A complex verb complex: templatic morphology and affix order in Aiwoo

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The Aiwoo verb complex

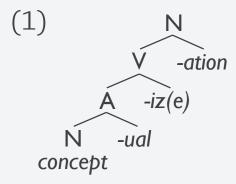
- Aiwoo: Oceanic language (Ross & Næss 2007); Solomon Islands, Temotu Province, Reef Islands; data collected by Ashild Næss (see e.g. Næss 2015a,b and ref.s therein)
- Potentially fairly complex verb forms, where the affixes' positions do not clearly correlate to their function/category

PM	Asp	PM	Stem											PM		Α	Q	Post-verbal clitics				
-3	-2	-1		0									1		7	2	4	5	6	7	Q	
			[a	a'	b	c]	[b'	c']	[b"	c"]	[]	Д	a	Ь	C] ~)	4	ر	6	,	0

- How do we explain this? How much of it can we account for?
- Spoiler: almost all slots can be accounted for, apart from slot 7

How to build words: layered morphology and templatic morphology

- •Simpson & Withgott (1986): two systems, layered vs templatic morphology
- Layered: morphemes are added one at a time, generating (headed) hierarchical structures



- **Templatic:** rigid linear string of «slots», into which (groups of) morphemes are inserted (in paradigmatic alternation)
- (2) Ahtna (Athapaskan; Good 2016: 13 (Kari 1989): naghiziłniige

THM-QUAL-IPFV.NEG1-S-2SG-CLF-feel-IPFV.NEG2-IPFV.NEG3

«You have not yet found a fabric-like object»

Discontinuous dependencies in templatic morphology

- •Importantly: templatic systems allow for **discontinuous dependencies**: morphemes can depend on each other from a distance
- E.g. Swahili (Stump 1997: 221–222):
- (3) a. tu-m-pige

 1PL.SUBJ-3SG.OBJ-beat.SBJV

 «That we may beat him»
 - b. tu-si-m-pige

 1PL.SUB|-NEG-3SG.OB|-beat.SB|V

 «That we may not beat him»

```
neg-1pl.subj-3sg.obj-beat.ind

«We don't beat him»
```

«Templatic morphology» is not a good explanation?

- Layered Morphology: the distribution and behaviour of affixes is predictable based on other factors, such as syntax or semantics (e.g. Baker 1985, Bybee 1985)
- Templatic Morphology: the distribution and behaviour of affixes are unpredictable/ unexpected, and we must stipulate an arbitrary linear template
 - Not a satisfying explanation; more a restatement of the problem
 - Many studies have tried to argue that a given language is not templatic, e.g. Rice (2000) on Athapaskan, Korotkova & Lander (2010) about Adyghe

Roadmap

• My goal: push a layered-morphology analysis of the Aiwoo verb as far as possible

- Overview:
 - Stem: clearly hierarchical
 - Person marking system: maybe not clearly hierarchical, but it does not need arbitrary stipulations
 - **Slot 7**, the circumstantial voice marker *=Cä*: cannot be accounted for

The stem of the Aiwoo verb (1)

• Nuclear-layer verb serialization: the first stem determines voice/valence, the following ones modify it

```
(4) ku-lu-[[po]-[to]-[du]]=kaa
IPFV-3AUG-go-go.in-finish=FUT
«They will all go in»
```

The stem of the Aiwoo verb (2)

• If the first stem is in undergoer voice (UV), the following ones have to agree in UV, with the suffix -i/-nyii:

```
(5) a. inâ lâ ki-[[âwââ]-[mana]]=kâ b.
                     IPFV-pull.av-very=DIST
       3<sub>MIN</sub>
               DIST
       «He catches a lot (of fish)»
```

- ki-**[[ââ]-[mana-i]]**-mu=kâ IPFV-pull.uv-very-uv.agr=DIST «You catch a lot (of fish)»
- This suffix behaves recursively: every following stem will take it
- (6) a. bäli engeke i-[[kää]-[päko-i]]-no b. i-[[[kää]-[päko-i]]-[mana-i]]-no side this ASP-know.uv-good-uv.agr-1min «I know this topic well»

```
ASP-know.uv-good-uv.agr-very-uv.agr-1MIN
«I know it very well»
```

The stem of the Aiwoo verb (3)

(6) b. i-[[[kää]-[päko-i]]-[mana-i]]-no ASP-know.uv-good-uv.agr-very-uv.agr-1min «I know it very well» UV stem [1+2]+3UV stem 1+2 UV stem 3 Hierarchical UV mana UV stem 2 UV stem 1 'very' structures! UV kää päko (UV) 'good' 'know'

