A new source for applicatives:
Spatial verb morphology in Harakmbut

An Van linden

University of Liège

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an.vanlinden@uliege.be

1. Introduction

- What are applicatives?

(1) *Ik   zong   over   de   straten van   Londen.*   INTR + oblique (PP)
      I   sang   about   the   streets of   London
      'I sang about the streets of London.'

(2) *Ik   **be**-zong   de   straten van   Londen.*   TR
      I   **APPL**-sang   the   streets of   London
      'I sang about the streets of London.'

Applicativization

- Productive verbal derivational process with syntactic consequences
- Introduces internal argument ('applied phrase') to the argument structure of the underived verb root/stem → valency-increasing verbal morphology
- Applied phrase carries non-Actor semantic roles: "peripheral" roles like Beneficiary, Instrument, Location, Comitative
- No consensus on syntactic optionality (as in (1)-(2)) (see Harakmbut cases)

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Applicativization:

- Productive verbal derivational process with syntactic consequences

Zaaien – bezaaien
Planten – beplanten
Kladden – bekladden
Schilderen – beschilderen
Varen – bevaren

- Introduces internal argument ('applied phrase') to the argument structure of the underived verb root/stem → valency-increasing verbal morphology

- Applied phrase carries non-Actor semantic roles: "peripheral" roles like Beneficiary, Instrument, Location, Comitative

- No consensus on syntactic optionality (as in (1)-(2)) (see Harakmbut cases)

3

1. Introduction

Aim of the talk:

- Present existing research on diachrony of applicative markers
  - Previous studies have only pointed to independent lexemes as sources for applicatives
- Present a new source for applicatives: spatial verb morphology (bound morphemes), in a language that also has dedicated applicatives, viz. Harakmbut (unclassified/isolate, Peru) (Van linden 2022)

Outline

1.Introduction

2. Overview of sources of applicatives

3. Introduction to Harakmbut (finite verb forms)

4. Dedicated applicatives in Harakmbut

5. Spatial prefixes as applicatives in Harakmbut

6. Lexicalized uses

7. Conclusion

2. Overview of sources of applicatives

Where does the morphology that marks applicative constructions comes from?

- 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 from Peterson (2007: 125)
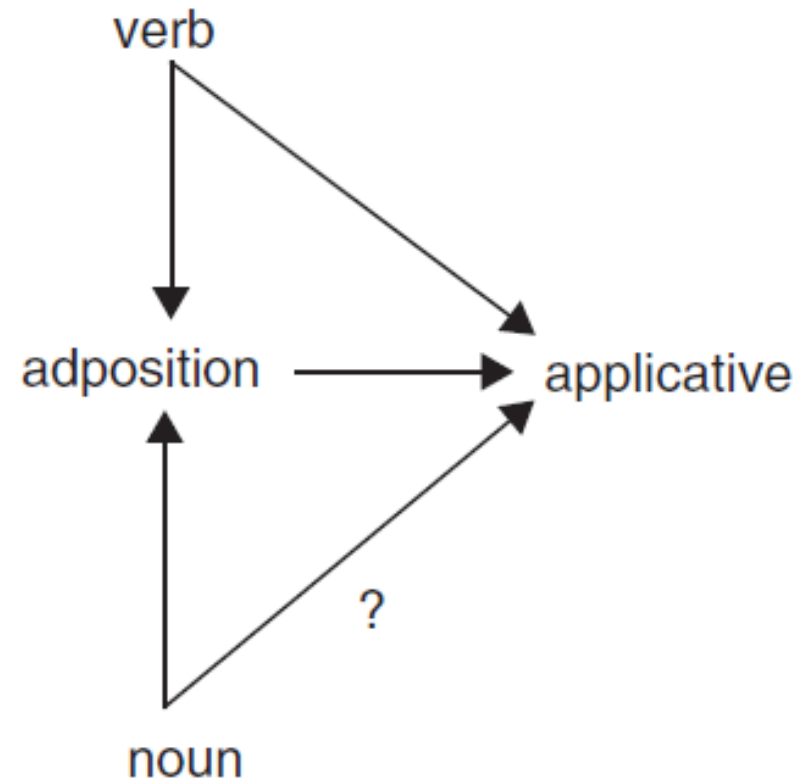
2.1 Adpositional sources

Craig and Hale (1988) on relational preverbs, a variety of applicative, in Rama (Chibchan, Nicaragua)

- relational preverbs (RPVs), e.g. *yu-* in (1b), are adpositional in origin

- "if the object of a postposition is given information, it may be subject to zero-anaphora, and its stranded postposition cliticizes to the verb, as in (1b), the second line of a text following (1a)" (Peterson 2007: 125)

- Eventually zero-anaphora became unnecessary as a prerequisite for use of most frequently cliticized RPVs → Peterson (2007: 126) invokes reanalysis (adpos → appl) for this last step

(1) Rama (Craig and Hale 1988: 322)

   a. *nainguku   kiskis   nsu-kuaakar-i,*
       so   tongs   WE-have-ASP
       'That's why we have the tongs.

   b. *suli-kaas   Ø yu-nsu-auk-kama*
       animal-meat   PV/WITH-WE-roast-SUB
       'for us to roast meat with it…'

OV-language

2.1 Adpositional sources

Conditions for adposition stranding (Peterson 2007: 126-127):

- zero-anaphora (see (1))

- when NP-complement of adposition is topicalized

- when NP-complement of adposition is extracted in relativization context: NP-complement is head/antecedent of the relative clause, and dislocated from the adposition in the relative clause (e.g. *the man I talked to*), e.g. (2) from Bemba (Bantu, Zambia)
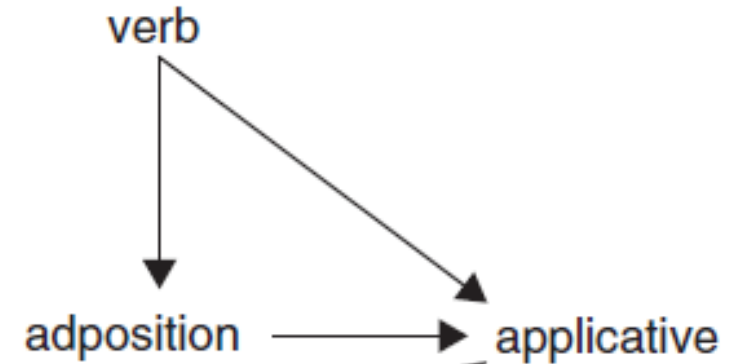
(2) *nàà-mweene*   *ingaanda*   *iyo*   *umunaandi*   *àà-keele-mo*
      I-saw   house   that   friend-MY   HE-lived-IN   VO-language
      'I saw the house that my friend lived in.' (Givón 1975: 85)

- Reanalysis of relative clause verb form as (alternative) main clause form → generalization to cases where applicative object is not subject to zero-anaphora

2.2 Verbal sources

verb

adposition ———▶ applicative

- Serialized verbs > prepositions (Durie 1988)
- Serialized verbs > applicative affixes (Peterson 2007)

Rude (1991) on verbal origin of applicative morphology in Sahaptian-Klamath

(3) Nez Perce (Sahaptian-Klamath, USA) (Rude 1991: 186)

wálc	páa-ny-a'n-ya	'áayato-na
knife	3SUBJ.3OBJ-make-APP-PAST	woman-OBJ

'He made the woman a knife.'

