

# Coordination, coherence and A'ingae clause linkage

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## 1 Introduction

- Presumably all languages allow for repetitions of different sorts
- However, languages like A'ingae in (1) show a specific form of repetition that recent typological work by Guérin & Aiton (2019) (henceforth, G&A) has dubbed 'bridging':

(1) *Kinikhuma chathûje. Kinikhuma chathûpatsû gafama utsian.*

[kinikhu=ma chathû-je]<sub>R</sub>. [[Kinihku=ma chathû-pa]<sub>B</sub>=tsû gafa=ma  
tree=ACC cut-IPFV tree=ACC cut-ss=3 goggle-ACC  
utsian]<sub>C</sub>  
put.on

'He cuts trees. Having cut trees, he puts on goggles.'

- **Note:** for clarity's sake, we use English overly literal translations. Translations with *and*, *then*, *after*, or *next* are arguably better than having the (repetitive) bridging clause.
- In terms of meaning, G&A characterize bridging as:
  - “adding structure and cohesion”
  - backgrounding **R**'s content and foregrounding **C**'s
  - highlighting “important turning points, or new events on the main event line”
  - and expressing “a semantic relation between discourse segments, typically, expressing sequentiality”

- While giving some sense of the meaning, these descriptions are incomplete in two ways:
  1. Lack precision – e.g. they do not clearly differentiate between sequences of finite clauses, coordination, etc.
  2. Lack compositionality – they assign a meaning to the whole construction, rather specific parts.

**This paper** case study of bridging in A'ingae (ISO: `con`), an isolate with  $\approx 1,500$  speakers in Amazonian Ecuador and Colombia.

- We propose a formal characterization of A'ingae bridging (to our knowledge the first formal account of bridging)
- Crucial role of the coherence relations of `NARRATION` and  $\implies$ `BACKGROUND` (Asher & Lascarides, 2003)
- Supported with textual data and—unlike most prior work on bridging—elicited data from context-relative felicity judgments (Matthewson 2004)

**Road Map:**

§2 presents background on A'ingae, its speakers, and grammar;  
 §3 introduces bridging including summary and recapitulative subtypes;  
 §4 develops a coherence-based account of bridging in A'ingae;  
 §5 briefly explores coherence in related constructions and concludes.

## 2 Background on A'ingae, its speakers and grammar

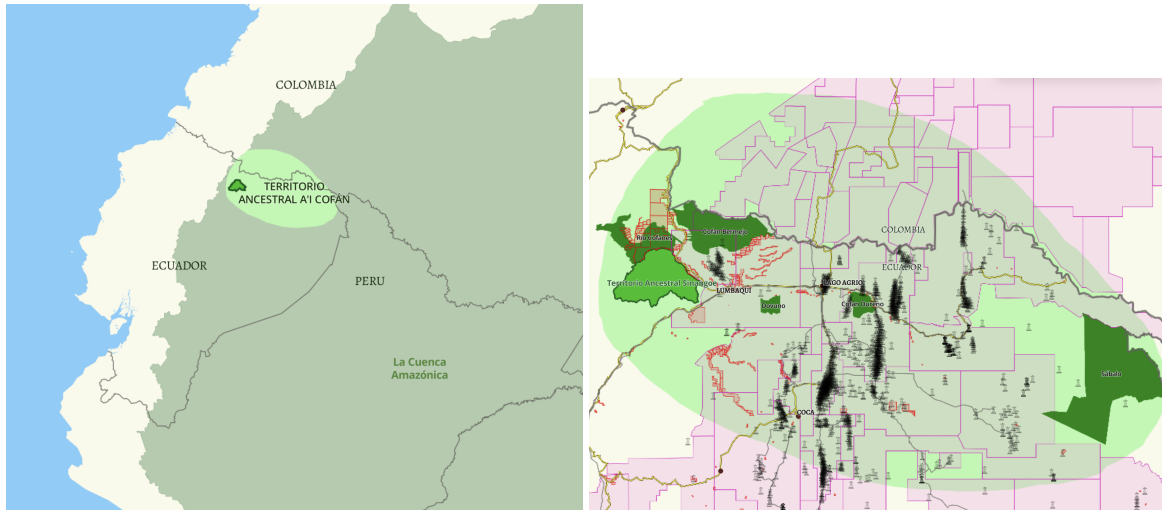
- A'ingae (Cofán, Kofán, ISO: `con`): isolate spoken by  $\approx 1,500$  speakers
- Andes-Amazon interface in Northern Ecuador and Southern Colombia
- Heavily endangered in Colombia, less so in Ecuador where still robustly learned by children in all communities.

