A Grammatical Sketch of Arapesh

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Preface

This document is the product of around 10 hours of elicitation spent with a speaker of a variety of Mountain Arapesh, a language in New Guinea. Naturally, all findings herein are tentative.

Orthographic representation of Arapesh words will be given in modified IPA: contrasts that the author does not believe to be phonemic will not be represented orthographically. (For example, [ɛ] and [e] will both be represented as /e/.) Cf. §2.2 for details.

All Arapesh forms were given by Jacob Sonin, one of the few remaining speakers of his variety of Arapesh. Mr. Sonin also speaks English and Tok Pisin.

1 Overview

In traditional typological terms, Arapesh is a fusional language. In other words, assuming the way we have segmented Arapesh utterances into words is correct, it appears that (a) the words consist of more than one morpheme on average, meaning it is not isolating, and (b) these morphemes combine with each other in ways that are not purely concatenative, meaning it is not agglutinative.

One of the most marked characteristics of Arapesh is its system of phonological alternations. *Ceteris paribus*, when one noun is switched for a "different" one, the words that in some sense "depend" on it are usually significantly changed. Specifically, in the noun's "dependent" words, some sounds occur which aren't predictable just from the noun's own sounds. For this reason, it is claimed that these changes are not purely phonological, and that instead Arapesh has *word classes*, categories of nouns which determine the inflectional patterns of both the noun and words that depend on it.

Consider these examples:

(1) **t**a**t**udə numba**t** **t**agək
that dog die

'That dog dies'

(2) **g**a**g**idə bo**g**
that pen
'That pen'

(3) orubai**gw**i numba**u** **gw**agək
many dogs die
'Many dogs die'

(4) bu**k**
book
'book'

(5) orubai**w**i bu**mep**
many books
'many books'

From (1) and (2) we see that the head words' (*numbat* and *bog*) dependents (*tatudə* and *gagudə*) have inflected based on what we might refer to as *thematic sound*s, which are rendered in boldface. Further, in (1), we see that the predicate being applied to the noun phrase has also taken on this thematic sound.

But consider (3). The sounds that are conditioned by the noun's class need not be identical to, or even closely resemble, the sound present in the noun's dependents. Even the thematic sounds of a single noun in the singular and plural numbers need not have any relation *prima facie*: it's hard to say what t and u have in common.

We see this happening also in (4) and (5), with the notable difference that *buk* is an English loanword. Apparently, it was incorporated seamlessly into an Arapesh noun class, as it is hard to imagine how else it was granted the plural form *bumep*. This illustrates one of the biggest questions raised by the Arapesh data. We have clear evidence that noun classification is a productive process in Arapesh. What, then, are the criteria by which Arapesh noun classes are differentiated? These criteria could be phonological, semantic, or perhaps neither.

Arapesh's apparent word order is SVO.

2 Phonology

Arapesh's phonemes consist of at most 12 monophthongs and 5 diphthongs, and no more than 25 consonants. Suprasegmentals are largely inert in differentiation of words: any differences in vowel quantity, tone, or nasality seem to be inconsequential at the lexical level. There are two exceptions: (a) owing to the paucity of our data, it is not clear yet whether stress is phonemic, and (b) Arapesh exhibits some vowel alternations that may be indicative of vowel harmony, though it is as yet unclear.

The hunt for these phonemes has been confounded by our consultant's variability in pronunciation, which is often dependent on his degree of enunciation. Of course, this is to be expected in any human speaking a natural language, but this deserves note because of how it has made unclear the degree to which some segments are differentiated. While we might get one "normal" form after prompting our consultant, further prompting, either in the form of a request for repetition or a repetition of our own, sometimes elicits a form that sounds very different to our Anglo ears. These differences can come in the form of quality change (*g**ə**nikwadai* vs. *g**a**nikwadai*) and elision (*orubai**w**i* vs. *orubai**gw**i*), among others. We and our consultant have done our best to ensure we are getting these more defined, enunciated forms.[1]

Luckily, many of Arapesh's sounds are familiar to the author's ear, but some, especially among the vowels, are foreign and hard to discern. Uncertainty will be noted.

	Labial	Dental	Alveolar	Palatal	Velar	Glottal
Stop/Affr.	p b	t d	t͡ʃ d͡ʒ		k g	
Fricative	ɸ	s			x	h
Flap/Glide			r	j	w	
Nasal	m	n		ɲ	ŋ	

Figure 1: Arapesh consonants

	Initial	Medial	Final
p	worɨp 'river'	əpə 'we'	rowep 'fruits'
b	bog 'pen'	ɲibɨr 'stomach'	wab 'night'
t	tapwe '(dog) sits'	ərmatok 'woman'	numbat 'dog'
d	dok 'today'	nidawik 'daughter'	NOT OBSERVED
t͡ʃ	t͡ʃup 'leaf'	et͡ʃau 'bag'	bijet͡ʃ 'two (thighs')'
d͡ʒ	d͡ʒuehas 'hot'	gid͡ʒɨrɨk	NOT OBSERVED
k	eik 'I'	okok 'she'	aduk 'outside'
g	bog gani 'pen and ...'	ɲumanigəs '(be) cold'	jəməg 'face'

Figure 2: Stop and affricate correspondence table

2.1 Consonants

2.1.1 Stops

Among the stops and affricates, voicing is undoubtedly phonemic in the word-initial and word-medial positions. It is as yet unclear whether Arapesh neutralizes this distinction in the word-final position. Both /d͡ʒ/ and /d/ are unobserved in this position, although /b/ and /g/ (to the author's ear) have occurred in this position. It may be that either there are

[1]However, it's worth noting that by doing this we're imposing our own structure on the data, compromising its integrity in the hope that the enunciated forms will shed more light on the grammatical mechanisms of Arapesh. We must not ignore the "normal" forms, because they are important, and indeed the norm, in everyday speech. Compare the "normal" pronunciation of <photography>, [fətɔgrəfi], with its "enunciated" pronunciation, [fotɔgrəfi]. Chances are that native English speakers use the former more in organic communication.

