xuán, Yuè. 2011. Xiàndài Hànyǔ dòngjiéshì bǔyǔ shì yìzhǒng nèibù qíngtài tǐ—“Wánjié duǎnyǔ” jiāshè duì dòngjiéshì jiégòu de jiěshì [The Modern Chinese resultative complement is an inner aspect: How the “Telicity Phrase” hypothesis explains verb-resultative constructions]. *Huáyǔ Jiāoxué yǔ Yánjiū* 1:67-78. DOI: [10.16131/j.cnki.cn44-1669/g4.2011.01.001](https://doi.org/10.16131/j.cnki.cn44-1669/g4.2011.01.001)
- Yan, Miaocai, and Ye Yuan. 2024. Three-layered hierarchical structure of Mandarin Chinese aspectual projections. *Lingua* 300:103677. DOI: [10.1016/j.lingua.2024.103677](https://doi.org/10.1016/j.lingua.2024.103677)