### 2.1 A'i speaker communities

- The A'i are traditionally hunter-gatherers, living across the territory (Left), but traveling much further.
- Many A'i still are hunter-gatherers, though this way of life (along with their territory) is increasingly threatened<sup>1</sup>.

<sup>1</sup>Maps created by Amazon Frontlines (<https://sinangoe.amazonfrontlines.org/>). as part of a community mapping project. Black icons are oil platforms, darker green patches are present-day

- Despite interactions with the Spanish since the 16th cent., A'i way of life and territory not severely affected prior to oil exploration in the 1950s.
- Huge direct environmental impact and decades-long legal battle
- Highways and other roads built to support oil extraction also facilitated colonization by people from other parts of the country, mining, etc.



## 2.2 A'ingae grammar background

- Generally, a typical SOV language: consistently head-final, dependent marking with case clitics on nominals
- Morphologically, A'ingae is agglutinative with lots of suffixes and enclitics, especially on verbs.
- Arguments indexed through ① case clitics on nominals (Nominative-Accusative alignment), ② number agreement on predicates, and ③ second position clitics in matrix clauses indexing the person of the subject

(2) *Junguesûmatsû tsunjen'fa turistandekhûja?*

Junguesû=ma=tsû<sup>3</sup> tsun-jen'-fa<sup>2</sup> turista-ndekhû=<sup>1</sup>ja  
 what=ACC=3 do-IPFV-PL.SBJ tourist-HUM.PL=NOM=CT

'What do the tourists do?'

A'i communities, pink and red boxes are oil and mining concessions.

- Subordinate clauses—including B clauses in bridging—are formally distinct from matrix clauses:

	<b>Subordinate</b>	<b>Matrix</b>
<b>Word order</b>	Rigidly V-final	Flexible
<b>2nd position subject clitics?</b>	No	Yes
<b>Assertive/Veridical suffix -'ya?</b>	No	Yes

### 3 Formal properties of A'ingae bridging

- Bridging linkage constructions per G&A have the following components:

- (3) BRIDGING LINKAGE STRUCTURE: A sequence of three clauses in the following order:

**Reference clause (R):** a fully finite main clause, typically declarative;

**Bridging clause (B):** a subordinate clause which repeats **R** in part or in whole and/or summarizes it;

**Continuation clause (C):** a main clause which forms a complex unit **X** (e.g. a sentence) with **B** to the exclusion of **R**.

- (4) *Kinikhuma chathûje. Kinikhuma chathûpatsû gafama utsian.*

[kinikhu=ma chathû-je]<sub>R</sub>. [[Kinihku=ma chathû-pa]<sub>B</sub>=tsû gafa=ma  
tree=ACC cut-IPFV tree=ACC cut-ss=3 goggle-ACC  
utsian]<sub>C</sub>  
put.on

‘He cuts trees. Having cut trees, he puts on goggles.’

- Previous terms: tail-head linkage, head-tail linkage, recapitulation clauses, backgrounding repetition, echo clauses, summary-head linkage, ...

#### 3.1 Formal properties of A'ingae bridging

- Two other notable formal properties of A'ingae bridging:

1. B clauses are introduced by the switch reference suffixes *-pa/-mba* ss and *-si* DS.

- These morphemes are also found in clause-chaining and certain causal/temporal adverbial clauses (see §5 for examples, [AnderBois et al. \(in prep\)](#)).

