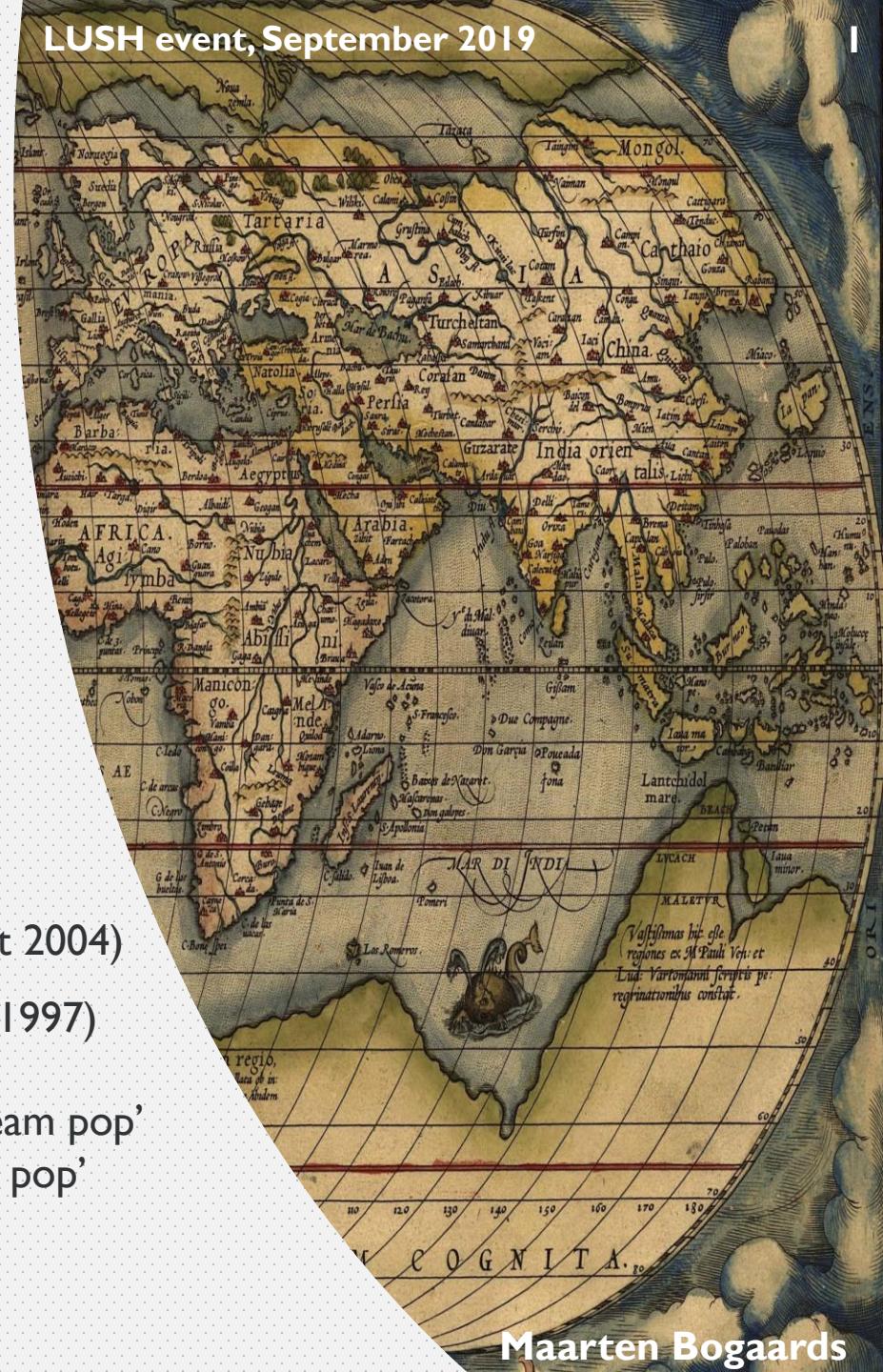




A Mandarin map for Dutch durativity

Parallel text analysis as a heuristic for investigating aspect



Aspect in Dutch (I)

Research problem: diffuse expression in Dutch (not grammaticalized)

Constructions aan het V_{INF} zijn 'to be V_{INF} ing' (Lemmens 2015)
zitten/staan/liggen te V_{INF} 'sit/stand/lie to V_{INF} ' (Boogaart 1991; Lemmens 2005)

Auxiliaries worden 'become' (Hanegreefs 2004)
beginnen 'begin', blijven 'continue' (Broekhuis et al. 2015)

Morphology resultative prefixes, e.g. lezen/uitlezen 'read/finish reading'
tense conjugation, e.g. ik ben/was boos 'I am/was upset'

Lexical semantics dynamicity, telicity, durativity... (Vendler 1957; Boogaart 2004)

Argument structure quantization of obj./subj. (Verkuyl 1993; Haeseryn et al. 1997)
e.g. (1) Henk at een ei/eieren 'I ate an egg/eggs'
(2a) Mijn kind krijgt een ijsje 'My kid gets an ice cream pop'
(2b) Kinderen krijgen een ijsje 'Kids get an ice cream pop'

Different levels interact!

'Higher levels': how to locate relevant phenomena?

Aspect in Dutch (2)

How to locate relevant phenomena?

Great crosslinguistic variation w.r.t. grammaticalization of aspect

E.g. Mandarin: verbal aspect markers (suffixes, particles)
attach to main verb of clause productively

Examples: 了 le → perfective/change-of-state aspect
过 guo → experiential aspect
着 zhe → durative aspect

Employ crosslinguistic feature to investigate intralinguistic expression

Parallel text analysis (Beekhuizen et al. 2017; van der Klis et al. 2017; Lu & Verhagen 2016; Lu et al. 2018; Mo 2019; Tabakowska 2014; Verkerk 2014)

⇒ Align text(s) with translation(s) to illuminate particular linguistic ‘tools’ in translation

Present selection: Mandarin ‘durative aspect’ marker 着 zhe



Research goals

Investigate Dutch durative aspect by means of parallel text analysis (PTA), using Mandarin zhe

Goal twofold: descriptive and methodological

Descriptive: ‘map out’ Dutch durative aspect in terms of zhe
(when a translator wants to capture zhe’s conceptual content in Dutch, which linguistic tools do they use?)

Methodological: test case/positioning PTA as characterized presently
(i.e. as a heuristic; quantitative/qualitative components)

Some issues: ontology of aspectual concepts
(do they exist separately from their linguistic manifestation?)
crosslinguistic heterogeneity
(comparable domains or imposing language-specific idiosyncrasies?)