- Benefactive applicative suffix **-a'n** in (3) is assumed to originate in lexical verb *'eni* 'give', which still exists in Nez Perce
- Nez Perce also still shows syntactic juxtaposition of verbs to indicate simultaneity of the events that they encode
- No diachronic evidence, but diachronic hypothesis on the basis of synchronic data

2.2 Verbal sources

- Serialized verbs > prepositions (Durie 1988)

- Serialized verbs > applicative affixes (Peterson 2007)

Other languages where benefactive applicative suffix grammaticalized from the verb 'give':

- Sahaptin (Sahaptian-Klamath, Oregon & Washington) (Rude 1991)

- Northern Iroquoian languages (Mithun 2001)

- Yimas (Lower Sepik, Papua New Guinea) (Foley 1991)

- Hakha Lai (Tibeto-Burman, Myanmar) (Peterson 2007)

(references in Peterson 2007)

2.2 Verbal sources

Also origin in dependent verb forms (different from verb serialization constructions):

- development of instrumental applicative *isht-* (5) from same-subject converbial form of verb *ishi* 'get, take' (4) in Chickasaw (Muskogean, USA) (Munro 1983):

(4)   *tali'*   *ish-li-t*   *isso-li-tok*
        rock   take-1SG.ACT-CONV   hit-1SG.ACT-PAST
        'Taking a rock, I hit him.'

(5)   *tali'*   *isht-isso-li-tok*
   rock   APPL.INSTR-hit-1SG.ACT-PAST
        'I hit him with a rock.'

2.3 Noun sources

Peterson's (2007: 140–141) on nouns as a possible source for applicatives:

grammaticalization path from noun to applicative always needs an **intermediate stage** (nouns have to be integrated into verb before reanalysis as applicatives)

→Absence of direct grammaticalization also supported by more recent studies

→Intermediate stage: incorporation of element that has nominal source but differs formally and semantically from it + element does not associate to core argument, but to oblique (Rose 2019: 460):
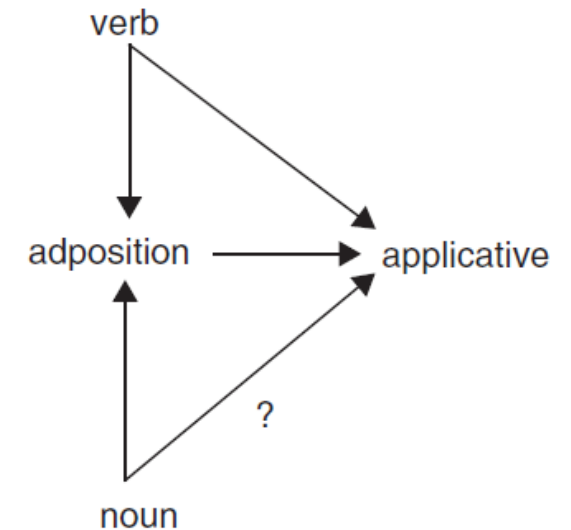
N 'face'	→ lexical suffix (directional)	→ (goal) applicative	Halkomelen (Salish, USA)	Gerdts and Hinkson (2004)
N 'hand'	→ incorporated body-part	→ applicative (for animate source or location)	Murrinhpatha (non-Pama-Nyungan, Australia)	Nordlinger (2019)
N +/- 20	→ incorporated body-part	→ applicative (locative preverb)	Adyghe and Kabardian (Circassian, Caucasus)	Arkadiev and Maisak (2018)
N 31	→ classifier on verbs (NI 4)	(→ applicative)	Mojeño Trinitario (Arawak, Bolivia)	Rose (2019)

2. Overview of sources of applicatives

Wrapping up:

Two direct (adposition, verb) and one indirect source (noun): independent morphemes/lexemes

2. Overview of sources of applicatives

What happens to applicative constructions after they have arisen and later on, when they cease to be synchronic applicatives?
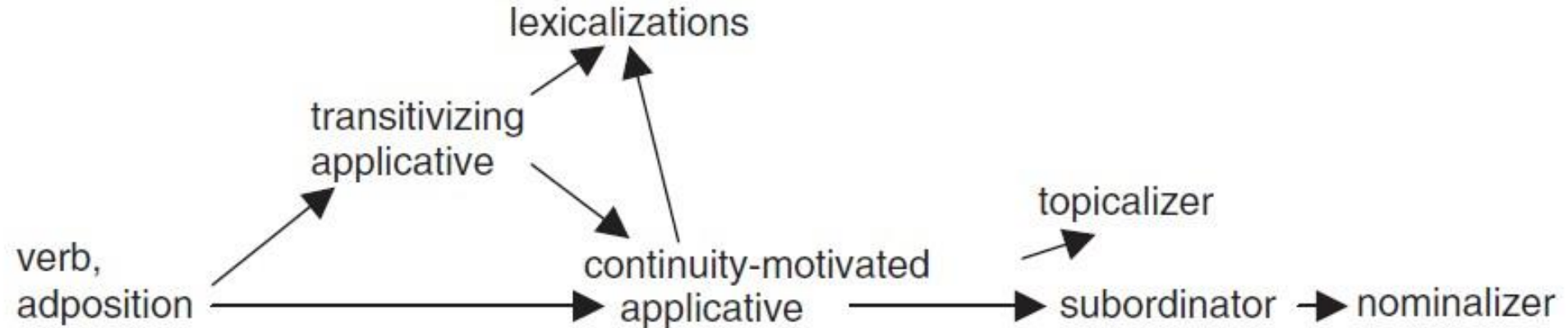
(Peterson 2007: 124)

FIGURE 5.1 The evolution of applicative constructions

3. Introduction to Harakmbut (finite verb forms)

- Harakmbut is a language from the Peruvian Amazon, Madre de Dios and Cusco

- Genetic affiliation:
  - **isolate/unclassified** language (cf. Wise 1999: 307; WALS)
  - Adelaar (2000, 2007): genetically related to the Brazilian **Katukina** family