- (5) a. *Bûthuin japa shagatunga ka'ni. Ka'nimba ja tsûtupani.*

[bûthu-in ja-pa shagatu-nga ka'ni]**R** [[Ka'ni-**mba**]**B** ja  
 run-MVM go-ss cedar=DAT enter enter-ss go  
 tsûtupa=ni]**C**  
 end=LOC

'He ran and entered a cedar tree. Entering it, he went to the tip-top.'  
 (Borman, 1977, p.295)

- b. ... *a'i khûtsû'ya khûtsûsite jipa kukefa'u sù'ya*: ...  
 [a'i khûtsû-'ya]**R** [[khûtsû-**si**]**B**=te ji-pa kuke-fa'u  
 person stand-VER stand-DS=REP come-ss hare-PEJ.ACC  
 sù-'ya]**C**.  
 say-VER  
 '... a person stood there, as they stood, the hare came and said:'  
[20170804\\_Kuke\\_Chiste\\_FACQ: 20-22](#)

2. In contrast to other uses of switch reference, B clauses in bridging are prosodically distinct, which we take as a reflex of asyndetic coordination
  - Deaccenting (cf. [Krifka & Levina 2019](#) on bridging in Daakie) and tighter prosodic integration (cf. G&A and references therein) between R and C
  - Speakers report the intuition that R and C comprise two separate sentences, yet should be separated by a comma rather than a period.

### 3.2 Three subtypes of bridging

- G&A distinguish three subtypes of bridging constructions defined by the form of the B clause:

**Recapitulative:** B repeats part or all of R, often just the main verb, (6)

**Summary:** B consists of an anaphoric pro-verb like *tsun* 'do so', (7)

**Mixed:** B repeats the main verb of R along with an anaphoric adverbial, (8)

A'ingae has examples fitting each of these descriptions:

- (6) ... [kueje'fa khutsiañaña]**R**, [[kueje'nga khûtsiansi]**B** tsaja aceite yaya'pave  
 daya'ya]**C**.  
 kueje'fa khûtsi-a-ña-ña kueje='nga khûtsi-an=si tsa=ja aceite  
 sun stand-CAUS-IRR-VER SUN=DAT stand-CAUS=DS ANA=CNTR oil  
 yaya'pa=ve da-ya-'ya  
 oil=ACC2 become-IRR-VER

‘He set it in the sun, after he set it in the sun, it became a natural oil’  
[20170806\\_Charapa \\_proyecto\\_BRCA:12-14](#)

- (7) [Ingi ka’ni-fa=ni dyai-’fa]<sub>R</sub> [[tsun-si]<sub>B</sub> ña=’khe dyai]<sub>C</sub>  
 PRO.1PL enter-PL.SBJ=LOC sit-PL.SBJ do-DS PRO.1SG=ADD sit  
 ‘When we entered, they sat down, then I sat down too.’
- (8) [Jose tsû fi’thi thesi=ma]<sub>R</sub>. [[Tsa-’ka-en fi’thi-pa]<sub>B</sub>=tsû Jose tise  
 Jose 3 kill jaguar=ACC ANA-CMP-ADV kill-ss=3 Jose PRO.3SG  
 tsa’u=ni anga]<sub>C</sub>  
 house=LOC carry  
 ‘José killed the jaguar and having killed it, José carried it to his house.’

- **Claim:** rather than three distinct constructions, these are interpreted compositionally from independently attested anaphoric and lexical resources.
- We give detailed arguments for this in the Appendix establishing the flexibility and compositionality of B clauses.
  - No independent formal constraints on the B clause, only semantic ones and constraints on subordinate clauses more broadly.

**Conclusion:** bridging constructions in A’ingae are compositionally constructed from ordinary lexical/anaphoric elements found elsewhere, rather than a construction-specific ‘bridging’ mechanism.

## 4 Bridging requires NARRATION

- Before turning to the meaning of bridging, we first provide about our assumptions regarding coherence relations, drawing on work in Segmented Discourse Representation Theory (SDRT), [Asher & Lascarides 2003](#).

