



# SPACEGRAM

Grammar from space – How spatial elements become applicatives

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# Introduction

- How spatial elements become applicatives – *applica-what??*

(1)	<i>Ik zong over de straten van Londen.</i>	
	I sang about the streets of London	INTRANSITIVE + oblique (PP)
	‘I sang about the streets of London.’	
(2)	<i>Ik <b>be-zong</b> de straten van Londen.</i>	
	I <b>APPL</b> -sang the streets of London	TRANSITIVE
	‘I sang about the streets of London.’	

- **Applicatives**: morphological markers on the verb that **increase the valency** of verbs (= the number of arguments that a predicate, e.g. a verb, can take)
- Specifically, they “allow the coding of a thematically peripheral argument or adjunct as a core-object argument” (Peterson 2007: 1), so they introduce internal argument (‘applied phrase’) to the argument structure of the verb stem
- Applied phrase carries **non-Actor** semantic roles like Beneficiary, Instrument, Location, Comitative

# Introduction

- How spatial elements become applicatives – *applica-what??*

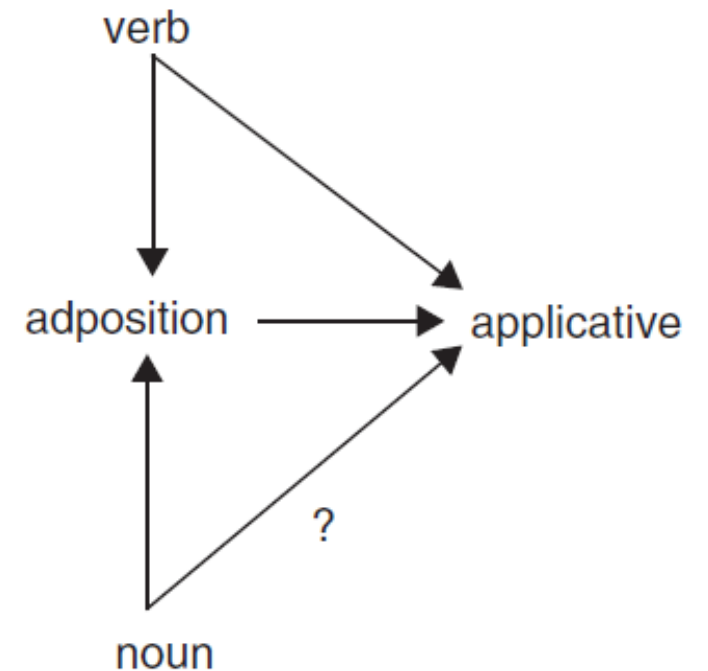
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- Applied phrase carries **non-Actor** semantic roles like Beneficiary, Instrument, Location, Comitative
- Productive derivational process (with syntactic consequences) *kladden – bekladden*
- No consensus on their syntactic optionality (*be-* is optional in (1)-(2)) *varen – bevaren*

# Introduction

## How spatial elements become applicatives

- Bigger picture: diachrony of applicative markers → Previous studies have only pointed to independent lexemes as sources for applicatives
- Peterson (2007: 123) gives two direct sources: **adpositions** and **verbs**; **nouns** would not directly develop into applicative markers
- discourse motivations: applicative constructions emerge “when the applicative object is high in topicality, especially when it is so topical that it is dislocated to a position reserved for highly topical entities or subject to zero-anaphora” (Peterson 2007: 123)  
→ topic continuity
- Figure (right) from Peterson (2007: 125)



# Introduction

## How spatial elements become applicatives

- Independent lexemes with spatial meaning as sources for applicatives: adpositions
  - Peterson (2007: 125-129) suggests that adposition-to-applicative pathway always involves **adposition stranding** (i.e. the adposition not being adjacent to its nominal complement) because of discourse reasons:
    - Zero-anaphora of NP-complement of adposition
    - Topicalization of NP-complement of adposition
    - Extraction of NP-complement of adposition in relativization context (cf. *the man I talked to*)
- (3) Bemba (Atlantic-Congo, Bantu, Zambia)

