

Valency and argumenthood in Sundanese applicative constructions

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What are applicatives?

- ▶ First used to describe certain **morphologically marked verbal constructions** in Uto-Aztecan languages and then Bantu languages.
- ▶ Since then, the label **applicative** has been used for constructions in many other languages and language families, including Austronesian languages of West Nusantara.
- ▶ Applicative morphemes (AM)
 - ▶ Indonesian *-kan* and *-i*
 - ▶ Javanese *-aké* and *-i*
 - ▶ Sundanese *-keun*, *-an*, and *pang--keun*

What do applicatives do?

- ▶ In linguistic typology, applicatives are often defined in terms of:
 - ▶ **Increase in Syntactic Valency/Transitivity** - "In an applicative construction, the number of object arguments selected by the predicate is increased by one with respect to the basic construction" (Polinsky 2013)
 - ▶ **Syntactic Coding** - "allow the coding of a thematically peripheral argument or adjunct as a core argument" (Peterson 2007)
 - ▶ **Clausal derivation**: "an argument which was in peripheral function in the underlying [clause] is taken into the core in O function" (Dixon 2010)

Goals

- ▶ Using Sundanese as a case study, I show that applicatives in West Nusantara languages do not fit neatly into these conceptions of applicatives.
- ▶ For three Sundanese constructions bearing applicative morphology,
 - ▶ Show range of possible structures (coding, relative valency/transitivity).
 - ▶ Examine semantic and inferential properties using tests for argumenthood (Riesberg 2014)
- ▶ Argue that nuanced semantic properties must be centered in an adequate understanding of AMs in these languages.

Applicatives as constructions

- ▶ Treat applicative constructions as a pairing of form and meaning (Goldberg 1995)
- ▶ Broadly defined, we are looking for clausal constructions where
 - 1 The verb is marked with a particular affix.
 - 2 A certain semantic role is selected as a core argument.
 - 3 When these coincide, a conventionalized meaning applies.
- ▶ Examine properties of these constructions.
- ▶ Investigate cases where “core argument” status isn’t clear.

Table: Sundanese applicative morphemes (AMs)

Affix	SR of Applied Phrase	Other verbal functions
<i>-an</i>	LOC, GOAL , ADDR, CONT, STIM	CAUS, PLUR, INTENS, COMP
<i>-keun</i>	THM , INST , CONT, STIM, PERF, BEN	CAUS
<i>pang--keun</i>	BEN	none

Basic verbal clauses in Sundanese

▶ Intransitive clauses

- ▶ Single core argument (S)
- ▶ Verb is bare, marked with *N-*, or rarely, marked with *di-*

- (1) a. *Abi luncat.*
 'I jumped.' (SLD-003)
- b. *Cai ngucur.*
 'Water flowed.' (root = *kucur*) (SLD-023)
- c. *Budak di-baju.*
 'The child is dressed/got dressed.' (SLD-025)

Basic verbal clauses in Sundanese

► Monotransitive clauses

- Two core arguments (A and P)
- Transitive verbs show an alternation between AV, marked with *N-*, and PV, marked with *di-* or *ka-* (nonvolitional).
- The actor in PV is marked with *ku* (has argument properties, *ku* optionally omitted, see Kurniawan 2013).

(2) Transitive voice alternation

a. *Icih neungeul Asep.*

'Icih hit Asep.' (AV)

(SLD-019)

b. *Asep di-teunggeul ku Icih.*

'Asep was hit by Icih.' (PV)

(SLD-019)

Basic verbal clauses in Sundanese

► Ditransitive clauses

- A small number of verbs can appear in ditransitive clausal structures without applicative marking.
- Three core arguments (A, R, & T) (Haspelmath 2015)
- These verbs show alternations in structure and coding of participant roles.