### 4.1 Background on coherence relations

- Specific connectives, particles, etc. can be thought of as signalling what we may call a COHERENCE RELATION between discourse units:

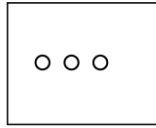
- (9) a. Max fell because John pushed him.  
       • **Explanation** (Effect)
- b. Max fell. So John helped him up.  
       • **Result** (Cause)
- c. Max fell. Then John pushed him.  
       • **Narration** (Contiguity)

- d. Max fell. John did too.
  - **Parallel** (Resemblance)
- [Hobbs \(1990\)](#): “It is tempting to speculate that these coherence relations are instantiations in discourse comprehension of more general principles of coherence that we apply in attempting to make sense out of the world ...”
- Coherence relations have played an instrumental role in analyzing. . .
  - anaphora and cataphora resolution
  - ellipsis
  - presupposition
  - tense, aspect and temporal adverbs
  - intonation and focus
  - ... (see [Kehler \(2022\)](#), [Altshuler & Truswell \(2022\)](#) for recent surveys)

### **SDRT (Segmented Discourse Representation Theory)**

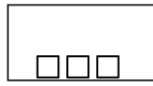
- SDRT models discourse structure as a **graph** over semantic representations (SDRSs) of **discourse units** (DUs), which are descriptions of events/states.
- The graph edges connecting DUs are **labeled** with coherence relations.
- The graph used to model discourse structure is **directed**.
  - A vertical edge represents a **subordinating** coherence relation, while a horizontal edge represents a **coordinating** coherence relation.
- Coordinating coherence relations **change the scene**, hence **moving forward** the narrative.
- Subordinating coherence relations **detail the scene**, hence **deepening** the narrative.

There were three circles.



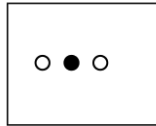
$\Rightarrow$

Later, there were three squares.



$\Downarrow$

One of them was filled.



- Since coordinating coherence relations **change the scene** while subordinating coherence relations **detail the scene**, only subordination keeps the things we talk about around, and hence available for anaphora.
- Put differently: We can't "detail" scenes that have been changed. Hence, **coordinated discourse moves "block" anaphoric potential.**

- (10) John had a great evening last night.  
He had a great meal.  
He ate salmon.  
He devoured lots of cheese.  
He won a dancing competition.  
#It was a beautiful pink.

Asher & Lascarides (2003)

**Summary:** SDRT proposes a hierarchically structured model of discourse in which Elementary and Complex Discourse Units are related by a set of coherence relations of two types:

- **Select coordinating relations:**  
RESULT, NARRATION, PARALLEL, CONTRAST,  $\Rightarrow$ BACKGROUND
- **Select subordinating relations:**  
ELABORATION, EXPLANATION,  $\Leftarrow$ BACKGROUND

## 4.2 Bridging is constrained by discourse coherence

- Previous characterizations for other languages (e.g. Guérin & Aiton (2019)) discuss a tendency for temporal sequentiality.
- This is too permissive for A'ingae in at least two respects:
  1. Iconic ordering is required, not a mere tendency.



- E.g. speakers judge (11) infelicitous in the more plausible scenario in which the subject put on safety goggles before cutting the tree.

(11) *Kinikhuma chathûje. Kinikhuma chathûpatsû gafama utsian.*

[kinikhu=ma chathû-je]<sub>R</sub>. [[Kinihku=ma chathû-pa]<sub>B</sub>=tsû  
tree=ACC cut-IPFV tree=ACC cut-SS=3  
gafa=ma utsian]<sub>C</sub>  
goggle-ACC put.on

‘He cuts trees. Having cut trees, he puts on goggles.’

2. In sequences which are iconically ordered: direct causal connections are not possible

- Speakers judge sequences infelicitous where there is a clear direct causal connection between the events described by R and C, (12).

(12) #[Jose tsû bûthujangi]<sub>R</sub>. [[Tsa-’ka-en uya-si]<sub>B</sub> shavu=’khe uya]<sub>C</sub>  
Jose 3 jump ANA-CMP-ADV move-DS canoe=ADD move  
‘Jose jumped and then the canoe moved too.’

**Scenario A:** #José jumps and his jumping shakes the canoe.

**Scenario B:** José jumps and then the canoe shakes (e.g. from a wave).

- We therefore propose the following generalization (making use of Asher & Lascarides (2003)’s definitions):

(13) **Generalization:** A’ingae bridging requires:

- NARRATION(R,X) – the reference clause and the complex discourse unit comprising B and C<sup>2</sup>
  - NARRATION: enablement – the post-state of the first event is the pre-state of the second event.
- ⇒BACKGROUND(B,C) – within X, B provides the background for C.
  - ⇒BACKGROUND – temporal overlap between a described event and state.

