Conjugation Class Stability:
Charting the History of Conjugation Classes in Yolŋu Languages

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Introduction

Roadmap: Points to mention at the start

- Paradigmatic shift
- A nice case of categorial/form stability while shifting a lot of other things around.

Yolŋu languages

- Subgroup of Pama-Nyungan isolated from the rest of the family
- Eastern Arnhem Land (see map)
- c. 30 'clan lects' in at least 6 mutually unintelligible 'languages' in a network
- (complicated by multilingualism and multilectalism)
- Fairly well described in basic terms (e.g. for morphology)
- Number of speakers of varieties range from < 10 to > 5000 (Dhuwal a regional *lingua franca,* Golpa and Yan-nhaŋu highly endangered, losing out to Dhuwala and Dhuwal*)*

A typical Yolŋu verb system

- Verbs inflect for tense/aspect in conjugation classes.
- Most varieties have between four and six inflected verb forms.
- They do not inflect for person/number.
- Verbs combine with TAM particles.
- The number of conjugation classes varies between three and eight.
- Classes are of different sizes.
- Most languages also have a few irregular verbs.

An illustration: Yan-nhaŋu

Cl.	English	Present	Command	Past	Habitual
1	sing	*ḏarṯar'yun*	*ḏarṯar'yu*	*ḏarṯar'yana*	*ḏarṯar'yala*
	run	*gabatthun*	*gabatthu*	*gabatthana*	*gabatthala*
2a	hit	*buma*	*buŋu*	*bunha*	*buwa*
2b	go	*garama*	*garama/guruku*	*garanha*	*garawa*
2c	crawl	*wakalama*	*wakala*	*wakalanha*	*wakalawa*
3a	get big	*yindiyirri*	*yindiyi*	*yindiyina*	*yindiyala*
3b	cry	*ŋätji*	*ŋätji*	*ŋätjina*	*ŋätjiyala*
4a	sleep	*ŋorra*	*ŋorritji*	*ŋorrinha/ŋorrunha*	*ŋorriyala*
4b	stand	*bamparra*	*bamparrayi*	*bamparranha*	*bampirriyala*
4b	talk	*waŋa*	*waŋayi*	*waŋanha*	*waŋayala*
5a	chase	*ŋupaṉ*	*ŋupa*	*ŋupaṉa*	*ŋupala*
5b	cook	*bathan*	*batha*	*bathana*	*bathala*
6	work	*djäma*	*djäma*	*djäma*	*djäma*
irreg	eat	*ben*	*biya*	*binha*	*birra*
	do what?	*nhapiyan*	*nhapiya*	*nhapiyanha*	*nhapiyala*
	do this	*bin(a)munu*	*biyamunu*	*binha*	*(biyamunu?)*

Verbs and Particles

- Verbs combine with tense, aspect, mood and polarity particles
  - Auxiliaries
  - Serial verbs
  - Fossilized serial verbs
- Placement varies (includes second position and immediately following the verb)
- There is a complicated relationship between verb forms and particles.
- Particle and verb *jointly* determine the tense/mood/polarity of the phrase.

Example: Yan-nhaŋu negation and tense interaction (see Bowern 2006; Bowern *et al* 2008):

	Positive	**Negative**
Remote Past	*mananha* ***garanha*** [form 3]	*rulka (mananha)* ***garanha*** [form 3]
Yesterday Past	*mana* ***garama*** [form 1]	*rulka* ***garawa*** [form 4]
This morning	*mananha* ***garanha*** [form 3]	*rulka (mananha)* ***garanha*** [form 3]
Now	*mana* ***garama*** [form 1]	*rulka* ***garawa*** [form 4]
Future	*gurrku* ***garama*** [form 1]	*rulka (gurrku)* ***garama*** [form 1]
Imperative	***guruku*** [form 2]	*rulka* ***garama*** [form 1]

Reconstruction

- Methodology: owes a lot to Alpher (e.g. 1990) and Koch's (2007) 'etymological method'.
- Past Yolŋu work got part of the answer but …
  - Didn't look at all the languages [Zorc]
  - Looked only at suffixes [Waters]
  - Didn't reconstruct, just compared class numbers [Zorc, Wilkinson]
  - Didn't consider semantic shift [no one]
  - 'Normalized' the data [Zorc]

Reconstructed major classes with sample verbs (Supporting data for the reconstructions are available on request; a full write-up is in progress.)