(3) *Teach* construction in AV

a. *Pa Guru ng-ajar matématika ka Asep.*

'The teacher teaches math to Asep.' (Monotransitive, AV)

(SLD-031)

b. *Pa Guru ng-ajar **Asep** matématika.*

'The teacher teaches Asep math.' (Ditransitive, AV)

(SLD-031)

Basic verbal clauses in Sundanese

(4) Give construction in PV

a. *Buku di-béré ka budak ku abi.*

‘The book was given to the child by me.’ (Monotransitive, PV)

b. ***Budak** di-béré buku ku abi.*

‘The child was given a book by me.’ (Ditransitive, PV)

Theme-selecting constructions with *-keun*

- (5) a. *Udi neunggeul bal maké tongkat kasti.*
U. AV.hit ball using bat kasti
'Udi hit the ball using a kasti bat.' (BC) (SLD-019)
- b. *Udi neunggeul-keun tongkat kasti kana bal.*
U. AV.hit-THM.APPL bat kasti to ball
'Udi used the kasti bat to hit the ball.' (AC) (SLD-019)
- ▶ Allow coding of <instrument> as core argument (Y)
 - ▶ Increase syntactic transitivity (N)
 - ▶ Derived from a underlying clause (Possibly)

Theme-selecting constructions with *-keun*

- (6) a. *Kuring ngan bisa nangkeup sirah budak dina dada.*
1SG only can AV.hug head child on chest
'I could only hug the child's head onto (my) chest.' (BC)
(nar. text by Idris 2021)
- b. *Udi nangkeup-keun leungeun ka pamajikan.*
U. AV.hug-THM.APPL arm to wife
'Udi hugged his arm around (his) wife.' (AC) (SLD-003/6/7)

- ▶ Allow coding of <theme> as core argument (Y)
- ▶ Increase syntactic transitivity (N)
- ▶ Derived from an underlying clause (?)

Theme-selecting constructions with *-keun*

- (7) ...*sok langsung ku sapu di-teunggeul-keun heula nepi ka*
usually directly by broom PV-hit-THM.APPL first reach to
ka-piuh-an...
NVOL-faint-CAUS

'... usually a broom is used to hit [a victim] until [he] faints...'
(describing *palasik*, a k.o. supernatural figure)

(MPI Corpus: 18295)

- ▶ Allow coding of <instrument> as core argument (Y, but...)
- ▶ Increase syntactic transitivity (N)
- ▶ Derived from a underlying clause (Possibly)

Theme-selecting constructions with *-keun*

Additionally, with certain verbs, we do not observe a change in coding for the theme when the verb is marked with *-keun*.

- (8) a. *Udi tos nyurung mobil ka imah.*
U. COMP AV.push car to house
'Udi pushed the car to/towards the house.' (BC) (SLD-027)
- b. *Udi tos nyurung-keun mobil ka imah.*
U. COMP AV.push-THM.APPL car to house
'Udi pushed the car to the house.' (AC) (SLD-027)

- ▶ Allow coding of <theme> as core argument (N)
- ▶ Increase syntactic transitivity (N)
- ▶ Derived from a underlying clause (How?)

Goal-selecting constructions marked with *-an*

- (9) a. *Tah ai peuting=na polisi datang ka imah...*
EMPH EMPH night=DEF police arrive to house
'That night the police came to the house...[telling that the man
had already died].' (BC) (FM4-067)
- b. *Abi nga-datang-an imah Euis.*
1SG AV-arrive-LOC.APPL house E.
'I visited Euis' house.' (AC) (SLD-002)

- ▶ Allow coding of <goal> as core argument (Y)
- ▶ Increase syntactic transitivity (Y)
- ▶ Derived from a underlying clause (Possibly)
- ▶ Also shows durational aspectual meaning

Goal-selecting constructions with *-an*

- (10) a. **Cangkir** *di-teundeun* dina méja *ku abi*.
cup PV-put on table by 1SG
'The cup was put on the table by me.' (BC)
- b. **Lomari** *di-teundeun-an* **cangkir**.
wardrobe PV-put-LOC.APPL cup
'The wardrobe has (many) cups put in it.' (AC) (SLD-022)

- ▶ Allow coding of <goal> as core argument (Y)
- ▶ Increase syntactic transitivity (Y)
- ▶ Derived from a underlying clause (Possibly)
- ▶ Also shows pluractional aspectual meaning

Goal-selecting constructions with *-an*

Additionally, we observe *-an* marked verbs that alternate between monotransitive and ditransitive structures.