<sup>2</sup>Technically, this is a slight oversimplification since NARRATION on this definition does not necessarily rule out inferring of RESULT. In the full formal compositional analysis we propose, we in fact derive NARRATION(R,X) from a common topic requirement introduced by asyndetic coordination (following Txurruka (2003)) and the fact that NARRATION supports the construction of common topics, but RESULT does not.

### Comparison with non-bridging sequences

- Matrix clauses and clausal coordination with *tuya-'ka-en* still-CMP-ADV 'and', allow for broader range of coherence relations despite iconic tendency:
- (14) is felicitous in contexts where the events occur in any order.
- (15) naturally is interpreted as the anger being caused by getting stuck in the hole.

- (14) **Context:** A response to the question in (2) "What do the tourists do when they visit?"

*Simbaje'fa, tsui'je'fa tsampinga, isian'jen'fa isian'chuve fi'thije'fa*

Simba-je-'fa, tsui-'je-'fa tsampi=nga, isian-'jen-'fa  
fish-IPFV-PL.SBJ walk-IPFV-PL.SBJ forest=DAT photo-IPFV-PL.SBJ  
isian-'chu=ve fi'thi-je-'fa.  
photo--SBRD=ACC2 hunt-IPFV-PL.SBJ

'They fish, walk in the forest, take photos, and hunt.'

- (15) **Context:** A traditional story in which the hare dug a hole and the fox fell in, angering the fox. *Tsefa'e indiya tse'thinga. Ti'tshe panduja iyikhayeya tsa kukefan'an*

tse-fa-'e indi-ya tse-'thi=nga ti'tshe pandu=ja iyikhaye-ya  
ANA.LOC-??-ADV stuck-VER ANA.LOC-LOC=DAT more fox=CT anger-VER  
tsa kuke-fan'an  
ANA rabbit-PEJ.ACC

'He got stuck!' The fox got more angry at the hare.

[20170804\\_Kuke\\_Chiste\\_FACQ: 152](#)

### 4.3 Different types of bridging and the Right Frontier

- Beyond providing a precise, predictive account of Bridging generally, more fine-grained observations can be explained as well.
- Most notably, [Aiton \(2019\)](#) observes for Eibela (ISO 693-3: AIL, Papua New Guinea) that summary bridging tends to target 'paragraphs' while recapitulative bridging targets 'episodes'.
- We observe a similar tendency in A'ingae:

(16) **Anaphoric tsun ‘do so’ refers complex DU**

- a. *Me’in ñanda tisûyi ji’chuma ke yayasû iya tisûyi ña kanjensitsû iya vaningae*

me’in ña=nda tisû=yi ji=’chu=ma ke yaya=sû  
 no 1.SG=NEW RFLX=EXCL come=SBRD=ACC 2.SG dad=ATTR  
 i=ya tisû=yi ña kanjen=si=tsû i=ya va=ni=ngae  
 bring=VER RFLX=EXCL 1.SG live=DS=3 bring=VER PRX=LOC=MANN  
 ‘no, I came alone, your father brought me because I was alone.’  
[20170801\\_Autobiography\\_ARLQ: 182-184](#)

- b. *Tsumbangi tse kansepa vanima athe mingae sûya tse vani kanjemba Jhonnykhunga daya*

**tsu**-mba=ngi tse kanse-pa va=ni=ma athe mingae sû-ya  
 do=SS=1 ANA.LOC live-SS PRX=LOC=ACC see how say-VER  
 tse va=ni kanje-mba Jhonny-khu-’u=nga da-ya  
 ANA.LOC PRX=LOC live-SS Jhonny-AUG-AUG=DAT become-VER  
 ‘So I came here and found, how do you say, I met Jhonny.’