	Class	**'Present' 'Yest. Pst'**	**'Potential'**	**'Imperative'**	**'Past$_1$'**	**'Past$_2$' potential+Past$_1$**	**Nominal**
1	*mukthun 'be quiet'	*mukthun	*mukthurru	*mukthurra	*mukthana	*mukthurruna	*mukthanara-
2a	*bathan 'cook'	*bathan	*bathu[rru]	*batha[rra]	*bathara	*bathuna	*bathanara-
2b	*ŋupan 'follow'	*ŋupan	*ŋupulu	*ŋupala	*ŋupara	*ŋupana	*ŋupanara-
3a	*nhäma 'see'	*nhäma	*nhäŋu	*nhäwa	*nhänha	*nhäŋala	*nhänara-
3b	*ŋäma 'hear'	*ŋäma	*ŋäku	*ŋäka	*ŋänha	*ŋäkula	*ŋänhara-
4a	*ŋäthi 'cry'	*ŋäthi	*ŋäthi[yi]	*ŋäthiya	*ŋäthinya	*ŋäthina	*ŋäthinyara-
4b	*ŋorra 'sleep'	*ŋorra	*ŋorri	*ŋorriya	*ŋorrana	*ŋorrina	*ŋorranhara

- Past$_1$ is often the basis for nominalizations, but in some conjugations the nominal form is laminal where the Past is apical.
- Classes 1 and 2 are subject to some analogical reformations in various languages (hence bracketing of [rra] and [rru]).
- Causatives inflect as 3a in all languages but Djinang and Dhaŋu, where they fall together with 1a.

- 'potential' descends as future in Central Yolŋu, imperative in Yan-nhaŋu, and both in Ritharrŋu.
- Potential and imperative forms based on vowel changes *u* ~ *a* are only found in Central and Southern Yolŋu, but I reconstruct them to Proto-Yolŋu on the basis of differences between *nhäŋu see-FUTURE and *nhäwa see-IMPERATIVE. However, it's possible that the distinction was not present for all conjugations.
- The nominal form is sometimes based on the Past (always in Yan-nhaŋu), but not in all cases, hence its separate reconstruction.
- The POTENTIAL form for *ŋäthi 'cry' may be reconstructible with an extra syllable, or there may be a difference in sub-conjugation between verbs like *ŋäthi and those like *waŋa 'talk', which has an form *waŋayi* in some languages (*waŋiyi* in Yan-nhaŋu), and *nyena 'sit', which has imperative *nyiniyi* in Yan-nhaŋu.
- $Past_1$ and $Past_2$ are not specifically designated as aspectual here, but $Past_1$ was probably perfective and $Past_2$ was perhaps aoristic, but the evidence is difficult and $Past_1$ has both perfective/resultative and imperfective meanings in the modern languages.
- I would also reconstruct the existence of uninflecting verbs, some of which alternate with inflected forms. These form the basis of a new conjugation of Macassan loans (and English loans like *bäyim* 'buy' and *riŋimab* 'ring, phone') in all languages but Djinang.

Djinang and Djinba: tense suffixation

- Only three classes
- Hard to line up cognates at first glance [therefore left out of work like Schebeck 2001].
- Waters gives categorial meanings to forms; other Yolŋu languages have forms labeled 'primary, secondary, etc' or generic labels.
- There's a continuous/noncontinuous split in forms.
- Waters argues for a phonological basis to the conjugations.[1]

Djinang Verb Forms

	non-past	yest. pst	tod. pst. cont	imper	tod. pst. irr	today past
Class 1	*-gi / -ngi*	*-mi*	*-nyi*	*-wi*	*-nyiri*	*-ngili / -li / -pirni*[2] */ -ngirni*
Class 2	*-gi*	*-nmi*	*-ni*[3]	*-rri*	*-rnir*	*-jini*
Class 3	*-ji*	*-ø / -rri*	*-nyi*	*-yi*	*-nyiri*	*-ni*

The problem: How do Proto-Yolŋu verbs descend in Djinang?

- Three areas that have changed:
  - Marking of the **forms**
  - Which verbs belong to which conjugation **classes**
  - What the forms **mean**

Forms

- Sound change

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[1] Waters (1979) analyzes Djinang conjugation classes as phonologically motivated; I find this analysis implausible, however. The phonological classes are essentially arbitrary, and there is a great deal of fossilized derivational morphology which allows us to make sense of the classes in morphological terms.