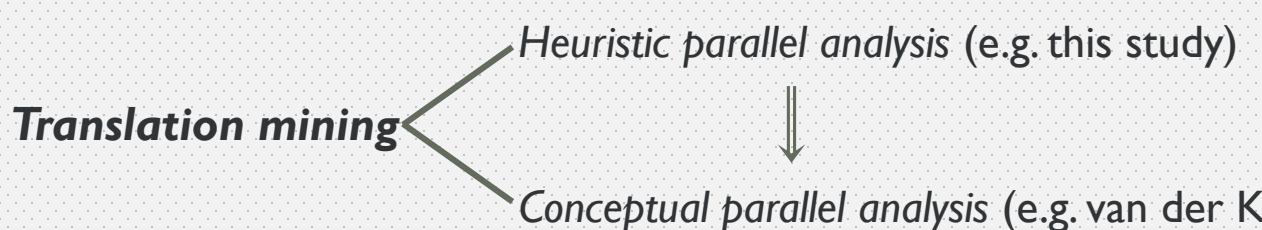
Parallel text analysis

PTA: systematic comparison of aligned text and translation(s) for the purpose of illuminating and analyzing a (set of) linguistic tool(s) in the language of the translation (Lu & Verhagen 2016)

1. heuristic 'catered to' one language
2. division of labor/one-way street: 'instrument' and 'target' language
3. intralinguistic definition of conceptual content
(i.e. within a language, not across languages)

Position in the field: cf. semantic maps (Anderson 1980; Beekhuizen et al. 2017)
translation mining (van der Klis et al. 2017; Mo 2019)

- ⇒ no heuristic aim; no one-way street; conceptual defintion across languages
- ⇒ not a categorical distinction: latter as gradient extension of the former



Method (I)

Points of departure

- ⇒ ‘Durative aspect’ defined exclusively in terms of Mandarin *zhe*
(1. heuristic element)
- ⇒ Crosslinguistic heterogeneity: not necessarily marked in translation

Methodological decisions

- ⇒ Compile small Mandarin/Dutch parallel corpus
- ⇒ 500 sentences with *zhe*, from 5 novels by different author/transl. pairs
- ⇒ Narrative material: only primary text (not embedded)
- ⇒ System of aspectual distinctions for interpreting results: **ANS**
(2. theoretical benchmark)

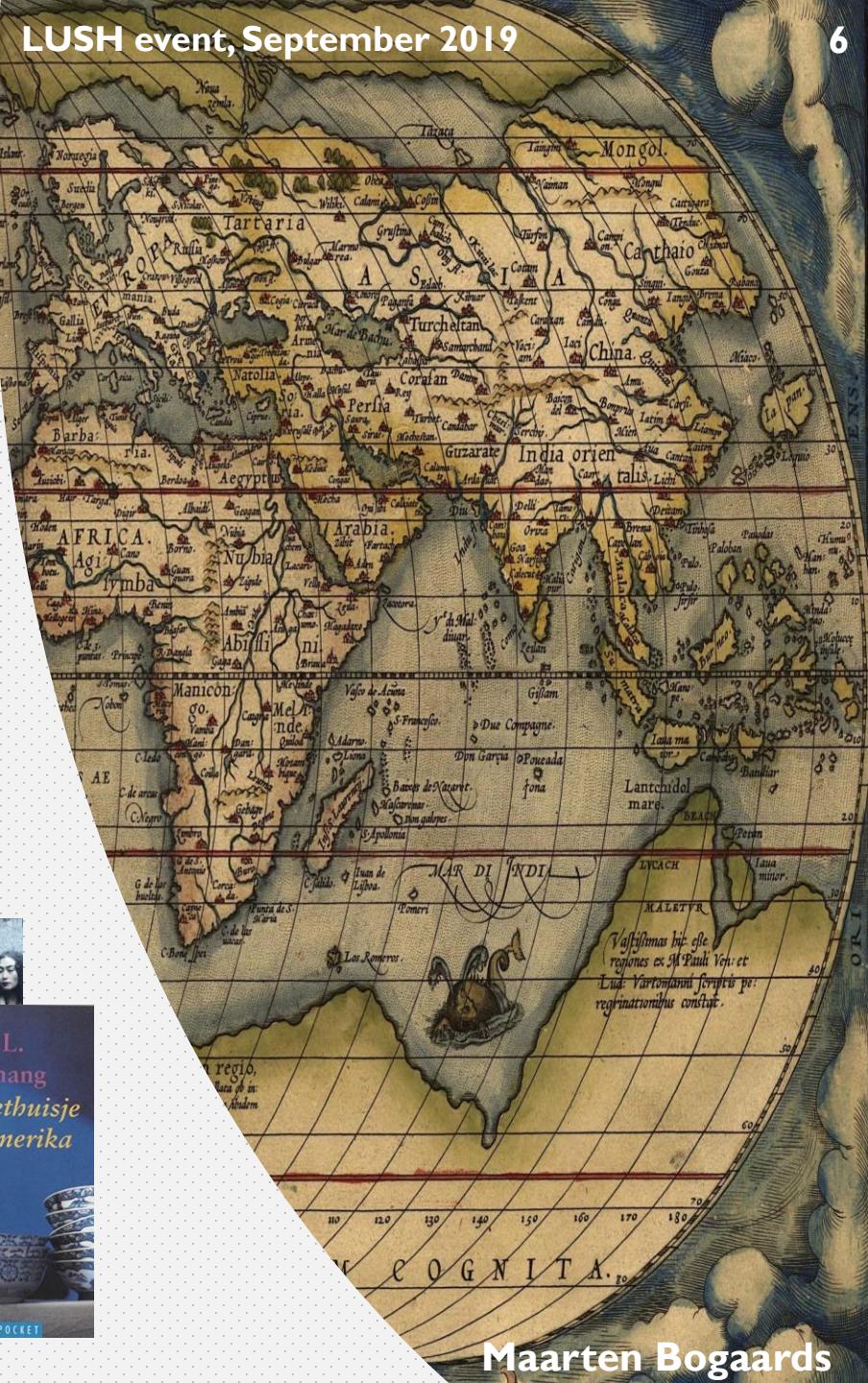
Procedure

- ⇒ Goal: establish labels capturing ‘locus of durativity’ in translation
- ⇒ Both quantitative and qualitative component
- ⇒ *A priori* set of expressional categories undesirable; establish labels in interaction with material (3. back-and-forth process)



Method (2)

#	Original	Author	Year	Translation	Translator(s)	Year
A	绿化树 <i>Lühua shu</i>	张贤亮 X.L. Zhang	1983	<i>Eethuisje Amerika</i>	Rint Sybesma	1990
B	玩儿的就是心跳 <i>Wanr de jiushi xiantiao</i>	王朔 Wang Shuo	1989	<i>Spannend spel</i>	Jan Willem van Bragt & Yuhong Gong	1997
C	我的禅 <i>Wo de chan</i>	卫慧 Wei Hui	2004	<i>Trouwen met Boeddha</i>	Jan De Meyer & Iege Vanwalle	2005
D	玉米 <i>Yumi</i>	毕飞宇 Bi Feiyu	2008	<i>Drie zussen</i>	Yves Menheere	2013
E	蛙 <i>Wa</i>	莫言 Mo Yan	2009	<i>Kikkers</i>	Silvia Marijnissen	2012



Method (3)

Theoretical benchmark

Algemene Nederlandse Spraakkunst (ANS) ‘General Dutch Reference Grammar’ (=Haeseryn et al. 1997): finite system of aspectual distinctions (cf. Verkuyl 1993)

4 binary properties determining aspect of a Dutch clause compositionally

Terminative or durative → temporal delimitation (yes/no)

Property	Options	
	+	-
1 Dynamicity ¹¹	Dynamic verb	Static verb
2 Quantification ¹²	Both object and subject specified for quantity	Object or subject, or neither specified for quantity
3 Terminative modifier	Resultative complement, frequency or time span adjunct in the sentence	None in the sentence
4 Durative modifier	Time duration adjunct in the sentence	None in the sentence