- (11) a. *Icih ngucur-an* ***gelas*** *paké* *cai*.
I. AV.flow-CAUS.LOC.APPL glass using water
'Icih pours water into/onto the glass.' (Monotransitive in AV)
(SLD-022)
- b. ***Gelas*** *di-kucur-an* ***cai*** *ku* *Icih*.
glass PV-flow-CAUS.LOC.APPL water by I.
'The glass has water poured onto it by Icih.' (Ditransitive in PV)
(SLD-023)

Goal-selecting constructions with nominal bases

- (12) **Sayur** *di-céngék-an*.
soup PV-chili-LOC.APPL

'To the soup, chili pepper was added.' (SLD-017)

- (13) *leu mah kalah Si Bungsu kabulusan can*
this PRT instead PN youngest shivering.cold not.yet
di-anduk-an.
PV-towel-LOC.APPL

'Instead this happened: the small one was shivering cold and not yet had a towel put on him.' (nar. by Rostiana 2021)

- ▶ Allow coding of <goal> as core argument (Y)
- ▶ Increase syntactic transitivity (Cannot be evaluated)
- ▶ Derived from a underlying clause (N)

Beneficiary-selecting constructions with *pang--keun*

(14) Ditransitive, beneficiary = unmarked NP

- a. *Asep mawa sangu keur Lilis.*
A. AV.bring cooked.rice for L.
'Asep brought food for Lilis.' (BC) (SLD-025)
- b. *Asep mang-mawa-keun Lilis sangu.*
A. AV.BEN.APPL-bring-BEN.APPL L. cooked.rice
'Lilis had food brought for her by Asep.' (AC) (SLD-043)
- c. *Lilis di-pang-mawa-keun sangu ku Asep.*
L. PV-BEN.APPL-bring-BEN.APPL cooked.rice by A.
'Lilis had food brought for her by Asep.' (AC) (SLD-025)

- ▶ Allow coding of <beneficiary> as core argument (Y)
- ▶ Increase syntactic transitivity (Y)
- ▶ Derived from a underlying clause (Possibly)

Beneficiary-selecting constructions with *pang--keun*

Here, the same verb is shown with the same meaning, but the beneficiary is coded as a PP.

(15) Monotransitive, beneficiary = PP

- a. *Asep mawa sangu keur Lilis.*
 A. AV.bring cooked.rice for L.
 'Asep brought food for Lilis.' (BC) (SLD-025)
- b. *Asep mang-mawa-keun sangu keur Lilis.*
 A. AV.BEN.APPL-bring-BEN.APPL cooked.rice for L.
 'Asep brought food for Lilis.' (AC) (SLD-025)
- c. *Sangu di-pang-mawa-keun ku Asep keur Lilis.*
 cooked.rice PV-BEN.APPL-bring-BEN.APPL by A. for L.
 'Food was brought by Asep for Lilis.' (AC) (SLD-025)

- ▶ Allow coding of <beneficiary> as core argument (Y, but)
- ▶ Increase syntactic transitivity (N)
- ▶ Derived from a underlying clause (How?)

Beneficiary-selecting constructions with *pang--keun*

Realization of beneficiary as a separate phrase is not the only option, nor the most natural.

(16) Monotransitive, inferred beneficiary coreferent with possessor

a. *Bapa nga-betot parahu Asep.*

father AV.pull boat A.

'Father pulled Asep's boat.' (BC)

(SLD-034)

b. *Bapa mang-metot-keun parahu Asep.*

father AV.BEN.APPL-pull-BEN.APPL boat A.

'Father pulled Asep's boat (for him).' (AC)

(SLD-034)

- ▶ Allow coding of <beneficiary> as core argument (?)
- ▶ Increase syntactic transitivity (?)
- ▶ Derived from a underlying clause (How?)

Beneficiary-selecting constructions with *pang--keun*

Clauses with no overt beneficiary are perhaps the most common.

- (17) *Udi, pang-neundeun-keun balanja-an di dapur.*
 U. BEN.APPL-put-BEN.APPL shopping-NMLZ in kitchen

'Udi, please put the shopping purchases in the kitchen (for me).'
 (SLD-022)

- (18) *Keur nga-mandi-an nu bungsu ogé der kudu indit*
 while AV-bathe-CAUS REL youngest also with.a.rush must go
mang-meuli-keun kopi.
 AV.BEN.APPL-buy-BEN.APPL coffee

'While she is bathing the youngest child, at once she also has to leave to buy [her husband] coffee.'