[2] Plus lenition of the verb stem *-bu* > *-wu*.

[3] In this form and the imperative and irrealis, the final trill *rr-* of the stem is deleted. In some verbs, "stem-final /rr/ of each stem … is deleted before all suffixes except today past". These are verbs like *nyumirr-gi* "smell" < *nhuman that would never have had a trill in the root etymologically, but would had had it in the future form. I assume reanalysis or misanalysis.

    - Laminals > palatals
    - Loss of vowel length
    - Loss of glottal
    - Final vowels > i
    - Voicing changes
- Grammaticalization of particles
    - *-gi* is not cognate with verb forms in other Yolŋu languages; it's cognate with the non-punctual aspect marker *ga*.
    - *(–mi* might have a similar particle source)

Conjugation Classes

- Inferred through studying class membership of cognate stems.
    - E.g. in most Yolŋu languages, *mukthun* 'be quiet' and its causative *mukmiyama / mukmaram(a)* inflect in different conjugation classes (Class 1a vs Class 3a above)
    - In Djinang, however, *mukjigi* and *mukmiygi* belong to the same class.
    - The same is true for all reconstructible pairs of this type.
    - Reconstructible Class 3 verbs like *buma 'hit', *nhäma 'see' and the like also inflect like class 1.
    - Djinang's class 1 has endings that reflect this merger (e.g. *–wi* and *–ngi* for imperative forms). [see table]
    - Other subclasses are collapsed:
        - 2a and 2b as 2
        - 4a and 4b as 3

Meanings of the Categories

- The **yesterday past** continues the old "present"
    - this is called 'Form 1' in most of the grammars of Yolŋu languages
    - in other Northern Yolŋu languages, yesterday past and present are the same (see Yan-nhaŋu forms above)
- the **today past continuous** continues the old "past$_1$"
    - this is called form 3 in the grammars
    - in other Northern Yolŋu languages, today past and remote past are the same (see Yan-nhaŋu above)
- the **non-past** is the old 'potential' plus a particle.
    - The potential is a future in some languages, an indefinite future in others, a combined future/imperative in others and an imperative alone in Yan-nhaŋu
- the **imperative** continues the Proto-Northern Yolŋu counterfactual/today negative (etc) form, and the Proto-Yolŋu imperative.
- the **today past irrealis** is the old nominal form.
- the **today past** [general] form has a variety of origins and is cognate with other past tense forms from various conjugations.

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Summary/Conclusions: Djinang paradigm descent

	Class	**~~'Present'~~ Yest. Pst**	**~~'Potential'~~ non-past**	**'Imperative'**	**~~'Past1'~~ today past**	**~~'Past2'~~ today past cont.**	**~~Nominal~~ tod. past irr.**
	*mukthun 'be quiet'	*mukthun	*mukthurru	*mukthurra	*mukthana	*mukthurruna	*mukthanara-
1	*mukjigi* 'be quiet'	*mukji.mi*	*mukji.gi*	*mukjuwi*	*muknyi*[4]	*[mukjili]*	*mukinyiri*
	*bathan 'cook'	*bathan	*bathu[rru]	*batha[rra]	*bathara	*bathuna	*bathanara-
2	*bachigi* 'cook'	*bachin.mi*	*bachi.gi*	*bachirri*	*[bachijini]*	*bachini*	*bachirnir*
	*ŋupan 'follow'	*ŋupan	*ŋupulu	*ŋupala	*ŋupara	*ŋupana	*ŋupanara-
	[this verb is not found in Djinang]						
	*nhäma 'see'	*nhäma	*nhäŋu	*nhäwa	*nhänha	*nhäŋala	*nhänara-
1	*nyangi* 'see'	*nyami*	*nyangi*	*nyawi*	*nyanyi*	*nyangirni*	*nyanyiri*
	*ŋäma 'hear'	*ŋäma	*ŋäku	*ŋäka	*ŋänha	*ŋäkula	*ŋänhara-
	[this verb and class is not found in Djinang]						
	*ŋäthi 'cry'	*ŋäthi	*ŋäthi[yi]	*ŋäthiya	*ŋäthinya	*ŋäthina	*ŋäthinyara-
3	*ngajiji* 'cry'	*ngaji*	*ngaji.ji*	*ngajiyi*	*ngajinyi*	*ngajini*	*ngajinyiri*
	*ŋorra 'sleep'	*ŋorra	*ŋorri	*ŋorriya	*ŋorrana	*ŋorrina	*ŋorranhara
3	*ngurriji* 'sleep'	*ngurri*	*ngurri.ji*	*ngurriyi*	*ngurrinyi*	*ngurrinyini*	*ngurrinyiri*

[4] Inferred from the rules in Waters (1982); Waters doesn't give full paradigms. But if true the loss of-ji- is explicable but unexpected.