- Areality:
  - Some grammatical features are shared with languages from **Guaporé-Mamoré** linguistic area (Crevels & van der Voort 2008)
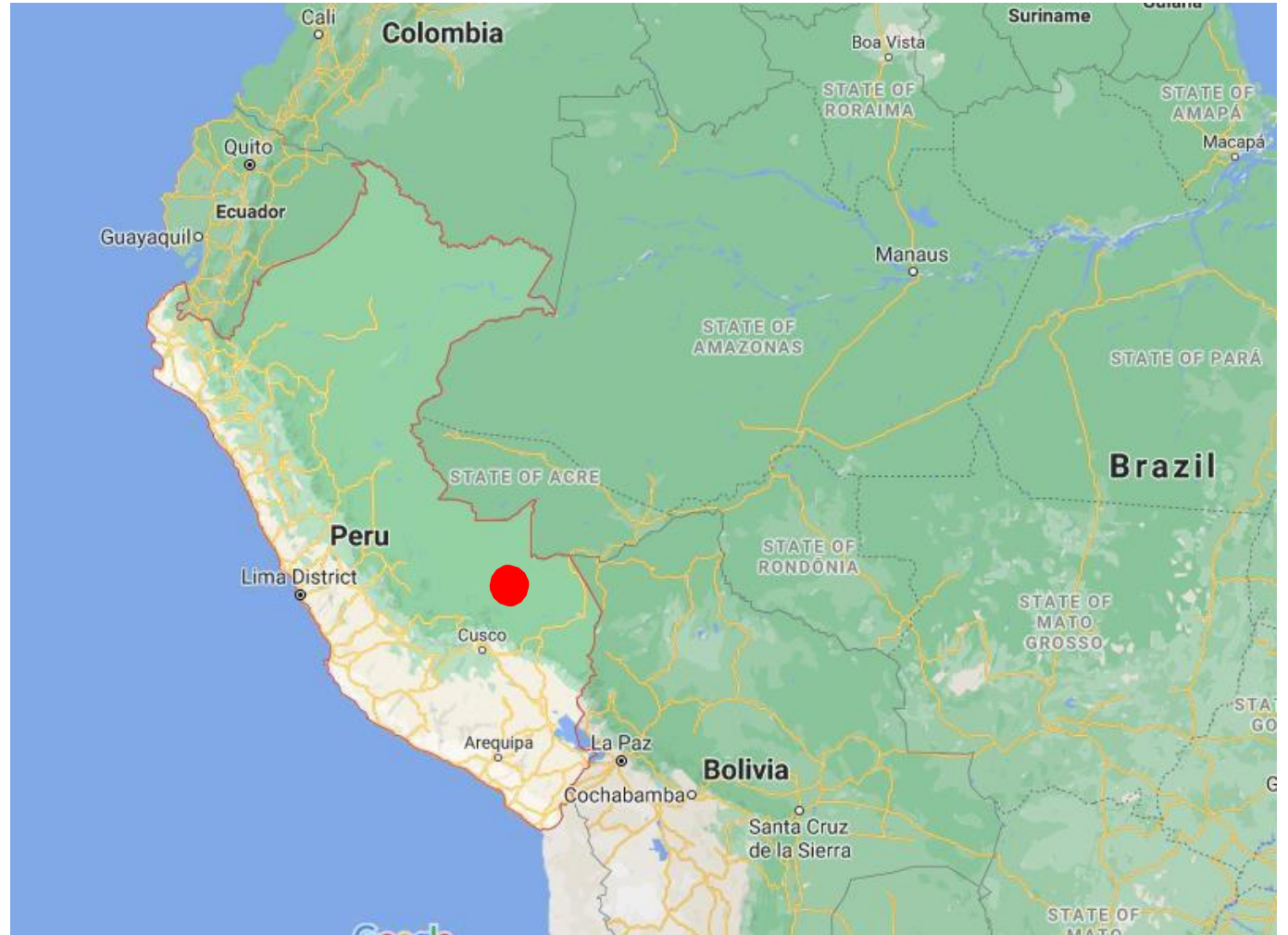
- Harakmbut live in 'native communities': patches of land entitled to them by the government
- subtropical climate
- around tributaries of the Madre de Dios River, which eventually flows into the Amazon River;