(nar. text by Rostiana 2021)

Summary

- ▶ Applied phrases show multiple patterns of coding—some which look like core arguments, and some which look like adjuncts—especially beneficiary phrases.
- ▶ Beneficiary-selecting constructions and some goal-selecting constructions show alternation in structure: monotransitive ~ ditransitive.
- ▶ It is quite problematic to identify an “underlying” clause and define the pattern that derives the observed structure and meaning of the applicative.

Reduction and inference tests

- ▶ Riesberg (2014) argues that there is no clear-cut distinction between argumenthood and adjuncthood, with some arguments being more core-like than others.
- ▶ She focuses on different types of non-subject actors in Totoli, Balinese, and German.
- ▶ To investigate the status of applied phrases in Sundanese ACs, I adopt the so-called inference test described by Riesberg for testing argumenthood of various German phrases following Zifonun, Hoffmann & Strecker (1997).

Semantic and inferential properties of ACs with *pang--keun*

- For the BC: *Asep mawa sangu keur Lilis.*
'Asep brought food for Lilis.'
- From reduced BC clause: *Asep mawa sangu.*
- Not possible to infer: *Asep mawa sangu keur hiji jalma.*
'Asep brought food for someone.'
- For the AC: *Asep mangmawakeun sanggu keur Lilis.*
'Asep brought food for Lilis.'
- From reduced AC clause: *Asep mangmawakeun sangu.*
- It is inferred: *Asep mangmawakeun sangu keur hiji jalma.*
'Asep brought rice for someone.'

The beneficiary shows evidence of argumenthood only when the verb is marked with *pang--keun*.

Semantic and inferential properties of ACs with *pang--keun*

- ▶ Verbs marked with *pang--keun* are also felicitous under different conditions than their unmarked counterparts.
 - ▶ *Bapa ngabetot/mangmetotkeun parahu Asep.*
'Father pulled Asep's boat...'
- ▶ Meaning: "perform an action on an entity in lieu of someone else to their benefit." Influenced by cultural and contextual factors.
- ▶ For some verbs it is almost impossible to construct felicitous examples.
 - ▶ *dahar* 'eat' vs. **?manga-dahar-keun*
 - ▶ *nga-liang* 'to make a hole' vs. **?manga-liang-keun*

Semantic and inferential properties of ACs with *-keun*

- For the BC: *Udi nyurung mobil ka imah.*
'Udi pushed the car to/towards the house.'
- From reduced BC clause: *Udi nyurung mobil.*
- Not possible to infer: *Udi nyurung mobil ka hiji tempat.*
'Udi pushed the car to some place.'
- For the AC: *Udi nyurungkeun mobil ka imah.*
'Udi pushed the car to the house.'
- From reduced AC clause: *Udi nyurungkeun mobil.*
- It is inferred: *Udi nyurungkeun mobil ka hiji tempat.*
'Udi pushed the car to some place.'

Semantic and inferential properties of ACs with *-keun*

- ▶ The two sentences have slightly different truth conditions with completive *tos*.
 - ▶ *Udi tos nyurung mobil ka imah.*
→ act of applying force to car is no longer occurring
 - ▶ *Udi tos nyurung-keun mobil ka imah.*
→ movement of the car to the house is complete, i.e. the car has reached the house
- ▶ Meanwhile, *neunggeul-keun* is felicitous only if a specific implement is used for hitting, while *neunggeul* is nonspecific as to the means of hitting, e.g. (by hand, with a stick, etc.)
- ▶ Meaning: 'manipulate an inanimate object towards another entity' (Kroeger 2007)

Semantic and inferential properties of ACs with *-an*

- ▶ It is difficult to apply the inference test with clauses marked with *-an* as many verbs allow for non-applicative aspectual use of *-an*.
 - ▶ *Abi neundeun-an duit di bank*. 'I put money in the bank several times.'
- ▶ Some verbs that combine with goal-selecting *-an* have an inferred goal in their semantic structure even when unmarked.
 - ▶ *Polisi datang*. 'The police arrived [someplace]'
 - ▶ *Abi neundeun cangkir* 'I put the cup [someplace]'
 - ▶ *Cai hujan ngucur* 'Rain water flows ? [someplace]'

Discussion

- ▶ In Sundanese applicative constructions, we sometimes observe a licensing effect for an applied phrase, i.e. a selected participant role is allowed to map to a core argument position.
- ▶ We also see constructions in which coding of participant roles does not change under AM-marking, and constructions where coding of the selected participant as a core argument is optional.
- ▶ Function of AM-marking cannot be defined solely in terms of licensing or coding.