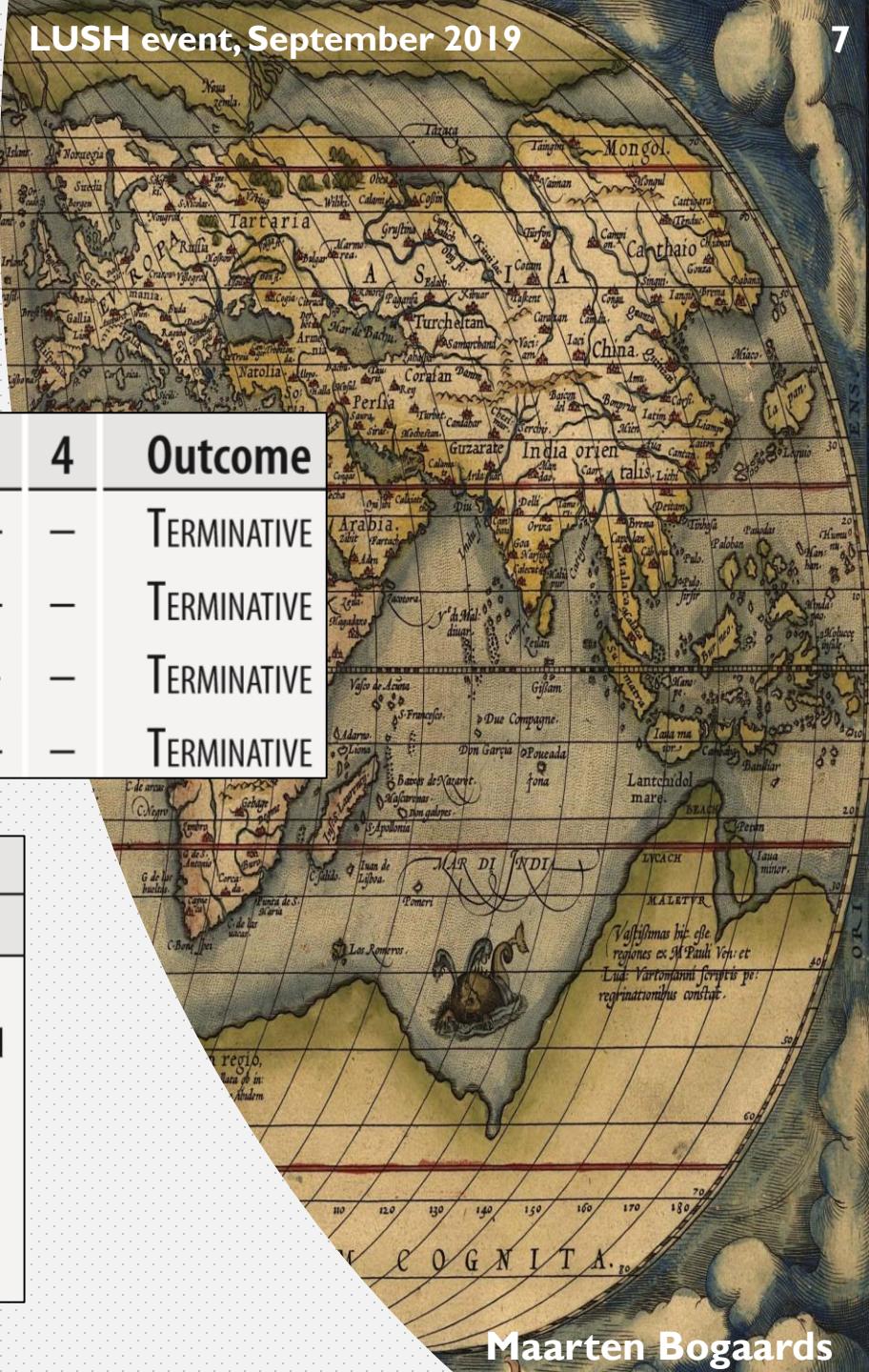


Method (3)

Theoretical benchmark

	1	2	3	4	Outcome	1	2	3	4	Outcome	1	2	3	4	Outcome
Binary values	-	-	-	-	DURATIVE	+	-	-	+	DURATIVE	+	-	+	-	TERMINATIVE
+	-	-	-	-	DURATIVE	-	+	-	+	DURATIVE	-	+	+	-	TERMINATIVE
-	+	-	-	-	DURATIVE	+	+	-	+	DURATIVE	+	+	-	-	TERMINATIVE
-	-	-	-	+	DURATIVE	-	-	+	-	TERMINATIVE	+	+	+	-	TERMINATIVE

Property	Options	
	+	-
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Method (4)

Heuristic element

Mandarin 着 zhe: ‘durative aspect’ (Chao 1968; Henne et al. 1977; Li & Thompson 1981; Dai 1997; Xiao & McEnery 2004; Wiedenhof 2015)

Focus on medial part, not temporal boundaries
(cf. temporal delimitation!)

(3) 街上刮着强劲的风

jiē-shang guā-zhe qiángjìng de fēng
street-on blow-DUR strong SUB wind
'A heavy wind **was blowing** in the street.'

(4) 疯骡把王胆咬伤后，我们都期待着再看一场好戏

fēng luó bǎ Wáng dǎn yǎoshāng hòu, wǒmen dōu qīdài-zhe zài kàn yì-chǎng hǎo xì
mad donkey take Wang gall bite after, IPL all **expect-DUR** again see a-CLF good show
'After the mad donkey had bitten Gallbladder, we **were** all **expecting** another spectacle.'

‘Mandarin affinity’: resultativity! → state resulting from completion of dynamic predicate

- ⇒ ‘Durativity’ in terms of zhe comparable to ‘durativity’ in terms of the ANS on a general level
- ⇒ Except for ‘resultant state’ component





Method (5)

Back-and-forth process

Highly general
categorizational template (ANS)

'Untranslatedness' vs.
unmarkedness

Schematicity in terms of
Construction Grammar

POS = posture verb

LOC = locative

COP = copulative

PPT = past participle

AUX = auxiliary

1. Translatedness	2. Constituent	3. Tense ¹⁸	4. Schematicity
a. Translated	a. Verbal	a. Simple	a. Unmarked
b. Untranslated	b. Nominal	n/a	b. [POS _{loc}]
	c. Adverbial		c. [POS _{cop}]
	d. Adjectival		d. [POS+INF]
	e. Prepositional		e. [POS+PPT]
	n/a		f. [COP+PPT]
			g. [<i>blijven</i> +INF]
			h. [<i>beginnen</i> +INF]
			i. [<i>aan het</i> INF <i>zijn</i>]
			j. [AUX+PPT]

Method (5)

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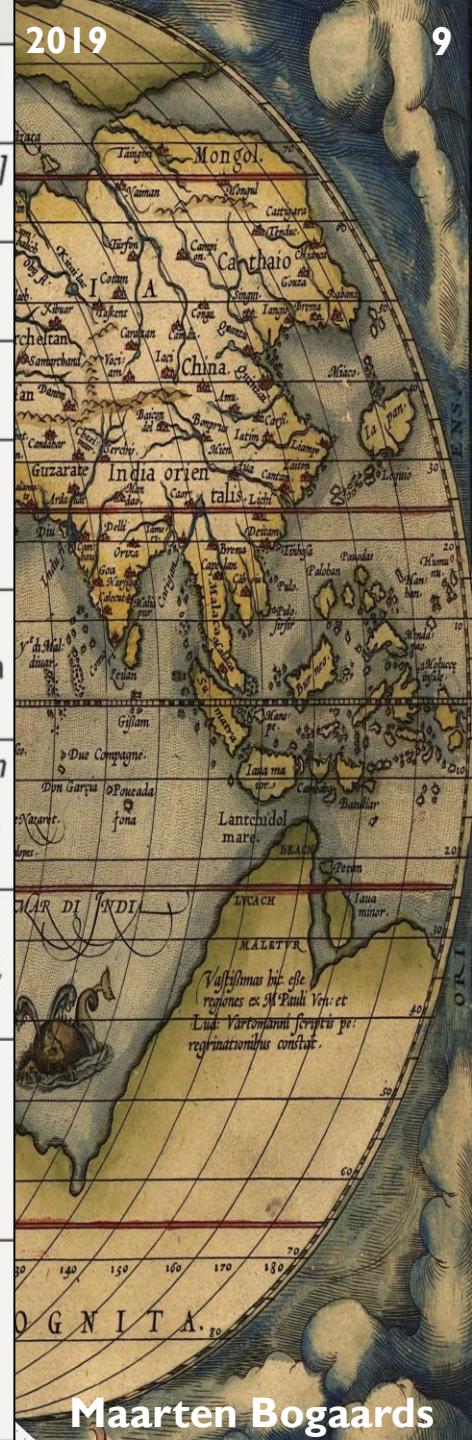
LOC = locative