*nàà-mweene ingaanda iyo umunaandi àà-keele-mo*  
I-saw house that friend-MY HE-lived-IN  
'I saw the house that my friend lived in.' (Givón 1975: 85)

- Diachronic scenarios on the basis of synchronic data

# Introduction



*o-ket-on*



*o-k-ket-on*

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## How spatial elements become applicatives

- But also new source of applicatives: spatial verb morphology in Harakmbut

(4) Harakmbut (unclassified, Peru)

*o-k-**mba**-kot-onka-me-te*

3SG.IND-**SPAT:separation**-VPL-fall-suddenly-REC.PST-INDIR.EVD

‘The keys suddenly got lost to An.’ (Lit. ‘The keys suddenly fell away from An.’)

(Van linden 2022: 143)

*yave*

key

*An-ta*

An-ACC

Valency-increasing use



Valency-neutral use

(5) Harakmbut (unclassified, Peru)

*o-k-ket-on*

3SG.IND-**SPAT:separation**-break-PFV.NVOL

‘The arrow broke into pieces.’ (elicitation) (Van linden 2022: 141)

*pĩã*

arrow

# Introduction

## How spatial elements become applicatives

- Aims: investigate how elements with spatial meaning develop into applicatives from a typological and Germanic perspective, with extensions into applied research, viz. translation studies

### **Typology** (WP1 & WP2):

- examine a new source of applicatives, viz. spatial verb morphology (e.g. *(o)k-* in (3), associated motion markers, directionals- → new grammaticalization pathways from spatial marker to applicative
- broad definition of applicatives, including also non-direct and valency-rearranging applicatives
- Methods: world-wide sample work (WP1) & language documentation (WP2)

### **Germanic** languages: Dutch (WP3) & English (WP4)

- investigate well-established adposition-to-applicative pathway based on historical data, adopting a new, valency-centred approach to verb-particle constructions in Dutch and English
- challenge existing accounts of adposition-to-applicative pathway in that adposition stranding (i.e. the adposition not being adjacent to its nominal complement) is not a necessary condition
- Methods: historical linguistics & synchronic + diachronic corpus studies

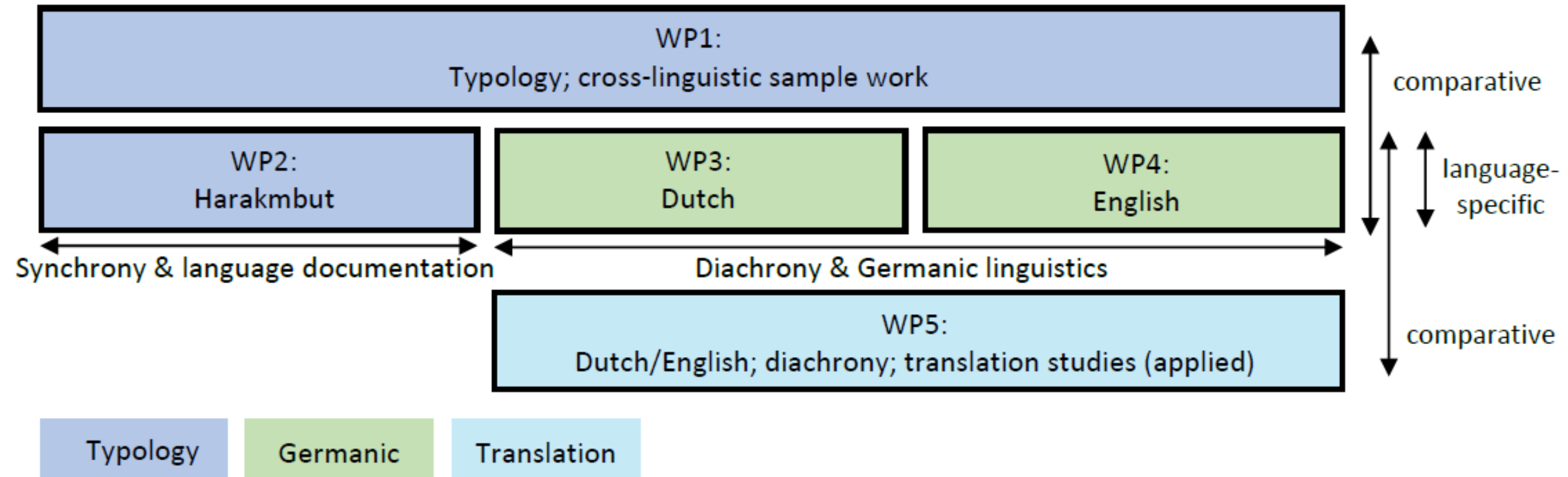
### **Translation** studies (WP5):