Djinba Verb Forms:

	Fut	Pot	Imp	YPI, PRI	YPA, PRES	TPA, RPA	TPI, RPI, NML
Class 1	*-mak*	*-mitj* *-Guy*	*-(V)ng*	*-(u)w* *-(a)w*	*-a* *-am* *-im*	*-NGal*	*-nya* *-inya*
Class 2	*-nmak*	*-nmitj*	*-ng,* *-lk,* *-rrk*	*-l* *-rr*	*-n*	*-n* *-yin* *+rr-yin*	*-na*
Class 3	*-k, -rrak*	*-tj, -rritj*	*-y*	*-y*	*-ø* *-rr*	*-n* *-n*	*-nya*

Part of the problem is sound change: both Djinang and Djinba underwent a sound change that changed many final vowels to *i* (the conditioning environment is a bit mysterious; it's partly morphological). In conjunction with this, there were a couple of sets of palatalization changes, and the collapse of a distinction in vowel length and between lamino-dental and lamino-palatal stops.

Another problem is presentation - since stems and inflection are fused for a few of the conjugation classes and do not readily lend themselves to segmentation, and since there are subtractive forms (where part of the stem deletes), Waters' and others' presentations of these forms with different morphological analyses actually makes it harder to see the commonalities.

The third problem is that the semantics of the verb categories differ across the Yolŋu bloc. There has been a tendency to assume similarity (that is, that Yolŋu is a dialect chain, not a set of languages) and this has had both a normative influence on descriptions and led to problems in recognizing the real differences between the varieties.

Two sets of changes have obscured the cognacy of Djinang/Djinba verb conjugations. First is the univerbation of tense/aspect particles with the verb. For example, Djinba's future suffix *-(n)mak* is partially cognate with the widespread adverb/dubitative particle *mak* ('maybe'). The *-n-* component of the suffix is the only part which continues old verb morphology. Separating etymological particles from old verb morphology, along with undoing the sound changes, allows us to recover a considerable amount of Proto-Yolŋu morphology.

A full stop . is used to separate non-cognate material in the Djinang forms.
Classes are named after the reconstructed base (primary) suffixal form, rather than being numbered.

-THUN class:
Djinang has conflated this and the –MA class

***-THUN class:** Example: *mukthun "be quiet", arranged by cognate form (**not** identical function)[5]

	***mukthun**	***mukthurru**	***mukthurra**	***mukthana**	[6]	***mukthanara**	
Djinang	*mukji.mi*	*mukji.gi*[7]	*mukjuwi*	*muknyi*[8]		*mukjinyiri*	*mukjili*
Djinba	*wukirriyu.m*	*wukirriyu.mitj* *wukirriyu.mak*	*wukirriyuw*	*wukirriyunya*			*wukirriyuwal*
Yan-nhaŋu	*mukthun*	*mukthu*		*mukthana*		*mukthanara-*	*mukthala*
Nhaŋu	*mukthun*	*mukthu/a*[9]		*mukthana*		*mukthanara*	*mukthala*
Wangurri	*mukthun*	*mukthu*	*mukthuwa(rra)*	*mukthunda*	*mukthuwan(a)*		
Gälpu	*mukthun*	*mukthu*	*mukthuwa(rra)*	*mukthunda*	*mukthuwan*		
Dhuwal	*mukthun*	*mukthurr*	*mukthurr*		*mukthunan*		
Dhuwala	*mukthun*	*mukthurru*	*mukthurra*	*mukthuna*	*mukthurruna*	*mukthunara*	
Ritharrŋu	*mukun*[10]	*mukurru*	*mukurra*	*mukuna*		*mukunrawu*	

Zorc (1986) separates this inflectional class from verbs such as *ŋupan* 'chase' and *bathan* 'cook'. Presumably this is on the grounds that –thun verbs are very frequent (and productively derived), whereas the others are a closed class. However, it is not clear to me why Classes 1 and 5 (particularly 5a; 5 itself has different future inflection) should not be treated as subclasses. There is evidence from cross-inference (e.g. the –*ala* forms in Djinang/Djinba and (Yan-)Nhaŋu) that the two are close. Note that this paradigm is comparatively all over the place, cf the –MA forms, which are much more consistent.

