

Australian relative clauses revisited

Dana Louagie & Ellison Luk

Australian relative clauses

(1) Arrernte (Central PN > Arandic; Wilkins 1989: 427)

*Re lhe-ke [artwe [*unte-rlē pwerte ine-ke-rlē*]]-kerte*

3SG.S go-PC [man [2sg.s-REL money get-PC-REL]]-PROP

‘She left with the man you got money from.’

(2) Arabana–Wangkangurru (Central PN > Karnic; Hercus 1994: 178)

*antha walpu mirra-nta [*nguringuri-ri tharni-ngura*]*

I leg scratch-REFL [fly-ERG eat-CONT]

‘I’m scratching my leg, which is being bitten by flies.’

Or: ‘... because/while flies are biting (it)’ (DL&EL)

RCs: “adjoined & multifunctional”

Common perception (since Hale 1976):

“adjoined relative clause”

(3) Warlpiri (Western PN > Ngumpin–Yapa; Hale 1976: 78)

<i>ngatjulu-lu</i>	<i>∅-ṇa</i>	<i>yankiri</i>	<i>pantu-ṇu,</i>	<i>kutja-lpa</i>	<i>ngapa</i>	<i>nga-ṇu</i>
I-ERG	AUX	emu	spear-PST	COMP-AUX	water	drink-PST

‘I speared the emu which was/while it was drinking water.’

Since then:

More enriched typological picture; Nordlinger (2006), Hendery (forthc.), individual grammars
...but no thorough Australia-wide investigation

We investigate

1. The degree of **embedding** of RC constructions (RCCs) in Australian languages
2. If and how they can be distinguished from **ADV clause constructions**

i.e.

- First teasing apart the features (following Nordlinger 2006)
- And then seeing how the two parameters interact

(Intersecting interests)

- **Dana Louagie**: Typology of **noun phrases** in Australian languages (Louagie 2019)

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- **Ellison Luk**: Typology of **clause linkage** in Australian languages (ongoing PhD)

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Data collection

Working definition (based on Hendery forthc.; see also Keenan 1985, Andrews 2007)

“a predicate that is linked to another clause, and delimiting or expanding on the reference of a nominal expression in that clause, whether or not this is its only function”

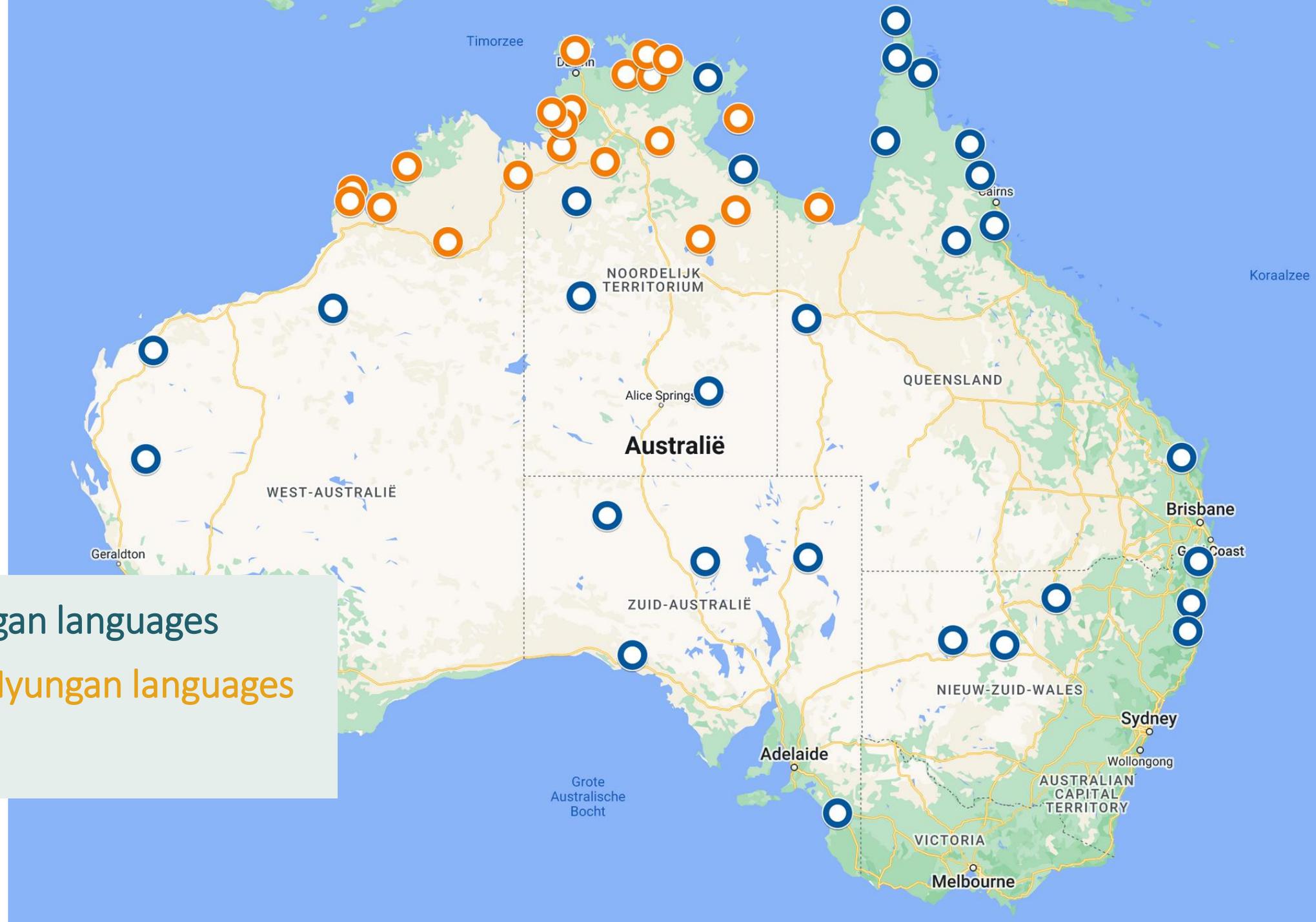
Excluding:

- Extended noun modifying constructions e.g. *“a story of how I came here”*
- Complements of purpose e.g. *“a shield to block boomerangs”*
- Manner complement clauses e.g. *“I saw how he swam”*

(In as far they don't share any constructions with RCs)

Sample

29 Pama–Nyungan languages
21 non-Pama–Nyungan languages
(17 families)



1. Wide range of construction types

Great structural diversity

94 constructions in **46 languages** (none in: Paakantyi, Umpila, Uradhi, Wirangu)

- Both **finite** and **non-finite** types abundant (roughly 70% / 30% split)
- Types of **marking**:
 - *conjunctions, verb inflections, clitics, no marking,*
- Positions **relative to main clause**:
 - *preceding (**rare**), following (**typical**), flexible between both (**^^majority**)*
- Positions **relative to head NP (pivot)**:
 - *external head (**^^majority**), internal head (~14), headless (~10 cxns)*
- Others (not explored today): gapping/resumption, accessibility
- Structural possibilities explored in Hendery's (forthc) overview

2. RCCs embedded to NP

What is “embedding”?

- Hale (1976):
 - “adjoined” and “embedded” as **relative position**
 - No ‘higher order’ or ‘deep syntactic’ relations assumed
- Nordlinger (2006):
 - Embedding = **subordination**
 - i.e. direct embedding to clause
- Our definition:
 - Embedding = **constituency**
 - → Do NP and RC form a constituent?
 - (!) “adjoined” is not the necessary inverse of “embedded”
 - (doesn’t apply to headless RCs, since there is no NP)

(Sufficient) criteria for embedding (to NP)

- **Interruption** (“centre embedding”):
 - If RC interrupts MC material
 - If RC interrupts NP material (even better!)
- **Obligatory adjacency**:
 - If RC and NP can never be separated
 - (*cf. Louagie & Verstraete 2016 on NP discontinuity*)
- **N-Phrasal marking**:
 - If case marking shows RC to be a constituent with NP

Criterion 1: RC interrupts

(4) Dhuwal (Western PN > Yolngu; Wilkinson 1991: 415)

ngayi marrtji [*yunangali-ny nganapurrun*g [*rninydjakngu-ny ngunhi*

3SG go-REAL) [oysters-(PROM) 1PL.DAT [first-PROM TEXD

rdangga-puy-nydja bu-nha-puy,]] *dhaarra'-dharra banikin-mirr mala.*

clear-ASS-PROM strike-IRR-ASS]] stand-REDUP-REAL tin-PROP PL/group

'our oysters, collected earlier when it was clear, were standing in the cans.'