UBICACION DE COMUNIDADES NATIVAS DE LA REGION MADRE DE DIOS
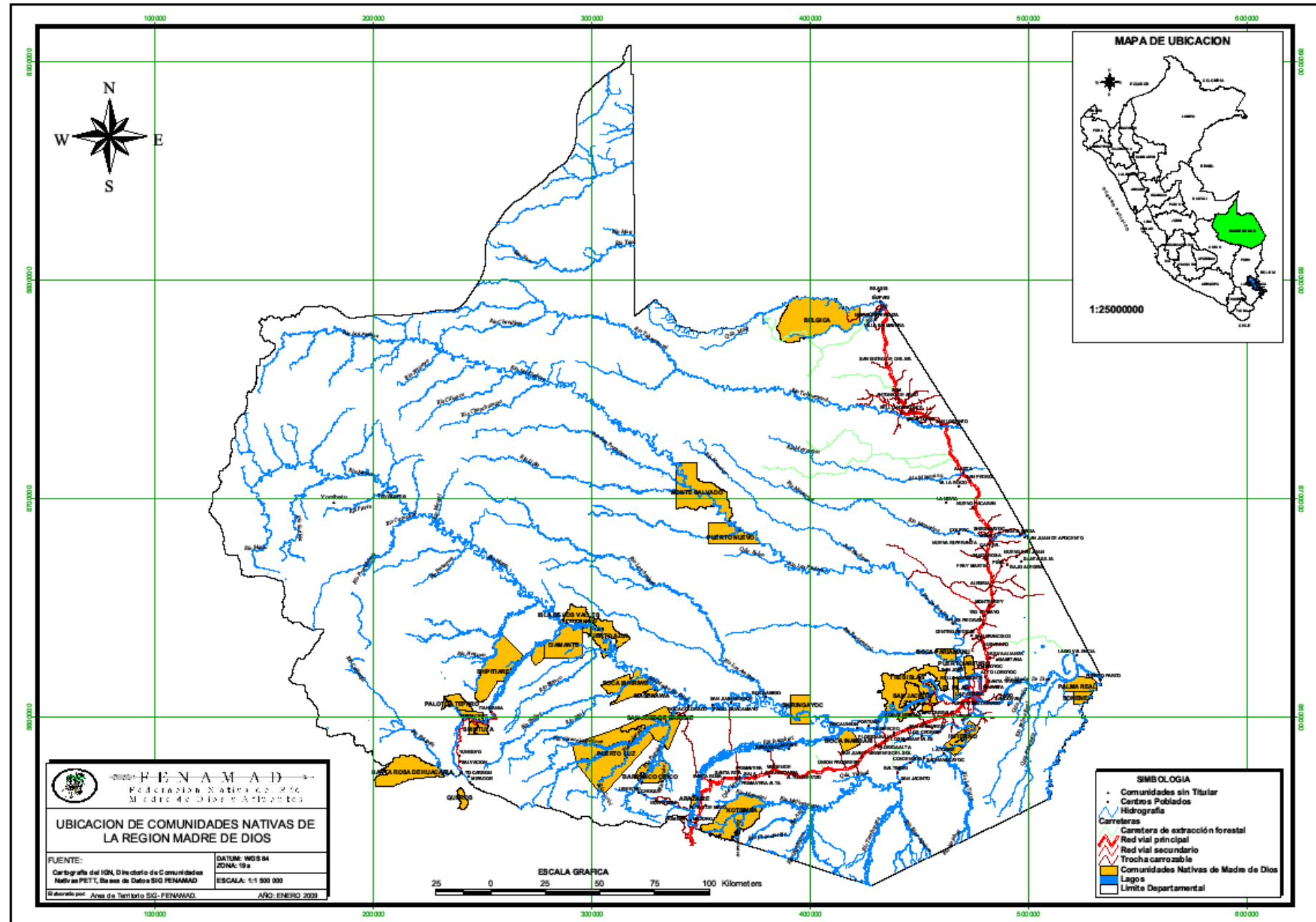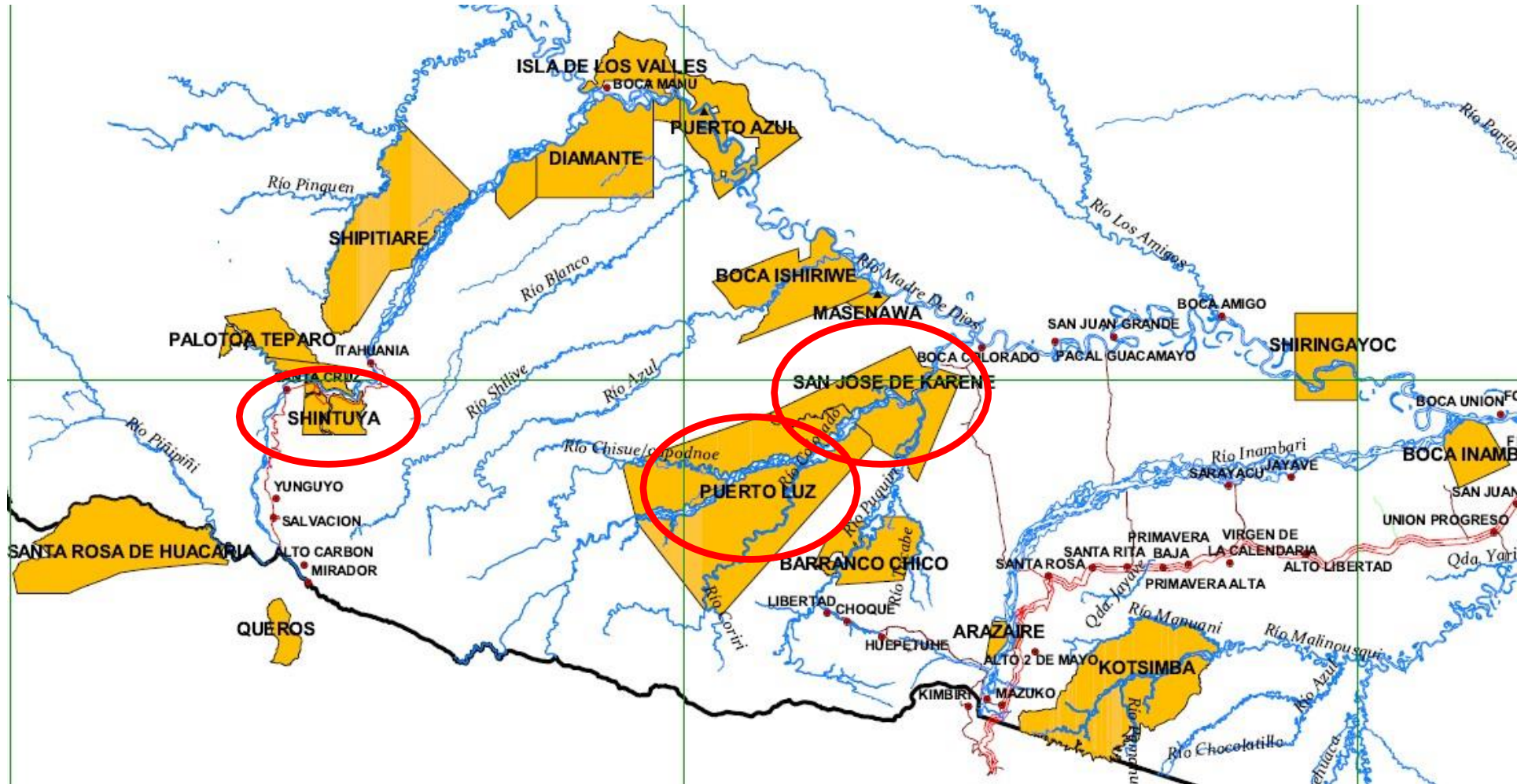
- About 1000 speakers left; distinct dialects
- Previous linguistic work: focus on Arakmbut/Amarakaeri dialect (Hart 1963; Helberg 1984, 1990; Tripp 1976ab, 1995)
- Fieldwork in Puerto Luz, San Jose de Karene and Shintuya → Arakmbut/Amarakaeri variety

3. Introduction to Harakmbut (finite verb forms)

- Harakmbut verbs: copular, intransitive, transitive and ditransitive roots → require valency-changing morphology to change transitivity

- Also set of labile verb roots (e.g. denoting breaking events): can occur in syntactically transitive and intransitive constructions without dedicated valency-changing morphology depending on their (non-)volitional event semantics (see Van linden 2020: 16-17)

- Valency-changing morphology is found in several slots in the morphological template of finite verbs

3. Introduction to Harakmbut (finite verb forms)

- **Valency-changing morphology** is found in several slots in the morphological template of finite verbs (Van linden 2022; 2023)

Figure 1. The prefix string of Harakmbut finite verb forms

-4	-3	-2	-1	Verb stem
Mood+AGR	(APPL)	(CLF/INCORP.N)	(CAUS.SOC)	

(VPL)

(Up to 2 x SPAT and/or VPL)

(SPAT)
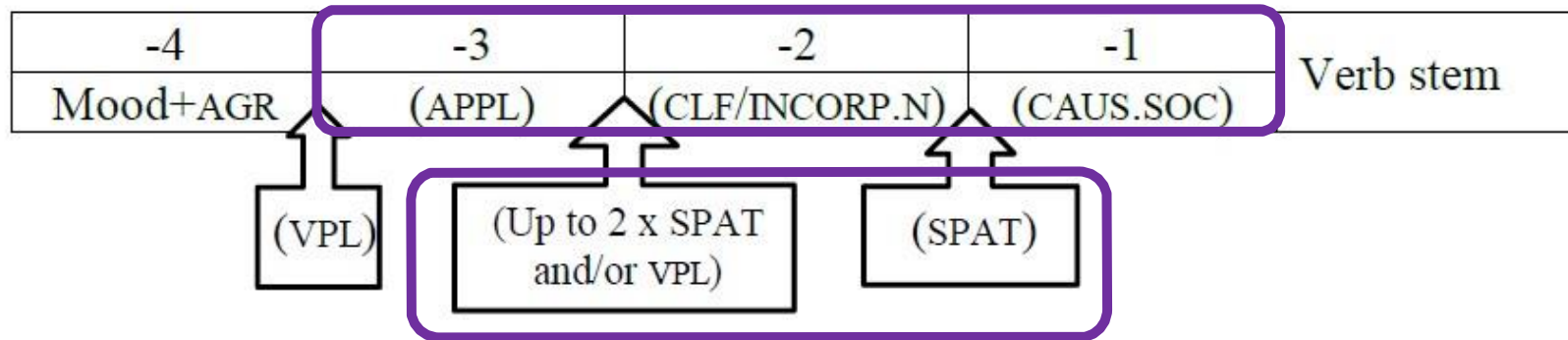
Figure 2. The suffix string of Harakmbut finite verb forms (cf. Tripp 1976)