Djinang and Gälpu (and Djinba) inflect causatives in the same paradigm as this. This is an innovation. I would class it as a major shared innovation in Northern Karnic. (Djinang/Djinba are thus conflictingly subgrouped.)

I think what happened with the future/imperative forms: Central (and Southern) Yolŋu have a number of morphological forms with a trill, where Northern Yolŋu is missing the trill. Compare the comitative –mirri ~ -mirr ~ -mi; Wangurri *ŋaya* '1sg' vs *ŋarra* in the rest of Yolŋu; and a few others. Therefore, I strongly suspect that the Northern Yolŋu forms *mukthu-* are an innovation, and that *mukthurru > **mukthuwu > mukthu, and *mukthurra > mukthuwa.

I assume that the forms in the final column are independent innovations, that is, a –n suffix built on a counterfactual form.

[5] I give both the causative and inchoative forms for Djinang. They are inflected in the same way, but in all the other languages, the inchoatives do not have the same paradigm as the causatives.

[6] Some form of counterfactual plus another suffix.

[7] The voicing in the Djinang form is mysterious, assuming it's not just an orthographic convention.

[8] Inferred from Waters' (1982:144, nt 11) rules, but this looks really wrong to me.

[9] I have no record of a form like this in my Yan-nhaŋu data, but it appears in Schebeck (2001).

[10] Inferred from grammar. The loss of –th- here is regular and a sound change (I believe).

-AN/-A<u>N</u> Class

Example: *bathan ‘cook’

			*bathan	*bathana	*bathurru		*bathara			
Djinang[11]	*bachi.gi*		*bachin.mi*	*bachini*	*bachirri*		*bachirnir*	*bachijini*		
Djinba			*batjan.mitj* *batjan.mak*					*batjiyin*	*batjal*	
Yan-nhaŋu	*batha*		*bathan*	*bathana*					*bathala*	
Nhaŋu										
Wangurri	*[ŋayatha]*	*[ŋayathu]*	*[ŋayathan]*	*[ŋayathana]*		*[ŋayatharra]*		*[ŋayathan]*		*[ŋayathanda]*
Gälpu	*biyarrtha*	*biyarrthu*	*biyarrthan*	*biyarrthan(a)*						
Dhuwal			*bathan*	*bathana*	*bathurr*	*bathurr*	*bathar*			*bathanara*
Dhuwala			*bathan*	*bathana*	*bathurru* *bathulu*	*bathurra*	*bathara*			*bathanara-*
Ritharrŋu			*bathan*		*bathurru*	*batharra*	*batharra*			*bathanara*

I assume that Proto-Yolŋu had two subclasses, one ending in –*n* and the other in –*<u>n</u>*. The distinction is lost in Dhuwal but maintained in Yan-nhaŋu and Ritharrŋu.

Some irregular verbs also pattern in similar ways to this class. This include the pro-verbs *nhaltjan* and *bitjan*.

I would reconstruct two subclass I think, with mergers in different ways in different Yolŋu varieties. This is the area of least consistency in conjugation class.

[11] These verbs are Class II in Waters’ system.

*-MA$_1$ class: Example: *nhäma "see"

	*nhäŋu	*nhäma	*nhänha	*nhäwa	*nhänara-		*nhäŋala	*nhäŋa	
Djinang[12]	*nyangi*	*nyami*	*nyanyi*	*nyawi*	*nyanyiri*	*nyangirni*			
Djinba	*nyaŋi*	*nyamitj* *nyamak*	*nyanya*	*nyawi*		*nyaŋa̲ɲ*			
Yan-nhaŋu	*nhäŋu*	*nhäma*	*nhänha*	*nhäwa*	*nhänhara*				
Nhaŋu									
Wangurri	*nhäŋu*	*nhäma*			*nhänharawu*		*nhäŋal(a)*	*nhäŋa*	*nhäŋarra*[13]
Gälpu	*nhäŋu*	*nhäma*	*nhänha*		*nhänhara-*		*nhäŋal*	*nhäŋa*	
Dhuwal	*nhäŋu*	*nhäma*			*nhänhara*		*nhäŋal*	*nhäŋ.u*[14]	
Dhuwala	*nhäŋu*	*nhäma*			*nhänhara*		*nhäŋala*	*nhäŋa*	
Ritharrŋu	*nhäŋu*	*nhäma*	*nhänha*	*nhäwa*	*nhänhara-*		*nhäwala [?]*		