(17) **Deaccented lexical verb refers to simple DU in preceding clause**

*Tsampini japa yuku’ma chathûnga’ya. Chathûngapa jiya.*

tsampi=ni ja-pa yuku=ma chathû-nga-’ya **chathû-nga**-pa ji-ya  
 forest=LOC go-SS yoco=ACC cut-AM-VER cut-AM-SS come-VER

‘I went to the forest and cut him some yoco. Having cut yoco, I came back.’  
[20170807\\_autobiography\\_JWC: 421-422](#)

- We propose to derive this difference from an independent observation: propositional anaphora generally allows for reference to simple and complex discourse units on the ‘Right Frontier’ of the discourse structure.<sup>3</sup>
- Rather than a separate property of specific bridging constructions, this tendency emerges from the combination of:

<sup>3</sup>For A’ingae specifically, [Morvillo & AnderBois \(to appear\)](#)’s analysis of contrastive clauses with -’ma CNTR claims that those with propositional anaphor *tsa* can similarly target a complex discourse unit:

- (i) Alejandro tshai’patshi’ma ki’an tsa’ma José tsû favatshi.

[Alejandro tshai’pa-tshi-’**ma** ki’an] **tsa-’ma** José tsû fava-tshi  
 Alejandro slow-ADJR-CNTR strong ANA-CNTR José 3 fast-ADJR

‘Alejandro is slow but strong but José is fast.’

[Morvillo & AnderBois \(to appear\)](#)

- (i) independently observable properties of anaphoric expressions<sup>4</sup>
- (ii) general principles of discourse coherence that make certain complex discourse units available for anaphoric reference.

## 5 Conclusions

- In this talk, we have presented an analysis of A'ingae bridging as requiring the coherence relation of NARRATION and  $\Rightarrow$ BACKGROUND.
- We have argued that such a characterization provides a precise account distinguishing bridging from other sequences of clauses.
- Two ongoing further directions:
  1. Compositionally deriving the NARRATION restriction based on the meaning of its components, e.g. asyndetic coordination, an adjoined switch reference clause, anaphoric/given content – Upcoming presentation at SALT 32
  2. Examining related SR constructions in terms of coherence relations.
- A'ingae SR morphemes also appear in clause chaining, (18), and causal/temporal adjuncts, (19)

### (18) Clause chaining

*Yumboye'ja motor'ga jayisi fingian khathûfaensi khathûfasi amigo ñambe angapa chavaen'jan'khen*

Yumbo-ye='ja [motor='nga jayi]-**si** [fingian khathûfa-en]-**si**  
 Yumbo-HON=CNTR motorboat=DAT go.PRSP-DS wind touch.land-CAUS-DS  
 [khathûfa]-**si** [amigo ña=mbe anga-pa chava-en-'jan=khen]  
 touch.land-DS friend 1.SG=BEN carry-SS buy-CAUS-IMP=QUOT

'As for Yumbo, I was about to go up river, the wind pushed me ashore, I went ashore, and he was like carry these and sell them.'

[20170803\\_cofan\\_territory\\_lc: 40](#)

### (19) Causal adverbial

*Ñajan.ja'ñu si'tsive kañe tsunjen, tû'i.jayisi.*

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<sup>4</sup>See also [Zheng \(2022\)](#) for detailed description of the anaphoric 'ts-' series in A'ingae: *tsa* for individuals and propositions, *tsun* for events, *tse* for times and places, *tse'sû* for states, as well as numerous morphologically complex forms built on these.

Ña=jan            ja'ñu si'tsi=ve            ka-ñe    tsun-jen [tû'i  
 PRO.1SG=CNTR now   firewood=ABS look-INF do-IMPV tomorrow  
 jayi=si]  
 go.PROSP=DS

'I am now going to look for firewood, [because tomorrow you're going to  
 leave].'  
20170731\_attembi-ai: 64

- In ongoing work, we argue that:
  - clause chaining in A'ingae also requires a NARRATION relation to hold
  - SR adjuncts require  $\Rightarrow$ BACKGROUND, NARRATION, or RESULT relation
- These relations form a natural class in SDRT: they are the non-structuring coordinating discourse coherence relations
- While we argue there is no syntactic generalization for where SR occurs (contra Fischer (2007)), a coherence-based generalization thus far seems promising.

## Acknowledgments:

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## References

Aiton, Grant (2019) The form and function of bridging constructions in Eibela discourse. In *Bridging constructions*, Valérie Guérin, ed., Language Science Press, 157–184.