	1	2	3	4	5	6	7
Verb stem	(ASP 1)	(TRNS)	(ASP 2/AM)	(AVRT)	(ASP 3)	(Tense)	Mood+AGR; MOD; EVID

3. Introduction to Harakmbut (finite verb forms)

- Figure 1 : verbal plural marker (VPL) and a set of **adverbial/spatial prefixes** are positionally flexible, entertaining scopal relations with fixed-position prefixes (cf. Van linden Forthc.)

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4. Dedicated applicatives

4.1 Benefactive *niŋ-*

(1a)   *Yesica*   *o-ma-mbasa*   *yudnta*   *Fermin-tewapa*
         Yesica   3SG.IND-VPL-wash   clothes   Fermin-BEN
         'Yesica washes clothes for Fermin.'

Base clauses in (a): monotransitive verbs

(1b)   *Yesica*   *o-**niŋ**-ma-mbasa*   *yudnta*   *Fermin-ta*
         Yesica   3SG.IND-**BEN**-VPL-wash   clothes   Fermin-ACC
         'Yesica washes Fermin clothes.'

(2a)   *Yoma*   *o-ka*   *wenpu*   *ndo-tewapa*
         Yoma   3SG.IND-make   string.bag   1SG-BEN
         'Yoma makes a string bag for me.'

(2b)   *Yoma*   *me-**niŋ**-ka-ne*   *wenpu*
         Yoma   3SG>1/2SG-**BEN**-make-IND string.bag
         'Yoma makes me a string bag.'

Hierarchical indexation resulting in a scenario-based split (without direction marking)
(1b): non-local scenario (3>3) → O-participant is not indexed → no change of person prefix
(2b): mixed scenario (3>1) → SAP O-participant is indexed → relational person prefix indexing A>O

4. Dedicated applicatives
4.1 Benefactive *niŋ-*

(3a)　　*Pablo　　o-matinoa　　　Maribel-tewapa*
　　　　Pablo　　3SG.IND-sing　　Maribel-BEN
　　　　'Pablo is singing for Maribel (to cure her).'

(3b)　　*Pablo　　o-**niŋ**-matinoa　　　　Maribel-ta*
　　　　Yesica　　3SG.IND-**BEN**-sing　　　Maribel-ACC
　　　　'Pablo is singing for Maribel (to cure her).'

(4a)　　?
(4b)　　*yok-ndik　　　õ-**nĩŋ**-ẽ-nẽ　　　　　taŋtaŋ*
　　　　give-POT　　　1<>2SG-**BEN**-be-IND　　flower
　　　　'you should give him flowers on my behalf.' → 'substitutive' applicative

Hierarchical indexation resulting in a scenario-based split (without direction marking)
(3b): non-local scenario (3>3)→O-participant is not indexed →no change of person prefix
(4b): local scenario (2>1) →SAP O-participant is indexed →relational person prefix indexing A<>O

Why is BEN *niŋ-* a **canonical** applicative? (e.g. Peterson 2007)
✓ verbal derivational process with syntactic consequences
✓ BEN introduces internal argument to the argument structure of the underived verb root/stem
✓ "peripheral" semantic role: **Beneficiary** (or substitutive)
✓ OPTIONAL

in (3a): intransitive verb
In (4b): ditransitive verb

4. Dedicated applicatives
4.1 Benefactive *niŋ-*

- BUT:

  benefactive applicative can still **co-occur** with the oblique constituent that should have been promoted to object position, cf. (5)

(5a)   *Jonas-tewapa*   *o-ka*   *wa-wedn*   *gringo-a*

        Jonas-BEN   3SG.IND-make   NMZR-lie   foreigner-NOM
        'The foreigner makes a bed for jonas.'

(5b)   *Jonas-**tewapa***   *o-**niŋ**-ka*   *wa-wedn*   *gringo-a*

        Jonas-**BEN**   3SG.IND-**BEN**-make   NMZR-lie   foreigner-NOM
        'The foreigner makes Jonas a bed.' (Van linden 2019: 457, ex. (1))

- Examples drawn from elicitation → (discourse) motivation for co-occurrence is question for further research

4. Dedicated applicatives
4.2 General applicative *ta-*

(6a)   *mboerek*   *oʔ-wadn*   *wettone-ere*
             man   3SG.IND-sit   woman-COM
             'The man is sitting with his wife.'

(6b)   *mboerek*   *o-**ta**-wadn*   *wettone-ta*
             man   3SG.IND-**APPL**-sit woman-ACC
             'The man is sitting with his wife.'

(7a)   *Luis*   *oʔ-wadn*   *kusina-yo*   *ndo-ere*
             Luis   3SG.IND-sit   kitchen-LOC   1SG-COM
             'Luis is sitting in the kitchen with me.'

(7b)   *Luis*   *mbe-**ta**-wadn-ne*   *kusina-yo*
             Luis   3SG>1/2SG-**APPL**-sit-IND   kitchen-LOC
             'Luis is sitting in the kitchen with me.'

Why is **ta-** a **canonical** applicative? (e.g. Peterson 2007)
✓ verbal derivational process with syntactic consequences
✓ APPL introduces internal argument to the argument structure of the underived verb root/stem
✓ "peripheral" semantic role: **Comitative** in (6)-(7), but also other
✓ OPTIONAL

Base clauses in (a): intransitive verb

Hierarchical indexation resulting in a scenario-based split (without direction marking)
(6b): non-local scenario (3>3) → O-participant is not indexed → no change of person prefix
(7b): mixed scenario (3>1) → SAP O-participant is indexed → relational person prefix indexing A>O

4. Dedicated applicatives

4.2 General applicative *ta-*

(8) *o-**ta**-mba-to-tiak-me-ne*   *e-mamboya*

1<>2SG-**APPL**-CFL:two.dimensional-CAUS.SOC-come-REC.PST-IND   NMLZ-photograph

'I brought your photograph.' (Lit. 'I brought a photograph on you.')