Causative-derived verbs also belong to this class in all languages except Djinang and Gälpu, where they have merged with the THUN class.

There is something funny going on with the verbs that have –ku as the future vs those with –ŋu.

nhäwa vs nhäŋa?

*-MA$_2$ class

Djinang									
Djinba									
Yan-nhaŋu	*ŋayathama*	*ŋayatha*			*ŋayathanha*		*ŋayathawa*		
Nhaŋu									
Wangurri									
Gälpu									
Dhuwal									
Dhuwala	*ŋayathama*	*ŋayathulu*	*ŋayathulu*	*ŋayathaŋala*	*ŋayathanha*	*ŋayathanhara*			
Ritharrŋu									

Yan-nhaŋu – if they have –ma, they have –wa as the habitual form.

[12] Djinang inflection is the same as the –THUN class.

[13] Imported from another paradigm I assume

[14] The difference between -u and -a in Dhuwal (Djambarrpuyŋu) is erased due to sound change in non-monosyllabic roots, and leveled by analogy in the monosyllabic roots.

Ŋayathama in Wangurri is a 1C verb; ŋayathan, ŋayatharra etc.

Example: ŋäma ‘hear’

Djinang	*girimi*		*[giri]*	*giriwi*	*girinyi*	*girinyiri*
Djinba						
Yan-nhaŋu	*garama*	*guruku*		*garawa*	*garanha*	*garanhara*
Nhaŋu						
Wangurri						
Gälpu	*ŋäma*	*ŋäku*	*ŋäka*	*ŋäkul*	*ŋänha*	*ŋänhara*
Dhuwal	*ŋäma*	*ŋäku*	*ŋäku*	*ŋäkul*	*ŋänha*	*ŋänhara*
Dhuwala	*ŋäma*	*ŋäku*	*ŋäka*	*ŋäkula*	*ŋänha*	*ŋänhara*
Ritharrŋu	*ŋäma*	*ŋäku*	*ŋäwa*	*ŋäwala*	*ŋänha*	*ŋänhara*

Wangurri doesn’t seem to have a reflex of this type of verb. FIND OUT WHICH VERBS SHOULD BE RECONSTRUCTED TO THIS CLASS.

Example: *l̲ap-* “open”, arranged by cognate form (**not** identical function)

		***l̲apmarama**				***l̲apmaranha**	***l̲apmaranhara**	***l̲apmaraŋala**
Djinang	*lapmirigi*	*lapmirimi*			*lapmiruwi*	*lapmirinyi*	*lapmirinyiri*	*lapmiringili*
Djinba								
Yan-nhaŋu		*l̲apmiyama*	*l̲apmiyaŋu*		*l̲apmiyawa*	*l̲apmiyanha*	*l̲apmiyanhara*	
Dhuwal		*l̲apmaram*	*l̲apmaraŋ*	*l̲apmaraŋ*		*l̲apmaram*		*l̲apmaraŋal*
Dhuwala		*l̲apmarama*	*l̲apmaraŋu*	*l̲apmaraŋa*		*l̲apmaranha*	*l̲apmaranhara*	*l̲apmaraŋala*
Gälpu								
Ritharrŋu								

-mara- causative in Wangurri (p113) goes on the end of the ‘neutral’ (primary) form. E.g. dhawa*t̲*thun ‘come out’ has two causatives: dhawa*t̲*thu-ma-n or dhawa*t̲*thun-mara-m [where, note, it’s changed conjugation class]

-THIRRI class [inchoatives]