- Altshuler, Daniel & Robert Truswell (2022) *Coordination and the Syntax-Discourse Interface*. Oxford University Press.
- AnderBois, Scott, Daniel Altshuler, & Wilson Silva (in prep) The forms and functions of switch reference in A'ingae, ms. in preparation for edited volume “Current Studies in Morphosyntax, Semantics, and Pragmatics: A View from the South American Lowlands and Beyond”, Guillaume Thomas and María Luisa Zubizarreta eds.
- Asher, Nicholas & Alexis Lascarides (2003) *Logics of conversation*. Cambridge University Press.
- Borman, M.B. (1977) Cofan paragraph structure and function. In *Discourse Grammar: studies in indigenous languages of Colombia, Panama, and Ecuador*, vol. 3, Robert Longacre & Frances Woods, eds., Summer Institute of Linguistics, 289–338.
- Fischer, Rafael (2007) Clause linkage in Cofán (A'ingae). In *Language Endangerment and Endangered Languages*, Leo Wetzels, ed., CNWS, 381–399.
- Guérin, Valérie & Grant Aiton (2019) Bridging constructions in typological perspective. In *Bridging constructions*, Valérie Guérin, ed., Language Science Press, 1–44.
- Hobbs, Jerry (1990) *Literature and Cognition*. CSLI Lecture Notes Number 21.
- Kehler, Andrew (2022) Coherence Establishment as a Source of Explanation in Linguistic Theory. *Annual Review of Linguistics* **8**: 123–142.
- Krifka, Manfred & Ekatarina Levina (2019) Recapitulative linkage in Daakie (Ambrym, Vanuatu), presentation at 11th International Austronesian and Papuan Languages and Linguistics Conference (APLL11).
- Matthewson, Lisa (2004) On the methodology of semantic fieldwork. *International Journal of American Linguistics* **70**(4): 369–415.
- Morvillo, Sabrina & Scott AnderBois (to appear) The inner workings of contrast: decomposing A'ingae tsa'ma. In *Proceedings of SULA 11*, tbd.
- Ortiz Quenamá, Medardo Segundo & Martín Crecencio Criollo Mendúa (2013) El arte de la caza y pesca ancestral de la comunidad Dureno, nacionalidad A'i, unpublished licenciatura thesis, Universidad de Cuenca.
- Txurruka, Isabel (2003) The Natural Language Conjunction *and*. *Linguistics and Philosophy* **26**: 255–85.

Zheng, Yuqi Holly (2022) Anaphoric expressions in A'ingae, BA Thesis, Brown University.

## Appendix: arguments for compositional account of bridging

- In this appendix, we present 4 pieces of evidence that A'ingae bridging is fully compositional, rather than the result of a specific bridging 'construction':

### Argument 1: repeated clause can be complex

- While the verb in the B clause is often in bare form, the full range of verbal morphology found in other subordinate clauses is possible, e.g. (20).
- Arguments and modifiers may be repeated or not, e.g. (21-22)

#### (20) Repetition of morphologically complex verbs

Khen fündujenijan tsa tsan'dûja khakejema athembiya athembipa runda-  
jekhen fünduje

khen fündu-je=ni=jan      tsa tsan'dû=ja      khakeje=ma  
QUOT shout-IMPV=LOC=CNTR ANA husband=CNTR leaf=ACC  
athe=mbi=ya athe-mbi=pa runda-je-ja=khen      fündu-je  
see-NEG-VER see-NEG=SS wait-IPFV-IMP=QUOT shout-IPFV

'When she was shouting like that, her husband didn't see the leaves. Having not seen them, he cried out like this: 'Wait!'