(9) *mbe-**ta**-**k**-puk-on-ne*   *ilo*

3SG>1/2SG-**APPL**-**SPAT:separation**-tear-PFV.NVOL-IND   thread

'The thread got torn on me' (Lit. 'The thread got torn with respect to me; the thread got torn to my detriment.') (Van linden 2020: 16, ex. (12b))

✓ verbal derivational process with syntactic consequences

✓ APPL introduces internal argument to the argument structure of the underived verb root/stem

✓ "peripheral" semantic role → (8): (prospective) Possessor; (9): Maleficiary (& involuntary Agent)

❖ OPTIONAL? Obligatory for non-Comitative applied phrases (8)-(9), which have no clear non-applicative counterparts

Figure 1. The prefix string of Harakmbut finite verb forms
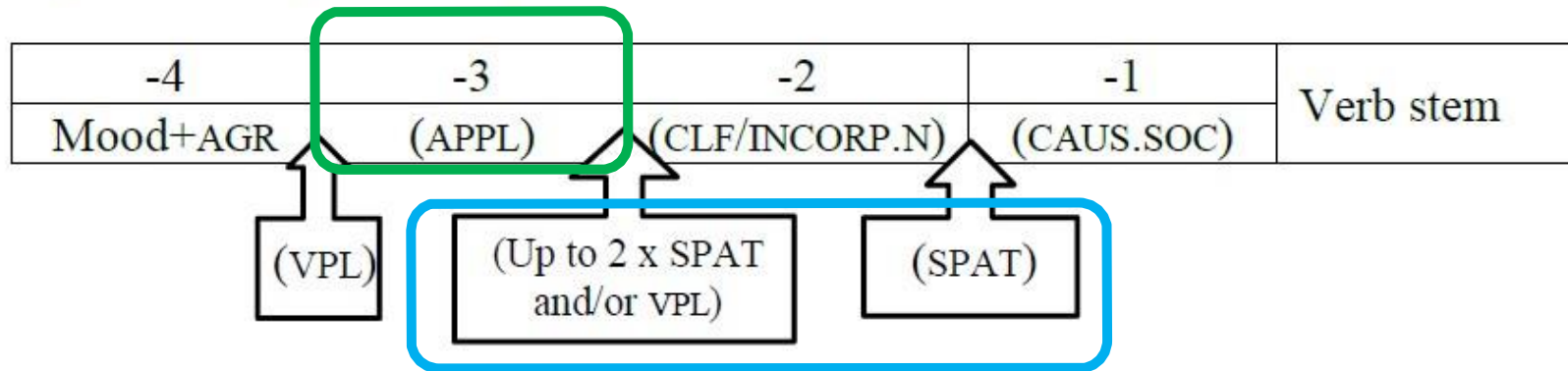
-4	-3	-2	-1	Verb stem
Mood+AGR	(APPL)	(CLF/INCORP.N)	(CAUS.SOC)	

(VPL)

(Up to 2 x SPAT and/or VPL)

(SPAT)

Figure 2. The suffix string of Harakmbut finite verb forms (cf. Tripp 1976)

Verb stem	1	2	3	4	5	6	7
	(ASP 1)	(TRNS)	(ASP 2/AM)	(AVRT)	(ASP 3)	(Tense)	Mood+AGR; MOD; EVID

5. Spatial prefixes as applicatives

Spatial prefixes:
- can be inserted in-between different fixed-position prefixes/incorporated nouns
- specify locative or directional circumstances of (participants in) the event denoted by the verb
- are valency-neutral or valency-increasing → have applicative functions, but are not dedicated applicatives
- have become fossilized in certain cases

Three items:
- *ti-* : location high up (ti_C → [tʃi]; ti_V → [tʃ])
- *on-~n-* : spatial relation of 'in', 'to' (Tripp 1976: 8) or 'on'
- *ok-~k-* : spatial relation of 'separation' (Tripp 1995: 219)

5. Spatial prefixes as applicatives
5.1 Valency-neutral spatial uses

- intransitive, transitive and labile verb stems
- SPAT does not introduce applied phrase → non-syntactic function
- SPAT specifies location/spatial configuration of O-participant of transitive verbs, or S-argument of intransitive verbs (ergative patterning just like CLF)

<p style="text-align:center;color:#c55a11">monotransitive verb stems</p>

(10a) *ken*   *on-pok*   *mboerek-ta*

then   3PL.IND-pass   man-ACC

'Then they pass the man.'

(10b) *ken*   *on-**ti**-pok*   *mboerek-ta*

then   3PL.IND-**SPAT:up**-pass   man-ACC

'Then they pass the man (who is high up, on a ladder).' (Pear story)

(11a) *Lupe*   *oʔ-tegŋ-me*   *mbiʔigŋ*

Lupe   3SG.IND-cut-REC.PST   fish

'Lupe cut (into) the fish.' (Lupe made cuts in the fish, e.g. to remove the guts)

(11b) *Lupe*   *o-**k**-tegŋ-me*   *mbiʔigŋ*

Lupe   3SG.IND-**SPAT:separation**-cut-REC.PST   fish

'Lupe cut the fish into pieces.'

5. Spatial prefixes as applicatives
5.1 Valency-neutral spatial uses

(12)   *o-k-ket-on*   *pĩã*

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

                'The arrow broke into pieces.'

(12) intransitively used labile root 'break': prefix ok-~k- specifies the
internal spatial configuration of S (12) and of O (11b)
→ targeted entity changed from a whole entity (or an entity in one piece, whose
internal parts are spatially contiguous) at the beginning of the event to an entity that is
broken into pieces (which are no longer spatially contiguous) at the end of the event

5. Spatial prefixes as applicatives
5.2 Valency-increasing spatial uses

Examples with intransitive verb stem *-kot* ('fall') → spatial prefixes locate 'original' S viz-à-viz applied phrase   (seem obligatory!)

(13)   *o-wedn-ato*   *ãnĩ*   *bisikleta*   *o-n-kot*
          3SG-lie-MOVE&DO   FILLER   bicycle   3SG.IND-**SPAT:on**-fall   Goal
          'He falls (literally: 'moves and lies down'), eh, he falls onto his bike.' (Pear story)

(14)   *o-k-mba-kot-onka-me-te*   *yave*   *An-ta*
          3SG.IND-**SPAT:separation**-VPL-fall-suddenly-REC.PST-NFIRSTH   key   An-ACC   Source

          'An's keys fell all of a sudden.' (Lit.: 'The keys suddenly fell away from An.')

(15)   *Pomelo-a*   *o-ku-ti-kot-ay*   *Joeri-ta*   Goal
          grapefruit-NOM   3SG.IND-head-**SPAT:up**-fall-AVRT   Joeri-ACC
          ''A grapefuit almost fell on Joeri's head.'
          [also noun incorporation Type II: possessor is advanced to object status, which
          position is vacated by the incorporated body part *ku-* (cf. Mithun 1984: 857–858)]

5. Spatial prefixes as applicatives
5.2 Valency-increasing spatial uses

Example with transitive verb stem → spatial prefixes locate 'original'/underived O viz-à-viz applied phrase → spatial prefix seems obligatory

(16)   *i-**k**-totok-me-y*   *eʔ-pidn*   *abuela-ta*   Source

       1SG-**SPAT:separation**-pull-REC.PST-1.IND   NPF-thorn   grandmother-ACC

       'I pulled a thorn out of grandmother('s knee).'