Person marking – prefixes: not all person markers are born alike

- Prefixes for AV/intransitives, suffixes for UV/CV
- •All prefixes are before aspect; only 3AUG *li* is after aspect

```
(7) me-ki-vevaale-wâ=to=wâ (8) dowâlili lâ ki-li-pevaale-mä=to=wâ

1AUG-IPFV-wait-
DIR2=now=DIST
«We wait»

(8) dowâlili lâ ki-li-pevaale-mä=to=wâ
child DIST IPFV-3AUG-wait-DIR1=now=DIST
«The children are waiting»
```

- Generalization: 1st/2nd person is before aspect, 3rd person is after aspect (3min is not marked anywhere)
- Typical split 1st/2nd vs 3rd person!
- The two different positions are explained if these markers are of different nature

The prefix system (2)

- Linear sequence: 1st/2nd ASP 3rd(Aug) (– STEM)
- Exactly the same pattern as in Athapaskan languages (Rice 2000: 182–183; Slave, in (9), is head-final, so the surface order mirrors the Aiwoo one, i.e. 3rd ASP 1st/2nd):
- (9) a. ni-ne-o-h-'i (1sg: -h-) b. ni-ke-n-eo-'i (3pl/DU: -k-) ('hide', optative)
- Assumption: 3rd person is no «person», but it represents the absence of person (e.g. Benveniste 1971, Harley & Ritter 2002, etc.)
- Then: these «3PL» (3AUG) markers are in fact only *number markers* (PL/AUG), i.e. they mark agreement in number, but not in person
- Rice (2000) connects the asymmetry with respect to aspect to the different discourse status of 1st/2nd (inherently referential) to 3rd (has to get its reference from somewhere)

The suffix system: two constructions

• In UV (and CV), the A is always marked; for some combinations of A and O, the O is marked as well:

```
(10) a. i-togulo-i=laa

ASP-hit-3AUG=FUT

«They will hit him/her/it»
```

- The construction in (10b,c) occurs whenever:
 - A = 1min, O = 2nd person (as in 10b); or
 - A = 3min, O = non-3min (as in 10c).

The suffix system: a direct/inverse split

- The Aiwoo system is split along two interwoven hierarchies: a person hierarchy (2 > 1 > 3) and a number hierarchy (AUG > MIN)
- When the A is lower than the O, a special construction is used (the one with two suffixes) = inverse construction
 - A = 1min, O = 2nd person \Leftarrow 1 < 2, min \leq {min, aug}
 - A = 3MIN, O = non-3MIN \iff 3 \leq {3, 1, 2}, MIN \leq {MIN, AUG}
- Crucially: when the A is high on either hierarchy (2nd, AUG), the inverse construction is blocked altogether: A = 3AUG triggers the direct construction, even if 3rd person is low
- Direct/inverse splits are not known from Austronesian languages...
- Conclusion: the person marking system is complex, but it can be explained/accounted for
 - we do not need linear stipulations

The circumstantial voice marker $=C\ddot{a}$

- Circumstantial voice: highlights a peripheral argument as the most prominent one of the clause (locative, instrumental, benefactive, etc.)
- This clitic can be added to both INTR, AV, UV (already strange: voice/valence morphology is usually stem-internal/close to the stem...)
 - (11) ilâ dee ku-nubo-epu-i=lä

 that this IPFV-die-also-3AUG=CV

 «They also die of this thing» (INTR)

 (12) nye-ki-vei-lâ-i=lä benuwää

 BN:way-IPFV-weave.AV-go.out-3AUG=CV kind.of.basket

 «The way in which they weave the benuwää»
 - (13) *lâto* ile ki-vili-wâ-no=ngä

 then this IPFV-weave.uv-DIR21MIN=CV

«Now I weave with them»

=Cä and person marking

• = $C\ddot{a}$ influences the person marking system: INTR/AV normally take prefixes (12), but with = $C\ddot{a}$ they take suffixes (13)

(14) me-nä-vei (15) nye-ki-vei-lâ-i=lä benuwää

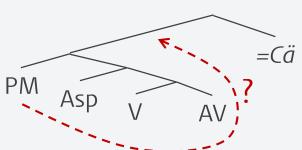
1AUG-IRR-weave.AV BN:way-IPFV-weave.AV-go.out-3AUG=CV kind.of.basket

«We (want to) weave» «The way in which they weave the benuwää»

Problematic! How can this be modelled in a layered fashion?

UV verbs: ✓

 $= C\ddot{a}$ PM



AV verbs: X

Asp

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Summary and prospects

- Several of the morphemes occurring within the Aiwoo verb complex can be accounted for without making arbitrary linear stipulations
 - The stem shows recursive behaviour
 - The person marking system shows a 1st/2nd vs 3rd split in the prefix system, and a direct/inverse split in the suffix system
 - The circumstantial voice marker =Cä eschews explanations: it influences the person marking system «from the outside»
- How do the TAM-related morphemes interact with each other? How should we account for them?
- How should we solve the conundrum of $=C\ddot{a}$?

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