	*-thirri	*-thi	*-thina		*-thiya [?]	*-thinyara-	
Djinang	*dalpamdjirri*	*dalpamdjidji*	*dalpamdjini*		*dalpamdjiyi*	*dalpamdjinyiri*	*dalpamdjinyi*
Djinba							
Yan-nhaŋu	*yindiyirri*	*yindiyi*	*yindiyina*	*yindiyala*		*marŋgithinara*[15]	
Nhaŋu							
Wangurri							
Gälpu	*marŋgiyi*[16]	*marŋgiyi*	*marŋgiyin*		*marŋgiya*	*marŋginya(ra)*	
Dhuwal	*marŋgithirr*	*marŋgithirr*	*marŋgithin(a)*		*[marŋgithirr]*	*marrŋgithinyara-*	
Dhuwala	*marŋgithirri*	*marŋgithi*	*marŋgithina*		*marŋgithiya*	*marŋgithinyara*	
Ritharrŋu	*marŋgithirri*[17]	*marŋgithi*	*marŋgithina* *marŋgithinya*		*marŋgithiya*	*marŋgithina-* *marŋgithinya-*	

Class 3 in Djinang is really the amalgamation of the inchoatives on the one hand (with a slightly different 'yesterday past' inflection) and the *nyena,* etc class on the other. Waters treats them as one class; I'd split them into subclasses.

[15] By analogy with the past; innovation
[16] with lenition [unexpected] and loss of rr [expected]. The lenition parallels that found in Yan-nhaŋu.
[17] Inflection inferred from grammar and presence of this root in language in the dictionary.

- XX Class
Example: *ŋäthi- ‘cry’

Djinang	*ngajiji*	*ngaji*	*ngajinyi*	*ngajiyi*	*ngajiyiri*	*ngajini*	
Djinba							
Yan-nhaŋu	*ŋätji*	*ŋätji*				*ŋätjina*	*ŋätjiyala*
Nhaŋu							
Wangurri							
Gälpu	*ŋätji*	*ŋätji*	*ŋätjinya*	*ŋätjiya*		*ŋätjin*	
Dhuwal	*ŋäthi*	*ŋäthi*		*ŋäthi*	*ŋäthinya(ra)*	*ŋäthin(a)*	
Dhuwala	*ŋäthi*	*ŋäthi*		*ŋäthiya*	*ŋäthinya(ra)*	*ŋäthina*	
Ritharrŋu	*ŋäthi*	*ŋäthi*		*ŋäthiya*	*ŋäthinya(ra)*	*ŋäthina*	

Subclasses in Central Yolŋu only?

*ŋorri- ‘sleep’

	***ŋorri**	***ŋorra**	***ŋorrVna**		***ŋorranhara**		
Djinang	*ngurriji*	*ngurri*	*ngurrinyi*	*ngurriyi*	*ngurrinyiri*	*ngurrinyini*	
Djinba							
Yan-nhaŋu	*ŋorritji*	*ŋorra*	*ŋorrunha* *ŋorrinha*				*ŋorriyala*
Nhaŋu							
Wangurri							
Dhaŋu	*ŋoyay*	*ŋoya*[18]	*ŋoyanha*	*ŋoyiya*	*ŋoyanhara*	*ŋoyan*	
Dhuwal	*ŋorri*	*ŋorra*	*ŋorrana*	*ŋorri*	*ŋorranhara*		
Dhuwala	*ŋorri*	*ŋorra*	*ŋorran*	*ŋorriya*	*ŋorranhara*		
Ritharrŋu							

[18] nice confirmation of the rr > y sound change. Inflection is inferred from combination of dictionary and paradigm list. McLellan doesn’t seem to include paradigms for these verbs.

Djinang and Djinba: conjugation class membership

The second change involves the collapse of conjugation classes. Five classes can be reconstructed to the proto-language, plus an uninflecting class, mostly for loans. Djinang and Djinba have collapsed the two largest classes into a single conjugation; they have eliminated the uninflecting class and have distributed stems from the third-largest class amongst the first and second classes. Moreover, some common productively inflected stems in other Yolngu languages have moved conjugation class and now receive minor class inflection.

Discussion

Are Djinang verbs cognate with the rest of Yolŋu? Yes, but it's hard to see because of 1) sound change and 2) meaning change.

While the Djinang/Djinba conjugations are homologous to one another systemically, and stand apart from other Yolngu languages, they recruit different verb morphology and different particles. This thus represents an interesting case of systemic isomorphism without formal similarity.

Methodological point: reconstructing morphology in isolation is dangerous; describing languages like this with extremely abstract morphological representations is also a bit sketchy