COP = copulative

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AUX = auxiliary

Category		Example
	Unmarked	<i>Hij droeg een bijna nieuw zwart katoenen, gewatteerd pak.</i> [A004] 'He was wearing an almost new black cotton, quilted suit.'
[POS _{loc}]	locative posture verb	<i>Op iedere korrel zat een kafnaald [...].</i> [D097] 'On every grain was [sat] an awn [...].'
[POS _{cop}]	copulative posture verb	<i>De deuren van de andere kantoren zaten op slot [...].</i> [B027] 'The doors to the other offices were [sat] locked [...].'
[POS+INF]	posture verb + infinitive	<i>[...] terwijl een grote schuurlamp ernaast stond te branden.</i> [D089] '[...] while a large lantern was [stood] burning beside them.'
[POS+PPT]	posture verb + past participle	<i>Bij alle families in onze noordoosthoek lagen ze opgestapeld op de binnenplaats [...].</i> [E066] 'At all families in our corner of the North East, they were [lay] stacked in the courtyard.'
[COP+PPT] ¹⁹	copula + past participle	<i>[...] dankzij Muju was ik vervuld van emoties en gevoelens die ik nooit eerder had gekend.</i> [C081] '[...] thanks to Muju I was filled with emotions and feelings I had never known before.'
[blijven+INF]		<i>[...] ik bleef maar doortobben over de manier waarop ik mijn kaarten beter had kunnen spelen.</i> [B094] '[...] I just kept brooding over ways in which I could have played my cards better.'
[beginnen+INF]		<i>Ze nam de aardappel lachend aan en begon hem met haar klunzige handjes te pellen.</i> [A095] 'With a smile on her face, she took the potato, and started peeling it with her clumsy little hands.'
[aan het INF zijn]		<i>Een paar vrouwen waren, klaar met schelden, naast de mesthoep in alle ernst recepten aan het uitwisselen.</i> [A047] 'A few women, done calling names, were very earnestly trading recipes next to the dungheap.'
[AUX+PPT]	temporal auxiliary + past participle	<i>Op de boeg, die ooit wit moet zijn geweest, waren grofweg met de hand enkele zwarte karakters geschilderd.</i> [C019] 'On the bow, that had to have been white at some point, several black characters were painted crudely by hand.'



Results: quantitative (I)

Quantitative overview: distribution of expressional categories

1. Translatedness			2. Constituent			3. Tense			4. Schematicity		
Label	f	%	Label	f	%	Label	f	%	Label	f	%
Transl.	481	96.2%	Verb	457	91.4%	Simp.	427	85.4%	Unmarked	354	70.8%
						Comp.	30	6%	[POS _{loc}]	37	7.4%
			Nom.	0	0%	n/a	43	8.6%	[POS _{cop}]	8	1.6%
			Adv.	10	2%				[POS+INF]	15	3%
			Adj.	2	0.4%				[POS+PPT]	11	2.2%
			Prep.	12	2.4%				[COP+PPT]	11	2.2%
Untransl.	19	3.8%	n/a	19	3.8%				[blíjven+INF]	9	1.8%
									[beginnen+INF]	4	0.8%
									[aan het INF zijn]	2	0.4%
									[AUX+PPT]	30	6%
										43	8.6%

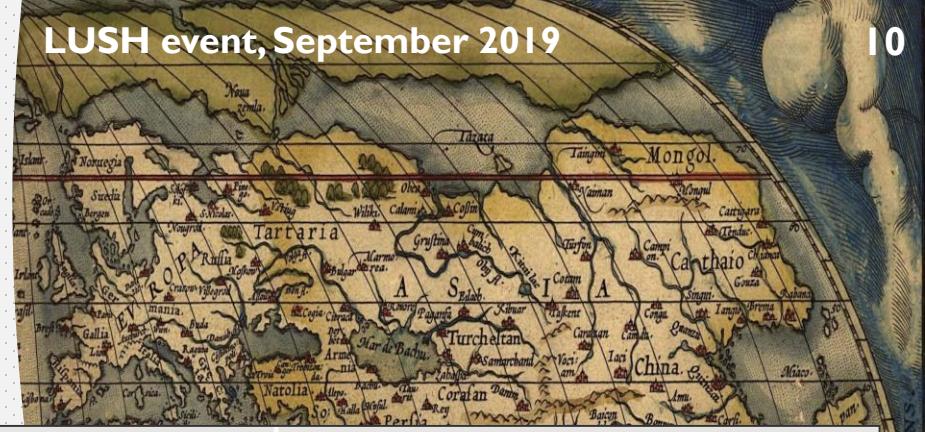
POS = posture verb

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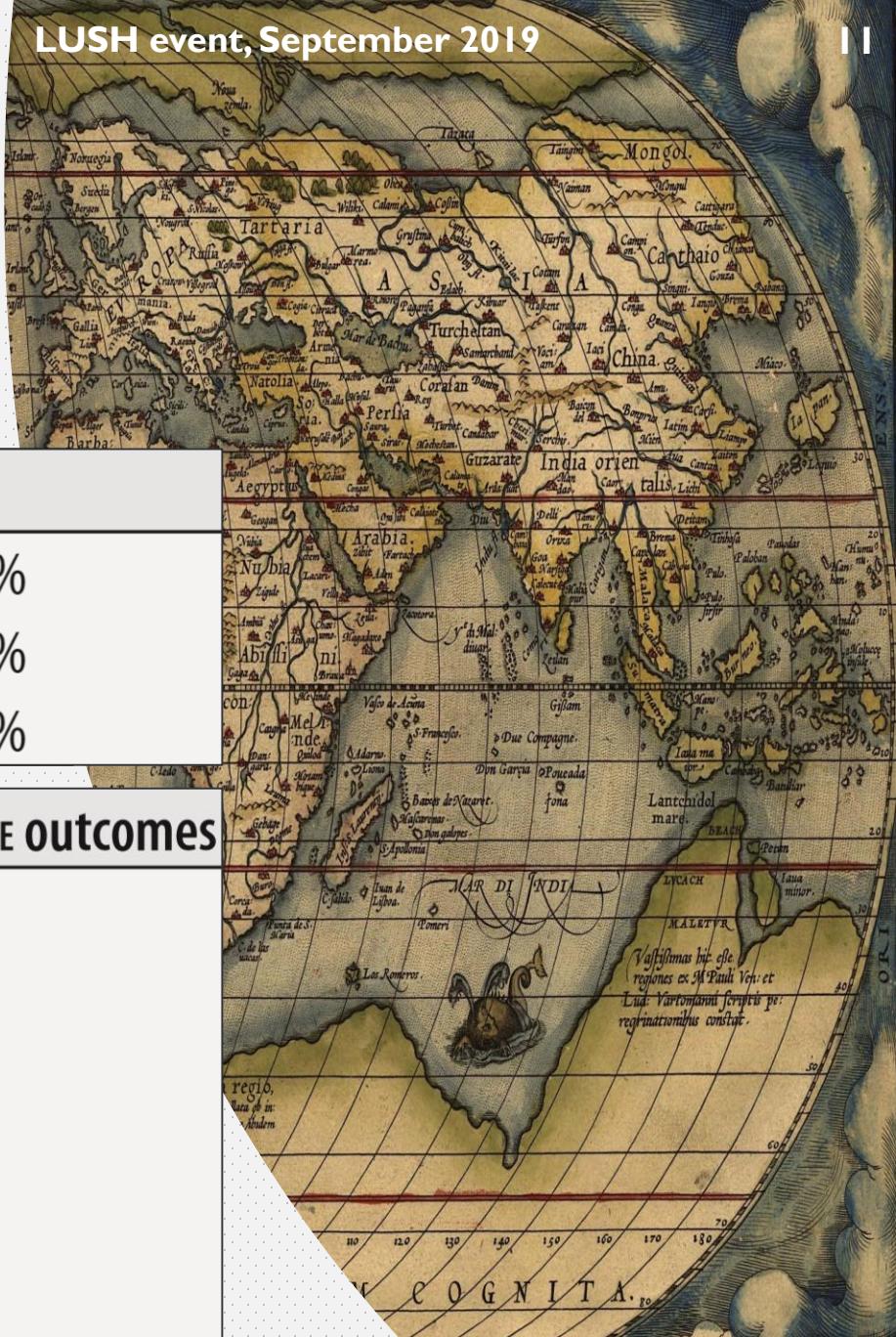