Discussion

- ▶ The observed alternations show that AM-marked constructions have an identifiable minimal and maximal syntactic transitivity.
 - ▶ The theme-selecting construction is minimally and maximally monotransitive.
 - ▶ Beneficiary-selecting and goal-selecting* constructions are minimally monotransitive and maximally ditransitive.
- ▶ This is consistent with the general behavior of Sundanese verbs, i.e. verbs like *béré* 'give' and *ajar* 'teach' show alternations not available to other verbs.
- ▶ Crucial to look at the range of observed possible structures that bear AM-marking... even “pseudo applicatives”, causatives, predicates without expressed arguments that show a common meaning.

Discussion

- ▶ Common typological approaches to applicatives only incompletely capture the behavior of Sundanese AM-marked clauses.
- ▶ Inference testing and truth/felicity conditions suggest that sets of AM-marked clauses have consistent semantic meaning and semantic argument structure.
- ▶ Conventionalized pairing of fixed form and meaning
 - ▶ Fixed form: shape of affix, some specification of mapping of the selected participant role to grammatical function.
 - ▶ Meaning: semantic argument structure, nuanced elements that are invoked by conventional association whenever the form arises.
 - ▶ Generalized across non-fixed elements of form.

Discussion

- ▶ Due to this conventionalized pairing, AM-marking gives rise to semantic inferences... even for the just the verb itself.
- ▶ This allows verbs to convey ‘applicative meanings’ without overt mention of participants.
 - ▶ Use of non-realization for reference-tracking
 - ▶ Pragmatic use of ambiguity, omission (see Ewing 2019 on bare predicates in Indonesian)
- ▶ Naturally leads to emergence of lexicalized meanings for verbs, which are common for applicative verbs cross-linguistically, but rampant in West Nusantara languages.
 - ▶ *béré-keun* ‘hand over (s.t.)’ cf. *béré* ‘gift/transfer possession of (s.t.) (to s.o.)’
- ▶ Explains how speakers develop intuitions about compatibility of verbs + applicative meanings, create and interpret novel AM-marked verbs.

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Causative + applicative

(20) Sundanese, Theme/Goal alternation

- a. *Acan gé anclom useup=na, geus di-samber*
hardly also touch.water fish.hook=DEF, already PV-pounce.on
mantén ku gabus.
in.meantime by snakehead
'The fish hook had hardly touched the water, when already it was
swooped upon by a snakehead fish.' (BC) ("anclom" 2019)
- b. *Sayur kacang di-anclom-an daun salam.*
soup bean PV-touch.water-CAUS.LOC.APPL leaf bay.leaf
'The bean soup had a bay leaf submerged into it.' (AC)
(SLD-020)
- c. *Kue di-anclom-keun kana kopi ku Ujang.*
cookie PV-touch.water-CAUS.THM.APPL to coffee by U.
'The cookie was submerged into the coffee by Ujang.' (AC)
(SLD-020)

Non-realized goal phrase

(21) *Duh Gusti ku di-kersa-keun salah nga-datang-an.*
 EXCL lord by PV-intention-APPL wrong AV-arrive-LOC.APPL

‘Oh Lord, by God’s will (we) paid a visit at the wrong (place).’
 (nar. text by Karyadipura 2021)

Beneficiary-selecting constructions with *pang--keun*

- (22) ...*engké ari geus di-jual jukut=na, ku Bapa*
 later when already PV-sell grass=DEF, by father
di-pang-meuli-keun lauk...
 PV-BEN.APPL-buy-BEN.APPL fish

“[if you help me cut grass,] later when the grass is sold, I (Father)
 will buy a fish (for you)...” (nar. text by Umbara 2002)