→Applicative function found on both intransitive and transitive roots
→Prefixes introduce a Location argument into the clause
→location/spatial configuration targets the underived S-argument of intransitive roots (= A-argument in the applicative structures) and the underived O-argument of transitive roots

5. Spatial prefixes as applicatives
5.3 Valency-increasing non-spatial uses

- **Semantic weakening** from spatial semantics to 'involvement' in the event: spatial meaning metaphorically extended or gone lost at the expense of the lexical semantics of the host verb
- attested for only two prefixes: *on-~n-* and *ti-*
- Animacy restriction: introduce **human** non-Actor arguments to the clause

(17a)   *Kate*   *i-ka-me-Ø*   *sik-yo?*

         what   2SG-do-REC.PST-DUB   dark-LOC
         'What did you do in the evening?

(17b)   *Kate*   *i-**n**-ka-me-Ø*   *abuela-ta*   *sik-yo?*

         what   2SG-**SPAT:on**-do-REC.PST-DUB   grandmother-ACC   dark-LOC
         'What did you do to grandmother in the evening?'

(context: I removed a thorn from grandmother's knee that night with my tweezers, cf. (16))

'DO STH' → 'DO STH TO A PERSON'

5. Spatial prefixes as applicatives
5.3 Valency-increasing non-spatial uses

Spatial prefixes: **semantic weakening** from spatial semantics to 'involvement' in the event

(18a)   *mboerek*   *oʔ-a-me*   *[o-arak-apo-ne   ndumba-yo]*
        man   3SG.IND-say-REC.PST   [1<>2SG-kill-FUT-IND   forest-LOC]
        'The man said: "I am going to kill you (SG) in the forest."'

(18b)   *mboerek*   *me-n-a-me-ne*
        man   3SG>1/2SG-**SPAT:on**-say-REC.PST-IND

        [mbe-arak-apo-ne-a   ndumba-yo]
        3SG>1/2SG-kill-FUT-IND-QUOT   forest-LOC
        'The man told me he was going to kill me in the forest'

(18a): reporting clause of direct speech/ 'SAY' → intransitive
(18b): reporting clause of indirect speech / 'SAY TO SOMEBODY' → transitive

5. Spatial prefixes as applicatives

5.3 Valency-increasing non-spatial uses

- (17)-(18): **metaphorical extension** to explain the semantic shift of the spatial prefix: the prefix *on-~n-* introduces an argument that is the human Goal of the actions of saying and doing respectively.

  → concept of Goal is extended from the concrete spatial domain to the abstract domain of human cognition and interaction (cf. Givón 2009: 89)

5. Spatial prefixes as applicatives
5.3 Valency-increasing uses

Spatial prefixes: **semantic weakening** from spatial semantics to 'involvement' in the event
→ abstract valency-increasing use seems to have become syntactically optional!

(19a)   *ndoʔ-edn*   *nãŋ-ere*   *i-yorok-mbedn-i*
         1SG-GEN   mother-COM   1SG-dream-ALL.NIGHT-1.IND
         'I dreamt of my mother all night.'

(19b)   *ndoʔ-edn*   *nãŋ-ta*   *i-**ti**-yorok-mbedn-i*   Stimulus
         1SG-GEN   mother-ACC   1SG-**SPAT:up**-dream-ALL.NIGHT-1.IND
         'I dreamt of my mother all night.'

→ Comes close to a canonical applicative

6. Lexicalized uses

- in some cases complex verb stems are no longer semantically transparent → lexicalization effects, which corroborate their affinity to derivational morphology

- Possible to identify distinct morphemes, but overall meaning of verb stem is no longer compositional, or too little predictable to warrant morpheme breaks

- In (a), (b), (c) and in the first meaning of (d), the spatial prefixes do not affect the valency of the verb roots

- In (e)-(f) + (2nd meaning of (d): the prefixes do increase the valency of the roots

	Verb root	Valency of root	Lexicalized verb stem	Morphological analysis	Meaning	Valence of stem
(a)	*a*	intr	*e-ma-ti-no-a* (Tripp 1995: 82b)	NMLZ-VPL-SPAT:up-vital.centre-say	'to sing'	intr
(b)	*ka*	tr	*e-ma-ti-on-ka*	NMLZ-VPL-SPAT:up-SPAT:on-do	'to hunt'	tr
(c)	*ka*	tr	*eʔ-ti-ka* (Tripp 1995: 96a)	NMLZ-SPAT:up-do	'to kill (an insect)'	tr
(d)	*wedn*	intr	*eʔ-ti-wedn* (Tripp 1995: 95b)	NMLZ-SPAT:up-lie	'to be full (of a container object)'	intr
					'to brood (eggs)'	tr
(e)	*ẽ*	cop-intr	*eʔ-ti-ok-põ-ẽ* (Tripp 1995: 82b)	NMLZ-VPL-SPAT:up-SPAT:separation-CLF:round-be	'to annoy'	tr
(f)	*ẽ*	cop-intr	*e-k-ma-ti-ok-põ-ẽ* (Tripp 1995: 41b)	NMLZ-SPAT:separation-VPL-SPAT:up-SPAT:separation-CLF:round-be	'to commit adultery with so. else's wife'	tr

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7. Conclusion

- Harakmbut has canonical applicatives: benefactive *niŋ-* and general applicative *ta-*
- In addition: set of spatial prefixes → can be ranged on a grammaticalization cline:

Syntax	valency-neutral	valency-increasing	
Semantics	spatial	spatial	non-spatial
ok-~k-	✓	✓	✗
ti-	✓	✓	✓
on-~n-	✓	✓	✓
ta?-	✓	✓	(✓)
wa-	✓	✓	(✓)

- Valency-neutral uses: SPAT specify location/spatial configuration of S/O-participant (resultant state or 'stable' throughout event)
- Valency-increasing uses – spatial (motion, caused motion verbs): SPAT introduce Location argument into the clause, and specify the location of the underived S or O argument (*Figure*) with respect to this applied phrase (*Ground*)
- Valency-increasing uses – abstract (non-motion verbs): applied phrase typically human
→ single grammaticalization path, from spatial element to non-spatial applicative

7. Conclusion – Call for input

- Grammar from space project (collaborative research project, funded by ULiège research council):

- We are interested in how elements with spatial meaning develop into applicative markers
- Relevant phenomena include:
    - spatial prefixes like in Harakmbut
    - Associated Motion markers and Directionals, e.g. in Nilotic (Payne 2021)
    - preverbs that grammaticalized out of incorporated spatial nouns, e.g. in Abaza (Northwest Caucasian, Russian republics of Karachay-Cherkessia; Arkadiev 2021).