Results: quantitative (2)

Theoretical benchmark (ANS): quantitative application

Outcome	f	%
DURATIVE	308	61.6%
TERMINATIVE	149	29.8%
n/a	43	8.6%

Label	f	% of total TERMINATIVE outcomes
Unmarked	114	76.5%
[AUX+PPT]	19	12.8%
[<i>blijven</i> +INF]	6	4%
[POS+PPT]	4	2.7%
[<i>beginnen</i> +INF]	3	2%
[POS+INF]	3	2%



Results: qualitative (I)

Qualitative component: reflection on expressional categories
arguing for relevance of those categories

- 4 main means of expression:
1. unmarked predicates
 2. posture verb patterns
 3. compound tense and copulative constructions
 4. other (pseudo-)auxiliary constructions

Explaining high proportion (29.8%) of TERMINATIVE outcomes?

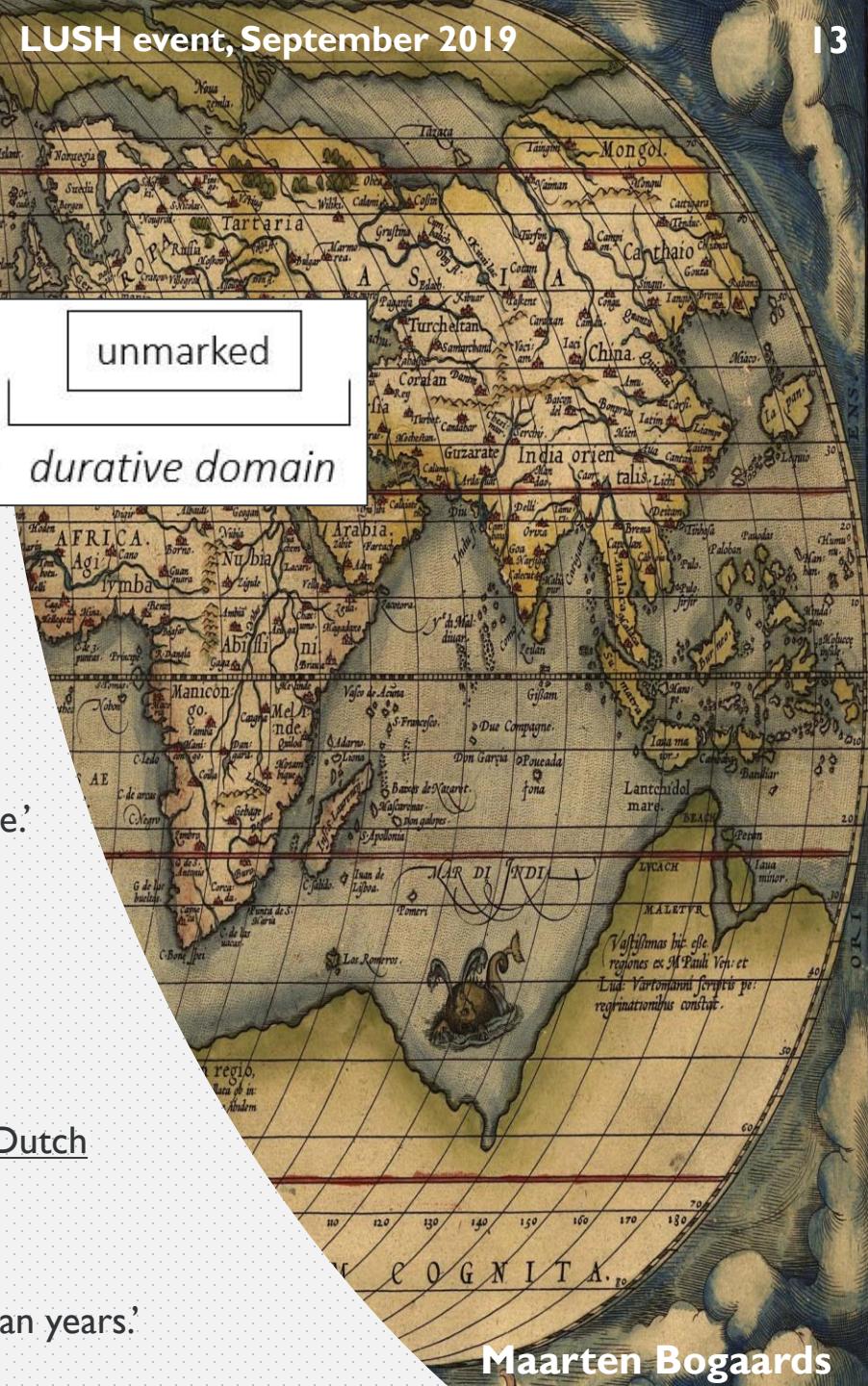
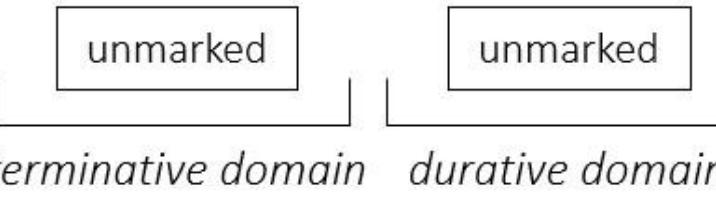


Results: qualitative (2)