[20170806\\_Apicha\\_pûshesû.kundasepa\\_brca:52-53](#)

#### (21) Repetition of arguments:

Te shavunga tsû'tsû tsanjan'fa shavukhûnga **tsûtsû** tsanjamba kuejen'fa  
khûtshiañaña

te shavu=nga tsû'tsû      tsanjan-'fa shavu=khû=nga      tsûtsû  
REP canoe=DAT IDEO:MASH mash=PLS canoe=SH.DLM=DAT ONOM  
tsanja-mba kueje'fa khûtshi-a-ña-ña  
mash=ss      sun      stand-CAUS-IRR-VER

'they were able to mash the eggs on the canoe and let it set on the sun'

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#### (22) Repetition of modifiers:

*Injantshe atapa'faya. Injantshe atapapa ankhesûma sefaembate, ...*

Injan-tshe      atapa-'fa-ya.      **Injan-tshe**      atapa-pa  
much-ADJ.ADV reproduce-PLS-VER much-ADJ.ADV reproduce-ss  
an-khesû=ma sefa-em-ba=te...  
eat-HABIT=ACC use.up-CAUS-SS=RPRT



‘They had grown in number a lot. Having grown in number a lot, they used up the food, ...’

[20170731\\_vahu\\_story\\_mmemq:5](#)

### Argument 2: non-identical verb forms possible

- The verb in the B clause may differ in its morphological details, (23).
- It may even be a synonym or hypernym<sup>5</sup> of the verb in the R clause, (24):

(23) a. **Difference in verb morphology:**

*Ñakhe tuya ña chite jichu vani,*

ña=khe tuya ña chi ji=chu va=ni

1.SG=ADD still 1.SG youth come=SBRD PRX=LOC

‘I had arrived here when I was a child,’

b. *Jisitsû charapa dûsûchujechuma asipa aña atesûfa.*

**ji-si**=tsû charapa dûsûchu-je-chu=ma asi-pa a-ña

come-DS=3 turtle lay.eggs-IMPV-SBRD=ACC take.out-SS eat-INF

atesû-fa

know-PLS

‘after we arrived, we would eat turtle eggs.’

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(24) **Difference in verb root:**

*Jose tsû bûthujangi tsa’kaen uyasi shavu’khe uya.*

Jose=tsû bûthujangi tsa-’ka-en **uya**-si shavu=’khe uya

Jose=3 jump ANA-CMP-ADV move-DS canoe=ADD move

‘Jose jumped. Having moved like that, the canoe moved too.’

### Argument 3: interpolation possible

- An additional class of mismatches between R and B clauses may involve ‘interpolating’ events which are natural extensions of R, (25)
- One notable class of cases: R encodes the beginning of an event (or some other non-culminating form) and B encodes its culmination, (26):

(25) *Sinte jangipangi kashi apishu’thuma, apishu’thuma san’jambangi anaña ja*

<sup>5</sup>More specific hyponyms are possible as well, but seemingly only when their content may be taken for granted in some way.

Sinte jangi-pa=ngi kashi apishu'thu=ma apishu'thu=ma  
 morning arise-ss=1 dish.wash dish=ACC dish=ACC  
 san'ja-mba=ngi ana-ñe ja.  
 dry-ss=1 sleep-INF go

'I got up in the morning and washed dishes. Having dried the dishes, I went to sleep.'

- (26) *Sinte sumbupangi thûthûye ashaen, thûthûpangi tueki tsa'uningae ji.*

Sinte sumbu-pa=ngi thûthû-ye asha-en, thûthû-pa=ngi tue-ki  
 morning leave-ss=1 chop-INF begin-CAUS chop-ss=1 same-DAY  
 tsa'u=ni=ngae ji  
 house=LOC=MANN come

'I left in the morning and started to cut trees. Having cut trees, I returned home.'

#### Argument 4: doubly anaphoric forms

- In addition to recapitulative, summary, and mixed forms, A'ingae also allows other anaphoric combinations:

- (27) [Tsa-'ka-en je-ña-mba zûña-mba=tsû panza-sû-ndekhû=ningae  
 ANA-CMP-ADV sound-CAUS-SS TWIST-SS=3 hunt-PL.HUM=MANN  
 anga-ya-'chu]<sub>R</sub>. [[Tsa-'ka-en tsun-si]<sub>B</sub> makaku'va=ja tse=ningae  
 carry-IRR-SBRD ANA-CMP-ADV do.SO-DS tinamou=CT ANA.ADV=MANN  
 ja-ya]<sub>C</sub>.  
 go-IRR

'One should wave and make noise in the hunters' direction and then the tinamous will go that way.' (Ortiz Quenamá & Criollo Mendúa, 2013, p. 16)