Criterion 2: Obligatory adjacency

(5) Ngarrindjeri (Southeastern PN > Lower Murray; Cerin 1994: 95)

[*ar-anaka* *narindjer-a* [*ngar=yan* *morok-un* *itjan-anakai* *waltjer-i*]]

[3PL.NOM-DEM? people-PL [3PL.ERG=3SG.ACC take-PRES 3SG.ACC-DEM? umbilical.cord-SG]]

'those people **who take the umbilical cord**'

Criterion 3: Nominal phrase marking

- Case marking:

(6) Arrernte (Central PN > Arandic; Wilkins 1989: 427)

re *lhe-ke* [[**artwe**] [*unte-rlē* *pwerte* *ine-ke-rlē*]]-**kerte**

3sgS go-pc [[**man**] [2sgS-REL money get-pc-REL]]-PROP

‘She left with the man **who you got money from.**’

Number of embedded structures

Embedding	Constructions	Languages
Total:	44 / 94 (46.8%)	34 / 46 (73.9%)
Criterion 1: interruption	33	26
Criterion 2: obligatory adjacency	5+	5+
Criterion 3: NP marking	12	10

(+7 “unsure” cxns in 7 lngs)

- Occurs in almost $\frac{1}{2}$ of all constructions, in almost $\frac{3}{4}$ of languages with RCCs
- As a structural option, embedding is not rare at all

3. Multifunctionality of RCCs?

Are RCCs overwhelmingly multifunctional?

Conceptions of Australian RCCs generally highlight their multifunctionality,
- re: 'general subordinate clause' combining relative and adverbial functions

(e.g. Hale 1976, but Nordlinger 2006, Hendery forthc.)

(=3) Warlpiri (Western PN > Ngumpin–Yapa; Hale 1976: 78)

ngatjulu-lu \emptyset -*ṇa* *yankiri* *pantu-ṇu*, *kutja-lpa* *ngapa* *nga-ṇu*
I-ERG AUX emu spear-PST COMP-AUX water drink-PST

'I speared the emu which was/while it was drinking water.'

The picture is, in fact, much more nuanced

Construction type	Constructions	Languages
Dedicated cxn with dedicated marker	38	27
Dedicated cxn with non-dedicated marker	18	12
	(= 56; 59.6%)	(= 31; 67.4%)
Multifunctional cxn	34	27
[unclear]	4	4
TOTAL	94	46

→ Dedicated constructions **outnumber** multifunctional ones!

1. Dedicated cxn with dedicated marker

Outside of verb	Specialised clitic (on 1 st element and/or V)	4
	Pron/dem/article/interr/LOC	12
	Other freeform conjunction	3
Verbal	Case or other nominal marking on V (inflected/nmlsd)	14
	V:NMLSR/PTCP	5

Dedicated markers may still have non-clause linkage functions:

- in simple NPs: DEM, PRON, classificatory element, anaphoric suffix
- on V: ‘nominalizing’ root, case marking

(=1) Arrernte (Central PN > Arandic; Wilkins 1989: 427)

re *lhe-ke* [*artwe* [*unte-rle* *pwerte* *ine-ke-rle*]]-*kerte*

3SG.S go-PC [man [2sg.s-REL money get-PC-REL]]-PROP

‘She left with the man you got money from.’

(8) Duungidjawa (Southeastern PN > Waka–Kabic; Kite & Wurm 2004: 104)

nga-dju *nja-ngi* *djan-a* [*guranggur* *yangga-yi-a*]

1SG-ERG see-PST man-ACC [*spear* make-PST-ACC]

‘I saw the man who made a spear.’

1. Dedicated cxn with dedicated marker

A dedicated marker may have *partial* overlap with other functions:

Dedicated RCC marker:
Article agreement

(9) Mawng (Iwaidjan; Singer 2006: 151-152)

a. *pa awunny-uji-ny ja jurra [ja inny-atpa-ng]*.
SEQ 3M/3PL-show-PST.PUNCT MASC paper(MASC) [MASC 3M/3M-hold-PST.CONT]

'And he showed them the poster he was holding.'

b. *ngarri ngatpun-eya-wng pata ngarrkarrk [pata kurrup-u-ng ja kiyap]*.
1PL.EX 1PL.EX/3PL-see-PST.PUNCT PL two [PL 3PL/2PL-give-PST.PUNCT MASC fish]

'We saw the two who gave you the fish.'

c. *kayirrk la [ta y-urrurtpi-ny] Nganarru a-miraw-ng*.
then [LL 3MA-cooked-PST.PUNCT] song.name 3PL-sing-PST.PUNCT

'Then when it was cooked, they sang Nganarru.'