- Methods: contrastive linguistics & translation studies, synchronic & diachronic perspective

# Introduction & Outline

## How spatial elements become applicatives

- Aims: investigate how elements with spatial meaning develop into applicatives from a typological and Germanic perspective, with extensions into applied research, viz. translation studies
- Architecture of the project:





# WP1: Typological study of applicative uses of spatial markers

Tim Mukhin, supervised by An Van linden & Dana Louagie, and Riccardo Giomi in supervisory committee

## **Research questions:**

RQ1. How widespread is the applicative use of spatial markers in the world's languages?  
Any areal/genetic patterns?

RQ2. What types can be distinguished? What are their characteristics? (e.g. spatial markers involved, encoding and semantic role of applied phrase)

RQ3. What do our findings tell us about the correlations established in the literature (like Peterson 2007)?

# WP1: Typological study of applicative uses of spatial markers

## What kind of spatial markers are we looking at?

- Associated motion markers

(x) Wolof (Atlantic, Senegal; Voisin 2013: 142, cited in Guillaume & Koch 2021: 6)

*Waa-dëkk*                      *bépp*                      *a*                      *wall-si*                      *woon.*

village\_inhabitant      all                      EMPH.S      rescue-**come&do**                      PST

‘The whole village came to rescue.’

- Directionals

(x) Päri (Andersen 1988: 87-88)

*yàath*      *á-ɲud`-ì*                      *ùbúrr-ì*

tree      CPL-cut:VEN-SUF      Ubur-ERG

‘Ubur cut the tree (this way).’

- Preverbs that grammaticalized out of incorporated spatial nouns

# WP1: Typological study of applicative uses of spatial markers

## Our study includes:

- Valency-increasing uses

see Harakmbut examples

- Valency-rearranging uses

(x) Agar Dinka (Nilotic, S. Sudan; Andersen 1992-1994: 10; cit. in Payne 2021: 719)

a. *d̥ɔk*    *à-bòk*    *dít*  
boy    D-throw    bird

‘The boy is throwing at the bird.’

b. *d̥ɔk*    *à-bóok*    *doòot*  
boy    D-throw:ITV    stone

‘The boy is throwing a stone thither.’

# WP1: Typological study of applicative uses of spatial markers

## Our study includes:

- Direct applicatives
- Non-direct applicatives (applied phrases = OBL; here: allative)

(x) Bystraja Even (Tungusic, Russia; Pakendorf & Stoyanova 2021: 857)

<i>nan</i>	<i>ga-sči-<b>na</b>-ri-n</i>	<i><u>akan-taki-n</u></i>	<i>asatkam</i>
and	take-CONAT- <b>AM</b> -PST-3SG	father- <b>ALL</b> -POSS.3SG	girl.ACC

‘And he went to her father to ask for (lit. take) the girl (in marriage).’

# WP1: Typological study of applicative uses of spatial markers

## **Method:**

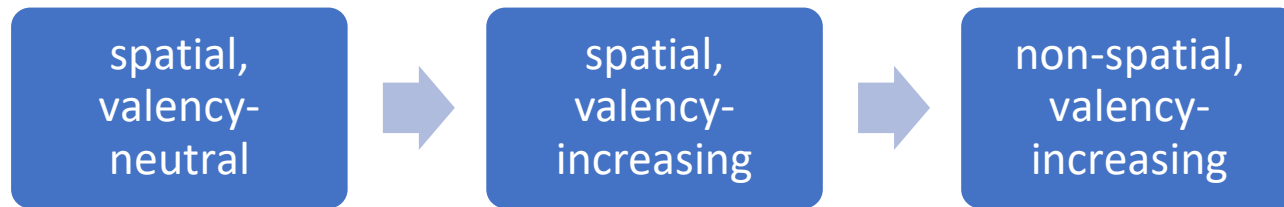
- Typological study
- Sample of 240 languages
- Grammar mining; drawing up database; analysis