    E-mail: an.vanlinden@uliege.be
    Webpage uliege: https://www.uliege.be/cms/c_9054334/en/directory?uid=u226091
    List of publications (postprints in slides in open access):
    https://orbi.uliege.be/ph-search?locale=en&uid=u226091&filter=ft-oa

8. References

- Adelaar, W. 2000. Propuesta de un nuevo vínculo genético entre dos grupos lingüísticos indígenas de la Amazonía occidental: Harakmbut y Katukina. In *Actas del I Congreso de Lenguas Indígenas de Sudamérica*, L. Miranda Esquerre (ed.), vol. 2, 219-236. Lima: U. Ricardo Palma.

- Adelaar, W. 2007. Ensayo de clasificación del katawixí dentro del conjunto harakmbut-katukina. In A. Romero-Figueroa, A. Fernández Garay, A. Corbera Mori (eds.), Lenguas indígenas de América del Sur: Estudios descriptivo-tipológicos y sus contribuciones para la lingüística teórica, 159-169. Caracas: Universidad Católica Andrés Bello.

- Arkadiev, P. 2021. Between noun incorporation and lexical affixation in Northwest Caucasian (with focus on Abaza). Paper presented at Stockholm University, 9 Dec 2021, online.

- Craig, C. & K. Hale. 1988. Relational Preverbs in Some Languages of the Americas: Typological and Historical Perspectives. *Language* 64: 312–44.

- Crevels, M. & H. van der Voort. 2008. The Guaporé-Mamoré region as a linguistic area. In *From linguistic areas to areal linguistics*, P. Muysken (ed.), 151-79. Amsterdam: Benjamins.

- Dryer, Matthew S. & Haspelmath, Martin (eds.) 2013. The World Atlas of Language Structures Online. Leipzig: Max Planck Institute for Evolutionary Anthropology. (Available online at http://wals.info, Accessed on 2016-03-10.)

- Durie, M. 1988. Verb Serialization and ''Verbal Prepositions'' in Oceanic Languages. *Oceanic Linguistics* 27(1–2): 1–23.

8. References

- Givón, Talmy. 1975. Promotion, Accessibility and Case Marking: Toward Understanding Grammars. *Working Papers on Language Universals* 19: 55–125.

- Givón, Talmy. 2009. *The genesis of syntactic complexity: diachrony, ontogeny, neuro-cognition and evolution*. Amsterdam: John Benjamins.

- Hart, R. 1963. Semantic components of shape in Amarakaeri Grammar. *Anthropological Linguistics* 5 (9): 1-7.

- Helberg, H. 1984. *Skizze einer Grammatik des Amarakaeri*. PhD dissertation, Tübingen.

- Helberg, H. 1990. Análisis functional del verbo amarakaeri. In R. Cerrón Palomino & G. Solís Fonseca (eds.), *Temas de lingüística amerindia*, 227-249. Lima: Concytec.

- Hart, R. 1963. Semantic components of shape in Amarakaeri Grammar. *Anthropological Linguistics* 5 (9): 1-7.

- Helberg, H. 1984. *Skizze einer Grammatik des Amarakaeri*. PhD dissertation, Tübingen.

- Helberg, H. 1990. Análisis functional del verbo amarakaeri. In R. Cerrón Palomino & G. Solís Fonseca (eds.), *Temas de lingüística amerindia*, 227-249. Lima: Concytec.

8. References

- Mithun, Marianne. 1984. The evolution of noun incorporation. *Language* 60. 847–879.

- Munro, P. 1983. When ''Same'' is ''Not Different''. In J. Haiman & P. Munro (eds.), *Switch-Reference and Universal Grammar*, pp. 223–43. Amsterdam and Philadelphia: John Benjamins.

- Nordlinger, Rachel. 2019. From body part to applicative: Encoding 'source' in Murrinhpatha. *Linguistic Typology* 23(3). 401–433.

- Payne, D. 2021. The extension of associated motion to direction, aspect and argument structure in Nilotic languages. In A. Guillaume & H. Koch (eds.), *Associated Motion*, 695-746. Berlin: de Gruyter Mouton.

- Peterson, David A. 2007. *Applicative constructions*. Oxford: Oxford University Press.

- Rose, Françoise. 2019. From classifiers to applicatives in Mojeño Trinitario: A new source for applicative markers. *Linguistic Typology* 23 (3). 435–466.

- Rude, N. 1991. Verbs to Promotional Suffixes in Sahaptian and Klamath. In E. Traugott & P. Hopper (eds.), *Approaches to Grammaticalization*, vol. 2. pp. 183–99. Amsterdam and Philadelphia: John Benjamins.

- Tripp, Robert. 1976a. Los verbos Amarakaeri. Datos Etno-Lingüísticos: Colección de los archivos del ILV 33. Lima: Instituto Lingüístico de Verano.

- Tripp, Robert. 1976b. Sustantivos verbales y frases de sustantivos verbales en Amarakaeri. Datos Etno-Lingüísticos: Colección de los archivos del ILV 50. Lima: Instituto Lingüístico de Verano.

8. References

- Tripp, Robert. 1976c. Las relaciones señaladas por –*po* y –*nõk* en Amarakaeri. Datos Etno-Lingüísticos: Colección de los archivos del ILV 50. Lima: Instituto Lingüístico de Verano.

- Tripp, Robert. 1995. *Diccionario amarakaeri-castellano*. Yarinacocha: Min. de Educación & SIL.

- Van linden, An. 2019. Nominalization in Harakmbut. In Roberto Zariquiey, Masayoshi Shibatani & David W. Fleck (eds.), *Nominalization in Languages of the Americas*, 455–490. Amsterdam: Benjamins. [https://doi.org/10.1075/tsl.124.12lin]

- Van linden, An. 2020. Constructional effects of indirect evidential marking in Harakmbut. *Functions of Language* 27(1): 7–28 [Special issue 'Notes from the field on perspective-indexing constructions: Irregular shifts and perspective persistence', edited by Stef Spronck, An Van linden, Caroline Gentens and María Sol Sansiñena]. [https://doi.org/10.1075/fol.20004.lin]

- Van linden, An. 2022. Spatial prefixes as applicatives in Harakmbut. In Sara Pacchiarotti & Fernando Zúñiga (eds.), *Applicative morphology: Neglected syntactic and non-syntactic*, 129-159. Berlin: De Gruyter. [https://doi.org/10.1515/9783110777949-006]

- Van linden, An. 2023. Harakmbut. In Patience Epps & Lev Michael (eds.), *Amazonian Languages, An International Handbook,* Vol 1, 441-481. Berlin: de Gruyter Mouton. [https://doi.org/10.1515/9783110419405-010]

- Wise, M. 1999. Small language families and isolates in Peru. In Dixon & Aikhenvald (eds.), The Amazonian languages, 307-340. Cambridge: CUP.

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