I. Unmarked predicates (70.8%)

Both durative and terminative in terms of the ANS

- (4) 疯骡把王胆咬伤后，我们都期待着再看一场好戏 → durative in Dutch
fēng luó bǎ Wáng dǎn yǎoshāng hòu, wǒmen dōu qīdài-zhe zài kàn yì-chǎng hǎo xì
 mad donkey take Wang gall bite after 1PL all expect-DUR again see a-CLF good show
- a. 'Toen de krankzinnige muilezel Galblaas beet, **verwachten** we allemaal weer zo'n schouwspel.'
 - b. 'After the mad donkey had bitten Gallbladder, we **were all expecting** another spectacle.'
- (5) 一个纠察队员，用一只脚踩着她的背。 → terminative in Dutch
yì-ge jiūchá duìyuán, yòng yì-zhī jiǎo cǎi-zhe tā de bèi
 one-CLF order member use one-CLF foot step.on-DUR 3SG SUB back
- a. 'Een ordehandhaver **zette** één voet boven op haar rug.'
 - b. 'A steward **put** one foot on her back.'
- (6) 我躺在沙发上，看着[...]张爱玲在美 国的晚年传记。 → aspectually ambiguous in Dutch
wǒ tǎng zài shāfā shàng, kàn-zhe Zhāng Àilíng zài Měiguó de wǎnnián zhuànji.
 1SG lie.down at sofa on look-DUR Zhang Eileen at USA SUB later.years biography
- a. 'Ik lag op de sofa en **las** de biografie van Eileen Zhang over haar jaren in Amerika.'
 - b. 'I was lying on the sofa and **was reading/read** Eileen Zhang's biography on her American years.'



Results: qualitative (3)

2. Posture verb patterns (14.2%)

Main verb (locative/copulative)

Auxiliary (with infinitival/participial complement)

- (7) 这三家店也在那里，互相紧挨着。 [POS_{COP}] → copulative (stative)

zhè sān-jīā diàn yě zài nàli, hùxiāng jǐn āi-zhe.

this three-CLF store also at there mutual tight be.near-DUR

- a. 'Daar lagen ook die drie winkels **op een rijtje**.'
- b. 'There **were** also those three shops **in a row**'

- (8) 扔在案板上的笼屉布，沾着许多馍馍渣！ [POS+PPT] → resultative (stative)

rēng zài ànbǎn shàng de lóngtì bù, zhān-zhe xǔduō mómo zhā.

throw.away at board on SUB steamer cloth touch-DUR a.lot bun residue

- a. 'Aan een achtelos op het hakbord gegooide broodjesstomerdoek **zaten** nog heel wat stukjes deeg **geplakt**!'
- b. 'To a steaming cloth thrown carelessly onto the chopping board, a lot of pieces of dough **were stuck**!'

(⇒ Bogaards 2019 → corpus research into posture verbs with participial complement:
productive resultative patterns)



Results: qualitative (3)

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 this three-CLF store also at there mutual tight be.near-DUR

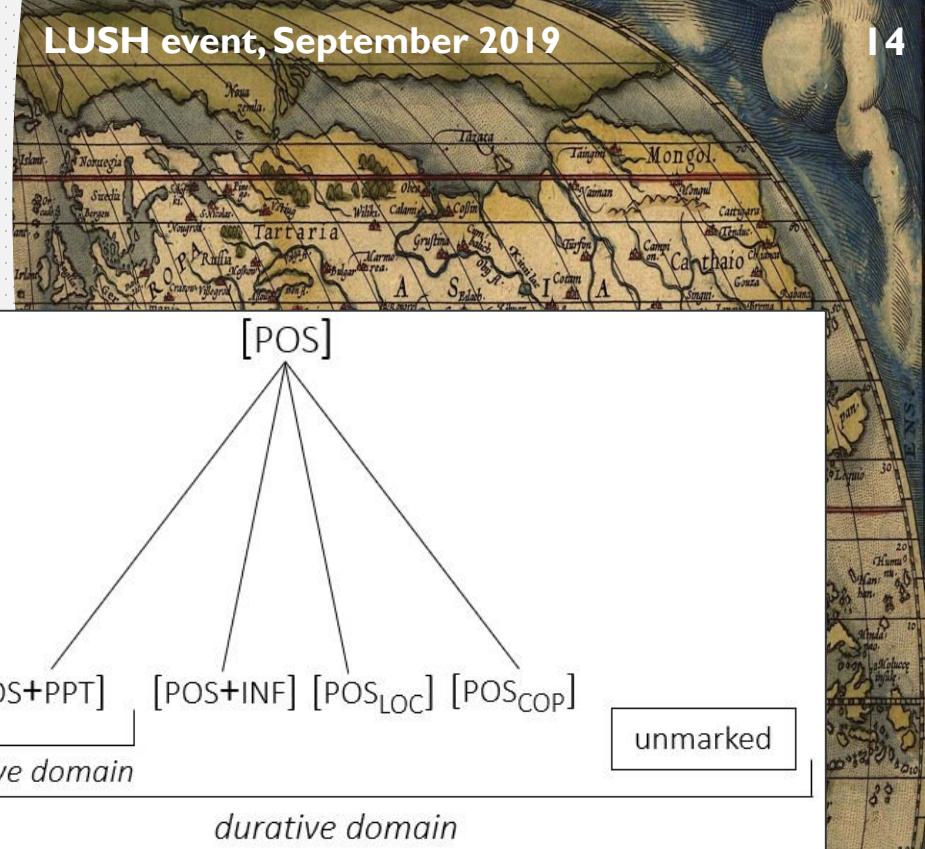
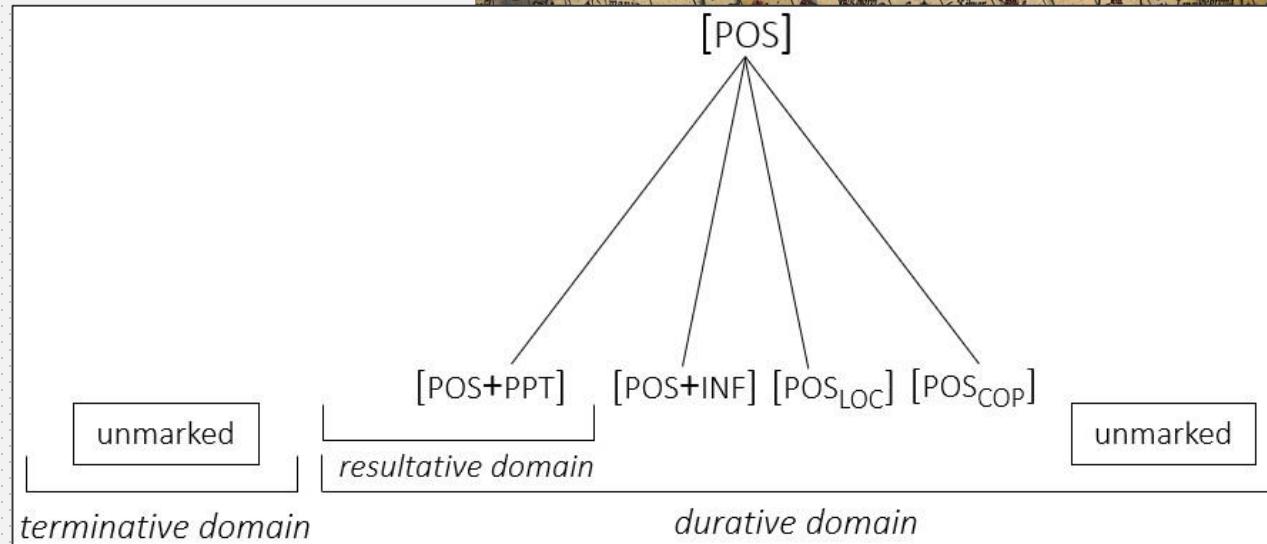
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Results: qualitative (4)

3. Compound tense and copulative constructions (8.2%)

Temporal auxiliary (*hebben/zijn* ‘have/be’) + (verbal) past participle

Copula (*zijn* ‘be’) + (adjectival) past participle

- (9) 集上有二三十个老农民摆着摊子。 [AUX+PPT] → terminative? resultative?

jí shang yǒu érsānhí-ge lǎo nóngmín bǎi-zhe tānzi
market on have twenty.to.thirty-CLF old farmer **arrange-DUR** booth

- a. ‘Op de markt **hadden** zo’n twintig à dertig oude boeren hun waar **uitgestald**.’
- b. ‘At the market about twenty to thirty old farmers **had put** their wares **on display**.’