ACC — accusative; ALL— allative; AM — associated motion; CONAT — conative; D — declarative; DUB — dubitative; IND — indicative;  
INDIR.EVD — indirect evidential; ITV — itive; NVOL — non-volitional; PFV — perfective; PL — plural; POSS — possessive; REC.PST — recent past;  
REM.PST — remote past; SG — singular; SPAT — spatial; VPL — verbal plural; 1,2,3 — first, second, third person

## WP2: Distribution and inventory of spatial prefixes in Harakmbut

### An Van linden

- Van linden (2022) describes three uses of three spatial prefixes in Harakmbut (unclassified, Peru) and arranges them on a grammaticalization cline



‘arrow broke into pieces’ > ‘keys fell away from An’ > (x) *men-pa*      *an-on-ka-tuy,*      *tia*  
which-manner 3PL.DUB-**SPAT:on**-do-REM.PST.INDIR.EVD aunt  
‘How did they do it to him, auntie?’ (Van linden 2022: 148)

- Methods: analysis of corpus of Harakmbut narratives and conversations selected from Van linden’s 30 hours of recordings in Harakmbut collected in the field

## WP2: Distribution and inventory of spatial prefixes in Harakmbut

- Research questions:

RQ1. Which factors determine the distribution of spatial prefixes, in their three distinct uses?

- a) Does the discourse status of the arguments targeted in valency-neutral uses differ from that of applied phrases introduced by valency-increasing uses of spatial prefixes?
- b) Which semantic roles do the applied phrases have (types of Location roles, types of non-Location roles)?
- c) How does their discourse status map onto their prosodic features (if expressed overtly)?

RQ1a, we will use well-established methodologies to quantify degrees of topic continuity (Givón 1983) and topicworthiness (Thompson 1990) (cf. Peterson 2007: ch. 4, 236-244); the prosodic analyses (RQ1c) will be conducted in PRAAT

RQ2. Can any additional spatial prefixes with applicative uses be identified, e.g. *taʔ-* (force against an object, rear position, downward motion) and *wa-* (human goals) (cf. Van linden 2022: 149-151)?



# WP3: Diachrony of verb-particle constructions in Dutch

Ann-Sophie Vrielynck, supervised by Julien Perrez & Dirk Pijpops

# WP4: Diachrony of verb-particle constructions in English

## An Van linden & Lieselotte Brems

- investigate well-established adposition-to-applicative pathway based on historical data, adopting a new, valency-centred approach to verb-particle constructions ('**phrasal verbs**') in English
- Challenges existing accounts of adposition-to-applicative pathway in that adposition stranding (i.e. the adposition not being adjacent to its nominal complement) is not a necessary condition
- Focus on particles with spatial meaning, including prepositions (*off, down*) & adverbs (*away, out*)
- Unlike in Dutch, particles follow the verb rather than precede it; verb moved to pre-particle position in Middle English (Thim 2012)
- Cappelle (2007) points to valency-increasing effect of particles on verbs: effects differ with respect to whether the entire VPC is spatial in meaning and whether the VPC has an inherent endpoint (telic vs. atelic)

Is transitivity affected ...	... in telic VPC ...	... in atelic VPC ...
... with spatial use of particle?	<b>Yes</b> , e.g. <i>bark the postman *(away)</i>	Usually not, e.g. <i>push the cart (along)</i>
... with non-spatial use of particle?	Usually not, e.g. <i>type the text (over)</i>	<b>No</b> , e.g. <i>hum (*a song) along</i>