Dedicated ADV marker:
Fixed form of article

2. Dedicated cxn with non-dedicated marker

Same marker for REL and ADV clauses,

→ but functions are distinguished by syntax:

- **Positional differences** between REL and ADV; e.g.
 - *Embedded position* ← *interruption / adjacency*
 - *Differences in edge positions*:
 - e.g. ADV clauses flexible wrt MC
 - e.g. REL clauses restricted to right-edge position
- **Restrictions** on only one of the two clause types:
 - e.g. *specific argument roles (in Kayardild)*
 - e.g. *specific time reference (in Duungidjawu)*

Outside of verb	Unmarked clause (finite)	6
	Freeform conjunction	1
	Verb-bound conjunction	4
Verbal	Verb inflection (non-finite)	5
	Other non-finite verbs	2

2. Dedicated cxn with non-dedicated marker

(10) Kuuk Thaayorre (Northern PN > Paman; Gaby 2017: 451, 452)

- a. pam ith [*thangkar-nam*] yuuw yat
man(NOM) DEM:DIST [*laugh-P.IPFV*] far go:P.PFV
'the man *who was laughing* went off'

- *Obligatory adjacency*
- *MC-interrupting position allowed*

- b. ngay pam ii nhaawr [*kuta-ku waawarin-r*]
1SG(ERG) man(ACC) there see:PST.PFV [*dog-ERG chase-PST.PFV*]
'I watched that man (*while he*) was chased by the dogs'

Always right periphery

2. Dedicated cxn with non-dedicated marker

Many examples allow several interpretations

→ Is there ambiguity between two dedicated constructions (RCC vs ADV), or should we distinguish a dedicated RCC from a multifunctional RCC?

(11) Kuuk Thaayorre (Northern PN > Paman; Gaby 2017: 451, 452)

c. *ngay* *pam.ngongkom* *paanth.....ith* [*iipal* *ii* *yan*]
1SG(NOM) ignorant.of woman(ACC) DEM:DIST [*this.way* *there* *go:NPST*]

'I don't know that woman who is / while she is coming this way.'

Right edge AND adjacent

3. Multifunctional cxn

Finite	Freeform or clitic conjunction	6
	Conjunction bound to finite V	3
	Subjunctive inflection	2
	Case or nominal marking on finite V	2
	Unmarked finite clause (incl. prosodic means)	9
Non-finite	Case, nominal or other switch-reference marking on V	10
	Other non-finite V	3

3. Multifunctional cxn

Clues to distinguish between RC and ADV reading:

- Temporal adverbs to reinforce ADV reading (e.g. Diyari)
- Use of demonstratives to reinforce RC reading (e.g. Gooniyandi)
- Coreferential elements preferred at boundaries for RC reading (e.g. Nyulnyul)
- Contexts associated with NPs for RC reading, like elaborating afterthoughts (e.g. Jaminjung)

(12) Jaminjung (Schultze-Berndt 2000: 243)

ngiyina=nu yirrg burrurr-arra-m mayi, murrqun [burru-yu=ma warrb]
DIST=3SG.OBL tell/discuss 3PL:3PL-PUT-PRS man three [3PL-BE.PRS=SUB be.together]

‘they are discussing those people with him, the three (people) that are sitting there’

Note on complement clause constructions

- Many Australian languages do not have dedicated constructions for certain complement types, like perception and cognition
- Perception and cognition usually done through adverbial or **relative** constructions

One well-studied exception:

- Mawng ‘pseudo-relative’ (Singer 2007) clauses denote **events** but take the form of **entities** (i.e. taking the article; recall ex 9a-c)
 - Relative reading can be ruled out, because agreement is not with pivot

(13) Mawng (Iwaidjan; Singer 2007: 275)

la naka ngarrung-purru-n [*ja naka ja k-i-maju-0*].

and DEM.S.MA 1PL.EX/3LL-know-NP [MA DEM.S.MA MA PR-3MA-die-NP].

‘Because we know **that someone has died.**’

4. Embedding vs. multifunctionality

There is no one-to-one pairing:

	+embedded	–embedded
+dedicated	36 cxns	15 cxns
–dedicated	6 cxns	17 cxns

- Strong links between [**+embedded**] and [**+/-dedicatedness**]
- But no strong link between [**–embedded**] and [**–dedicated**]
 - since there are almost as many [**+dedicated**][**–embedded**] constructions!

This is strong evidence *against* Hale's claim of an 'adjoined (multifunctional) relative clause'

5. Conclusion

Summary of Australian relative clauses

- The study of relative clauses remains a thorn in the description of many languages
- But research has come a long way (Nordlinger 2006, Mawng 2007, Hendery forthc.)
- Our comparative study has provided new analytical tools + nuanced the image
- **Multifunctionality** and **'adjoined'** behaviour are **still** widespread
- But embedding remains available as a structural option in the **majority** of languages
- And dedicated RCCs are far more common than appreciated
- Future research can hopefully focus on some structural specifics;
e.g. accessibility, role of focus markers

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Thank you!

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