- (10) 窗子上刻着剔透的花鸟大草。 [AUX+PPT] → resultative? durative?

chuāngzi shàng kè-zhe tītòu de huāniǎodàcǎo
window on **carve-DUR** transparent painting.of.flora.and.fauna

- a. ‘In de ramen **waren** natuurvoorstellingen **uitgesneden**.’
- b. ‘Scenes of nature **were carved** into the windows.’

- (11) 每间高大的房间里都住着人家。 [COP+PPT] → durative

měi-jīān gāodà de fángjiān-lǐ dōu zhù-zhe rénjiā.
each-CLF lofty SUB room-in all live-DUR household

- a. ‘Alle ruime, hoge kamers **waren bewoond**.’
- b. ‘All the spacious, tall rooms **were occupied**.’

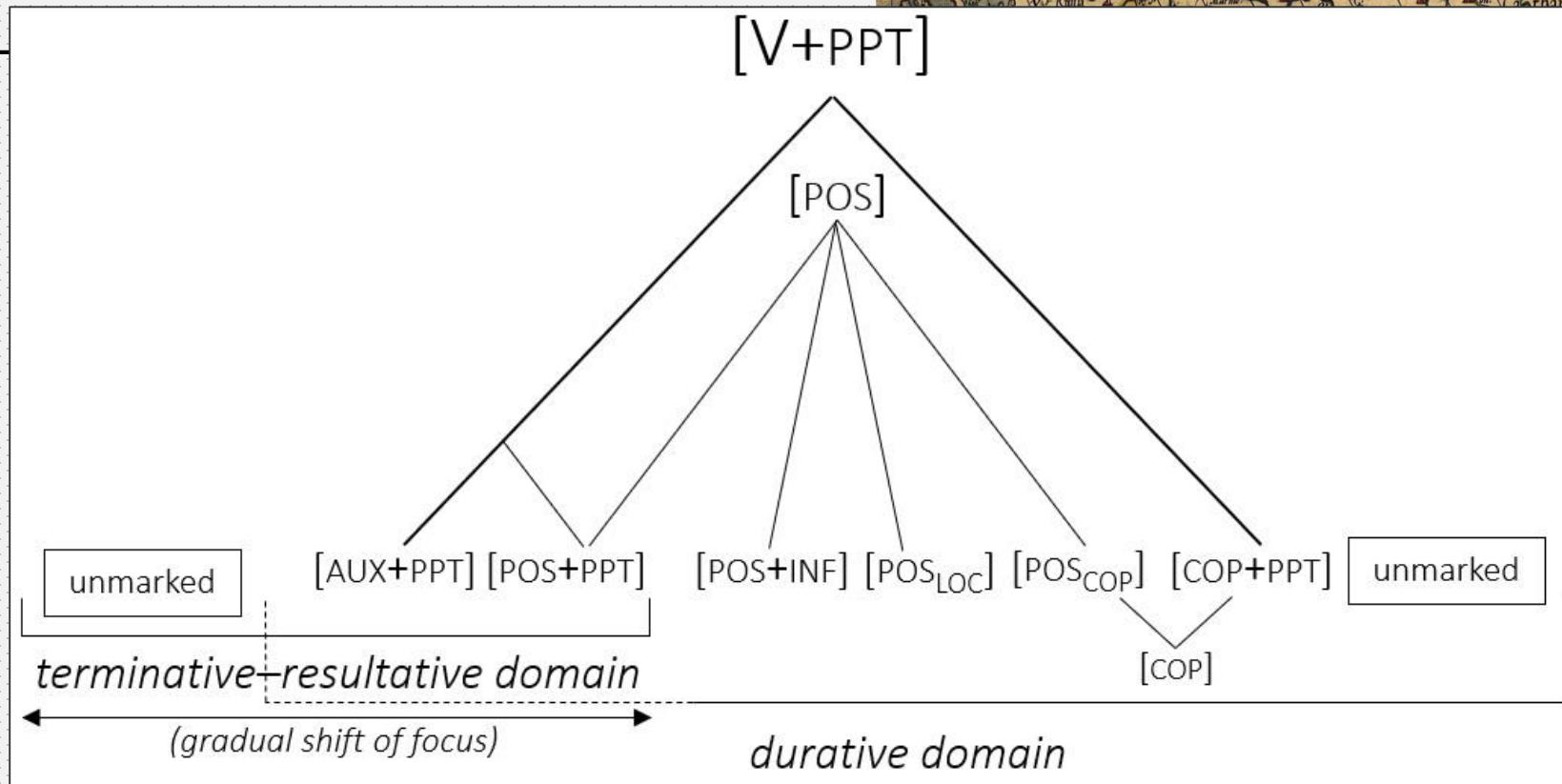


Results: qualitative (4)

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Temporal auxiliary
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Copula (zijn 'be') +
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- chuāngzi shàng kè-zhe tītòu de huāniǎodàcǎo*
window on carve-DUR transparent painting.of.flora.and.fauna
- a. 'In de ramen **waren** natuurvoorstellingen **uitgesneden**.'
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each-CLF lofty SUB room-in all live-DUR household
- a. 'Alle ruime, hoge kamers **waren bewoond**.'
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Results: qualitative (5)

Items tagged TERMINATIVE by the ANS

3 explanations

1. Gradual focus shift terminative → resultative → durative
2. Quantization does not delimit all dynamic verbs: **zero-delimitation**

(12) 马蹄和车轮踏碾着寂寥的土路。

mǎtí hé chēlún tāniǎn-zhe jìliáo de tǔlù.

hoof and wheel step.crush-DUR lonely SUB dirt.road

a. ‘De hoeven en de wielen pletten de eenzame zandweg.’

b. ‘The hooves and the wheels flattened the solitary sand road.’