## WP4: Diachrony of verb-particle constructions in English

- Reanalysis in preposition stranding scenario à la Peterson (2007: 126-129) is highly unlikely:
  - (x) *She **ran** [**off** the road].* (Cappelle 2004: 32)
  - (x) *She [**ran off**] another copy // She ran them off.* ('produced one on a machine') (Cappelle 2004: 32)
- Alternative: development from intransitive V-PRT combination () to transitive one ()? Role of labile verbs?
  - (x) *they were forced to **run off** to sea for their owne safeguard.* ('flee') (OED, 1628)
  - (x) *[I] did..on a new text..**runne of** halfe a sermon at leisure hours.* ('write rapidly') (OED, 1683)
- Thim (2012: 7) noted that the majority of English verb-particle constructions contain mono-syllabic verbs of Germanic descent, while there seem to be restrictions on the use of borrowed and/or polysyllabic verbs

# WP4: Diachrony of verb-particle constructions in English

Research questions:

RQ1. Did transitive English VPCs develop from preposition constructions?

- (a) Does the telicizing effect of the particle on the VPC play a role? Does the spatial versus aspectual contribution of the VPC play a role?
- (b) Do we find historical evidence for verb-particle order contexts as the locus of change from intransitive postposition constructions to transitive VPCs? Did adposition stranding play a role in this change?

RQ2. If reanalysis can be upheld, can we uncover concomitant semantic changes? (see RQ2a in WP3)

RQ3. If reanalysis is to be ruled out, did lability of verbs play a role?

- (a) Do we find evidence of lability of the simplex verb before we find lability of VPCs containing the same lexical verb?
- (b) Or do transitive VPCs diachronically precede intransitive VPCs (for the same lexical elements)?

→ Working in two directions:

→ From PDE back in time: case-studies of individual VPCs

→ From Old to Present-day English: case-studies of individual spatial markers

→ Using two types of corpora: monolingual English historical corpora & EDGeS-corpus of Bible translations

# WP5: Complex verbs in Dutch and English: diachronic translation studies & contrastive approach

Isa Hendrikx & researchers WP3-WP4

- This transversal work package bridges WP3 and WP4, and takes a comparative perspective just like WP1
- Its overarching objective is to provide a contrastive analysis of Dutch and English complex verbs, synchronically and diachronically, by means of two translation studies
- WP5 is expected to have a theoretical as well as an applied impact:
  - At the theoretical level, we aim to further the knowledge of contrastive morphology and complex-word formation – under-investigated topics in corpus-based translation studies (Lefer 2011)
  - The applied study will generate concrete results for translator education

# WP5: Complex verbs in Dutch and English: diachronic translation studies & contrastive approach

## Research questions & hypotheses

RQ1. How are complex verbs treated in literary translations from English to Dutch and vice versa?

- a) How do translators tend to translate complex verbs? By (i.) separable verbs, (ii.) inseparable verbs, (iii.) simplex verbs, (iv.) paraphrases or (v.) complete omission?
- b) Are the observed tendencies similar in both translation directions?

RQ2. Do complex verbs (separable and inseparable) develop in English and Dutch in a parallel manner (apart from the different position of the spatial element)?

RQ1a -> we expect to find complete omission only rarely:

- Expectation supported by research on priming (Defrancq & Rawoens 2016: 375)
- Phrasal verbs are less numerous in English translations if the source language is a Romance language than if the source language is a Germanic one (Cappelle & Loock (2017)
- Even experienced translators tend to translate literally (Tirkkonen-Condit 2002)  
→ they will thus translate a complex verb into a complex verb

# WP5: Complex verbs in Dutch and English: diachronic translation studies & contrastive approach

## Data & methods

- For RQ1, we will use the Dutch Parallel Corpus (DPC) which contains translations Dutch > English and English > Dutch, from a variety of text types (Macken, De Clercq & Paulussen 2011), and analyse 100-hit samples of 50 lexical items in each translation direction
- RQ2 will be addressed on the basis of the results of WP3 and WP4, and will hence be tackled in the last two years of the project
- In addition to comparing the findings of both WPs, we will select a set of 20 lexical items (see WP3 and WP4) and analyse the concordances in the parallel diachronic EDGeS-corpus of Bible translations (Bouma et al. 2020)

# Recap

Grammar from space – How spatial elements become applicatives

