

Syntax of Coercion

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The project

- ◊ PhD project (2020-2025): Aspect in Languages without Aspect
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Aim Syntactic comparison of viewpoint aspect in two aspectually divergent languages:

- Mandarin Chinese (aspect-oriented) — V-affixes (-zhe着, -qilai起来, -xiaqu下去...)
- Dutch (non-aspect-oriented) — periphrastic constructions (*zitten te 'sit to'*, *aan het 'on the'*, *op het punt 'on the point'*...)

Background Challenge for Cartographic Syntax, which posits a universal hierarchy of functional (aspectual) projections:

...Asp_{continuative} > Asp_{progressive} > Asp_{prospective} > Asp_{ingressive(I)} > **Voice/v** > Asp_{ingressive(II)}...

(excerpt, adapted from [2]:153)

- ◊ Viewpoint aspect is in two clausal zones: [V—v] and [v—T]
 - Cinque: Some aspectual viewpoints occupy either zone (Asp_(I) and Asp_(II))
 - Laca; Ramchand & Svenonius: Two distinct zones (Situations > Events)
 - Cheng: Some viewpoints merge low but get interpreted high (e.g., -le了)

? Where is viewpoint aspect in MC & D? Consistent with Cartography?

Variable coercion effects

Aspectual coercion Viewpoint aspect markers impose selectional restrictions (situation type). Not met? Coerce the offending situation structure into the appropriate type (situation type shift).

E.g., English Progressive: *They're being really annoying right now.*

- ◊ Chief (2007) and Fukuda (2012) independently show that some types of viewpoint aspect allow coercion, while others don't.
 - ◊ **New observation** Different manifestations of the same viewpoint aspect vary in whether they allow aspectual coercion.
- E.g., English continuative *keep* vs. *on*: *They kept leaving* vs. #*They left on*.
- No (clear) semantic difference. Alternative hypothesis: Syntax-driven.
- ? If this is a syntactic contrast, can it inform the question (above) of where viewpoint aspect is situated along the clausal spine?

The data

- ◊ Full study: 4 types of viewpoint aspect—Continuous/Progressive (ongoing), Ingressive ('begin'), Continuative ('continue') and Prospective ('about to')

	Mandarin	Dutch
Continuous/	▸ -zhe 着	▸ <i>zitten te</i> 'sit to'
Progressive	▸ (zhèng)zài (正在)	▸ <i>aan het...zijn</i> 'be on the...' / <i>bezig zijn (om)</i> te 'be busy to'
Ingressive	▸ kāishǐ 开始 'begin'	▸ <i>beginnen te</i> 'begin to'
	▸ -qilai 起来	▸ <i>aan het...gaan/slaan</i> 'go/hit on the...'
Continuative	▸ jìxù 继续 'continue'	▸ <i>blijven</i> 'stay'
	▸ -xiaqu 下去	▸ <i>door-</i>
Prospective	▸ jiùyào 就要	▸ <i>op het punt staan (om) te</i> 'stand on the point to'
	▸ kuài 快...le了	▸ <i>op...staan</i> 'stand on...'
Coercers	Mixed	Non-coercers

Assumptions about the VP domain

Isomorphic mapping between situation structure and VP phrase structure (inner aspect) (e.g., Ramchand; Travis; Sybesma).

[5], [6], [11], [12], [13], i.a.

- ◊ Travis/Sybesma-style model of decomposition into

- [VP] Dynamic predicate
- [Asp1P [VP]] "TelicityP": Add result state
- [Asp2P [Asp1P [VP]]] "Scale reduction": Multi→Two-point scale
- e.g., *cāgān* 擦干 'wipe dry'
- e.g., *màidiào* 卖掉 'sell off'

Consequences Input condition for situation type = c-selection; Coercion = Remapping in one of two flavors:

- I. Remap in Lexicon, enter syntactic derivation as coerced situation type
 - II. Remap in Syntax, coercion interacts with syntactic properties of the viewpoint aspect construction whose input restrictions are violated
- Type I predicts that non-coercers don't exist; Type II predicts they do.

[1] Cinque, G. 1999. *Adverbs and functional heads*. Oxford: OUP. [2] Rizzi, L. & G. Cinque. 2016. Functional categories and syntactic theory. *Annual Review of Linguistics* 2:139-163. [3] Yan, M. & Y. Yuan. 2024. Three-layered hierarchical structure of Mandarin Chinese aspectual projections. *Lingua* 300. [4] Laca, B. 2004. Romance "aspectual" periphrases. In J. Guérin & J. Lecarme (eds.), *The Syntax of Time*. Cambridge: MIT Press, 425-440. [5] Fukuda, S. 2012. Aspectual verbs as functional heads. *NLLT* 30, 965-1026. [6] Ramchand, G. & P. Svenonius. 2014. Deriving the functional hierarchy. *Language Sciences* 46, 152-174. [7] Cheng, L. 2019. On the interaction between modals and aspects. *English Linguistics* 35, 241-260. [8] de Swart, H. 1998. Aspect shift and coercion. *NLLT* 16, 347-385. [9] Michaelis, L. 2014. Static by construction. *Linguistics* 49, 1359-1399. [10] Chief, L. 2007. Scalarity and incomplete event descriptions in Mandarin Chinese. PhD thesis, SUNY Buffalo. [11] Ramchand, G. 2008. *Verb meaning and the lexicon*. Cambridge: CUP. [12] Travis, L. 2014. *Inner aspect*. Dordrecht: Springer. [13] Sybesma, R. 2014. *Voice and little v and VO-OV word-order variation in Chinese languages*. *Syntax* 24, 44-77. [14] Wurmbrand, S. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [15] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [16] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [17] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [18] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [19] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [20] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [21] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [22] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [23] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [24] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [25] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [26] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [27] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [28] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [29] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [30] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [31] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [32] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [33] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [34] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [35] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [36] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [37] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [38] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [39] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [40] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [41] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [42] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [43] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [44] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [45] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [46] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [47] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [48] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [49] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [50] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [51] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [52] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [53] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [54] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [55] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [56] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [57] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [58] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [59] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [60] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [61] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [62] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [63] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [64] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [65] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [66] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [67] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [68] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [69] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [70] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [71] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [72] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [73] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [74] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [75] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [76] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [77] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [78] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [79] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [80] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [81] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [82] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [83] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [84] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [85] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [86] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [87] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [88] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [89] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [90] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [91] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [92] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [93] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [94] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [95] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [96] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [97] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [98] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [99] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [100] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [101] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [102] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [103] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [104] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [105] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [106] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [107] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [108] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [109] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [110] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [111] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [112] Boogaart, R. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45, 403-447. [113] Boogaart,