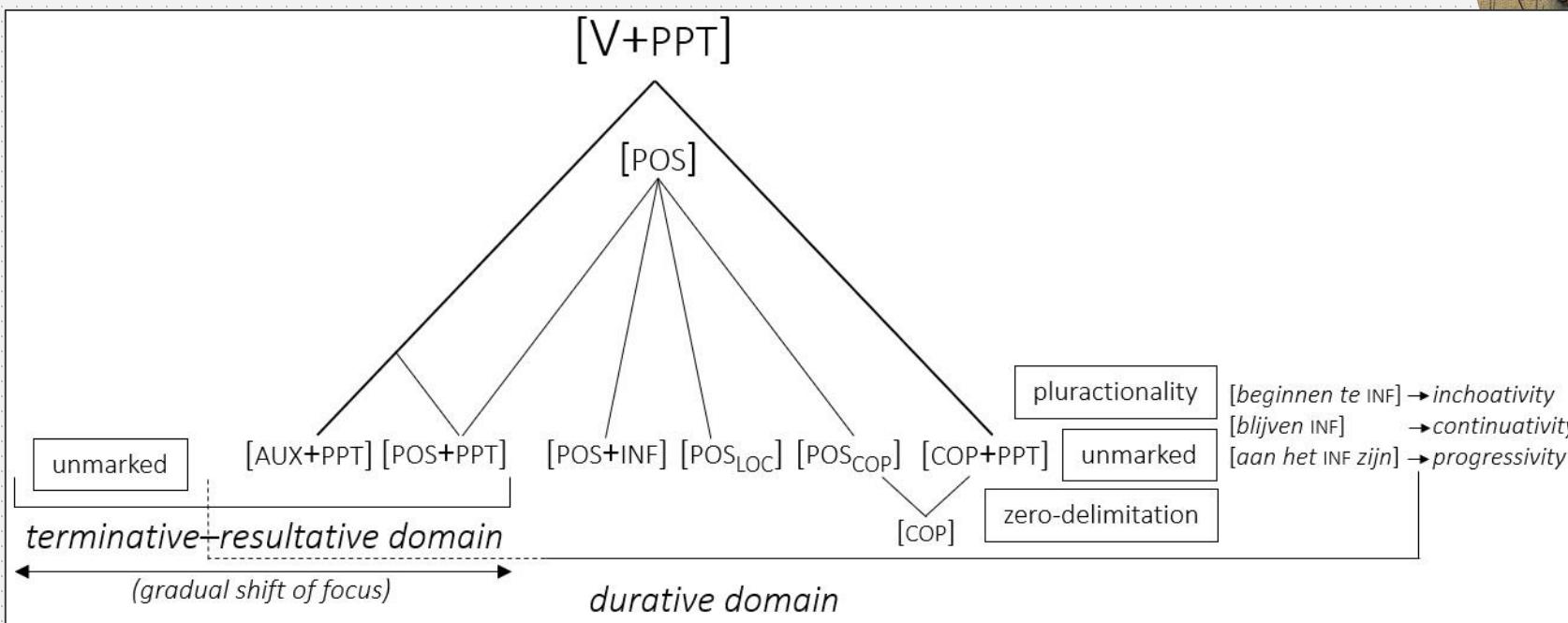
(cf. *Esmay plette de knoflookteen* ‘Esmay flattened the garlic clove’ → TERMINATIVE)

3. Pluractionality: iterative and habitual readings



Overview

Durative domain		
Stative	Dynamic	Other
Resultative	Non-resultative	
[POS+PPT]	[POS _{loc}]	[beginnen te INF]
[AUX+PPT]	[POS _{cop}]	[blijven INF]
	[COP+PPT]	[aan het INF zijn]
	habituality	
	unmarked	



Conclusions & discussion

Conclusions

Durative aspect generally not marked in Dutch (beyond level of lexical semantics and argument structure)

Posture verbs relevant in marking durativity (both stative and dynamic)

Resultativity as gradual link between terminative and durative domains

Zero-delimitation as ‘problem’ for ANS model

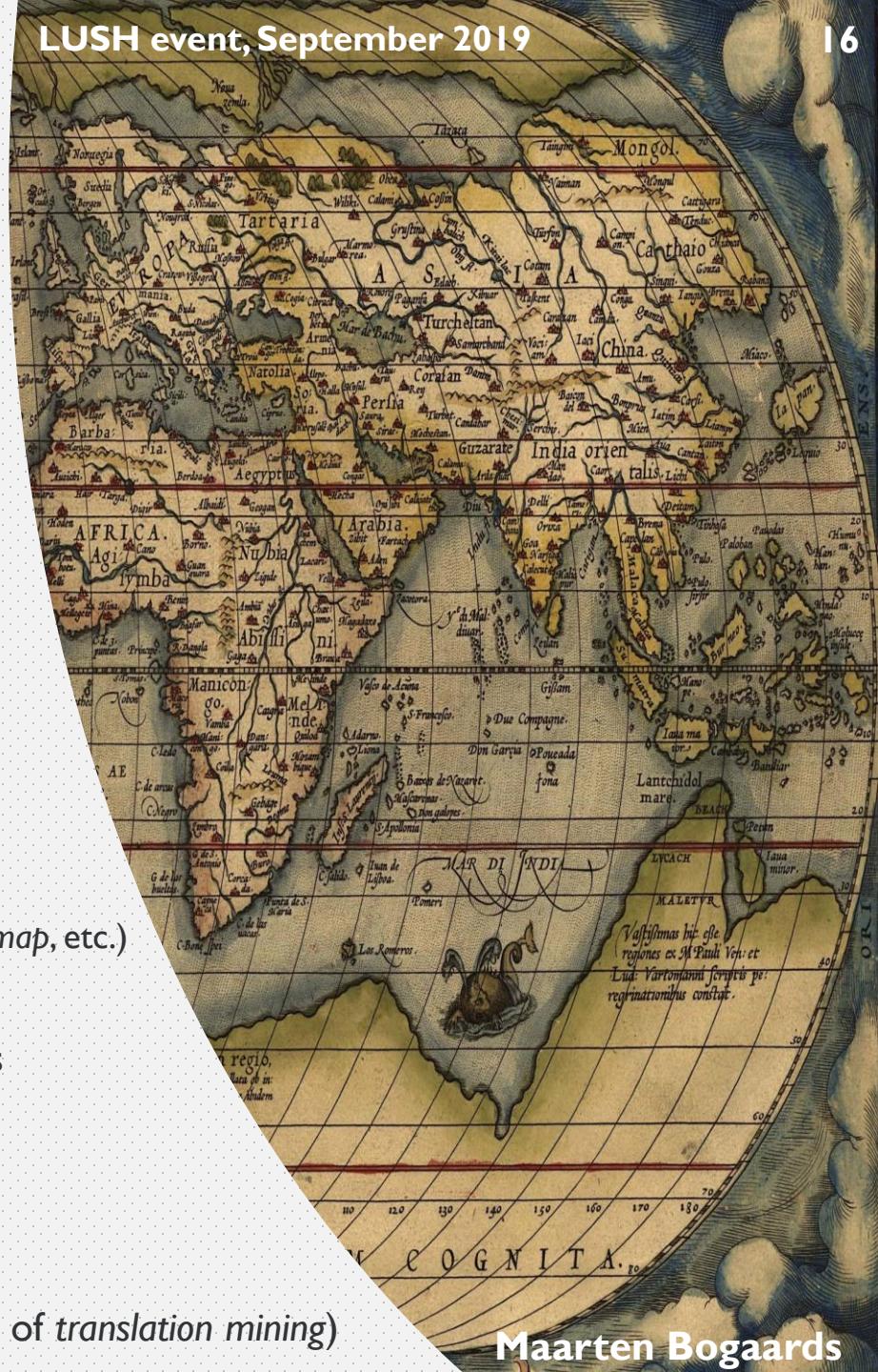
Discussion

3 limitations:

1. ‘Mandarin map’ necessarily hypothetical in nature
⇒ Test on *original* and more Dutch material
⇒ Complementary heuristic parallel analyses desirable (e.g. a Japanese map, English map, etc.)
2. ‘Mandarin map’ likely inexhaustive from Dutch perspective
3. ‘Mandarin map’ does not inform about constraints on expressional categories
⇒ Heuristic parallel analysis as point of departure (e.g. Bogaards 2019)

Methodological takeaways:

- ⇒ mutual dependence of quantitative/qualitative analyses
- ⇒ incorporation of heuristic element and theoretical benchmark
- ⇒ interconnection between heuristic and conceptual parallel analyses (as subtypes of translation mining)





Thank you very much for your attention!
Any questions or comments? (and please feel free to contact me)

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