Arapesh words out there yet to be heard with these sounds, or that Arapesh only enforces a voicing neutralization for the postalveolar affricates and dental stops. The latter is a situation the author has never encountered in a language, so the former seems more likely.

Aspiration, as in English, is not contrastive, although it occurs in some environments more often than in others. For example, /t^h/ can be heard often word-initially as in *numbat tani* 'the dog and...', but it is usually only pronounced reliably word-finally if our consultant is making conscious effort to enunciate.

2.1.2 Fricatives

/s/ is a robust phoneme. Consider minimal pair t͡ʃup, 'page', t͡ʃus 'pages'. /ɸ/ and /x/ are found exclusively at the end of words, with the lone exception of /ekixnau/ 'my tooth'. If we dismiss the /ekixnau/ as perhaps a mishearing of some other form, then these posited phonemes /x/ and /ɸ/ become incredibly suspect. /vx/, /vɸ/, and /v̥v/ (for some vowel /v/) are all phonetically very similar to an English speaker, who is natively familiar with none of these sequences. And even if we trust that we correctly heard /ɸ/ in some words and /x/ in others, it may very well be that these sounds are in free variation for Arapesh speakers with no great difference in perception. A future test to perform would be to deliberately replace one apparent segment with another, e.g. /x/ for /ɸ/, in an effort to get the consultant to either accept or reject the substitution.

An acceptance would lead us to think that perhaps word-final vowel devoicing is a feature of Arapesh, if we consider the features perceived like [+VELAR] and [+LABIAL] as merely incidental with the devoiced vowel and not characteristic of it. A rejection would lead us closer to a conclusion that Arapesh has these consonant phonemes only word-finally, or some other way of accounting for these sounds.

/h/ is well-supported in the initial and medial positions, as in /auhwi aropa hani/ 'red cloth and...', but the author never recorded it in the final position. We then must ask whether it is more likely that there is an imperfection in the analysis or that Arapesh simply does

not distribute this sound word-finally. This is not unheard of, as this is the distribution of /h/ in English. But given the phonetic similarity of [h] to [ɸ] and [x], two hypotheses seem most plausible. First, the latter sounds two are allophones of /h/. Second, that /h/ is an independent phoneme and that [ɸ] and [x] are realizations of an Arapesh ability to end some words with vowel devoicing. It's unclear which is better supported.

2.1.3 Flaps and glides

The consultant has produced sounds very close to both [l] and [r]. There's a weak tendency to produce sounds more on the r-side of the spectrum intervocalically, with sounds on the l-side elsewhere. But [l] and [r] (as English ears conceive of them) are quite freely varied. Students have tried very many times to give the opposite sound where they heard one (e.g. [əlmatok] after hearing [ərmatok], but the strongest reaction this has produced from our consultant is some mild resistance in the form of raised eyebrows and a repetition of the word as he originally said it.

It's important to remember that Mr. Sonin is competent in two languages that enforce an l-r distinction, English and Tok Pisin. Interference from these two languages could lead to Mr. Sonin conceiving of these two sounds as separate phonemes when he is speaking Arapesh, even if "pristine" Arapesh does not enforce such a distinction. Thus we have reason to question his mild resistance to the "reversed" forms we produced for him. Further, because his pronunciation of [l] and [r] has varied in between the two even in the same positions in the same words (e.g. in /ədɨr/ 'indeed', /nɨrɨgəs/ 'families'), the analysis of the two sounds as noncontrastive, forming a single phoneme /r/, is favored, in the absence of a minimal pair to distinguish [r] and [l].

Labiovelar glide /w/ appears more with some consonants than with others. It appears often after /h/, /k/, /g/, /p/, /b/, but never after /t/, /d/, /t͡ʃ/, /d͡ʒ/. If our observations had finished there we would have had grounds to posit labialized analogues of /h/, /k/, /g/, /p/, and /b/, but we also find that /w/ occurs on its own, as in /wab/ 'night' and /wehisi/

'empty'. The only analysis to save the labialized consonants, then, would be to interpret /w/ in these contexts as /u̯/, yielding /u̯ab/, /u̯ehisi/. It is not yet clear from the distribution of the vowels and syllable structure whether this vowel sequence would be desirable or not, so we refrain from advancing the /u̯/ hypothesis for now and tentatively hold on to a /w/ phoneme.

2.2 Vowels

2.2.1 Monophthongs

Arapesh has 7 monophthongs, each with some degree of allophony. /i/ is often heard as [ɪ], /u/ as [ʊ], /o/ as [ɔ], and /e/ as [ɛ]. A minimal pair supporting the distinction /i/ and /e/ is /ohur**i**gur/ 'neck' vs. /ohur**e**gur/ 'shin'. Minimal pairs for the other vowels have not yet been found, but each monophthong's ubiquity in every word position lends confidence that they are all fully phonemic.

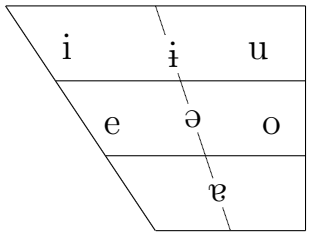

Figure 3: Arapesh monophthongs.

There are a couple caveats. Words with /ɐ/ are sometimes heard at other times with /ə/. For example, Mr. Sonin seems to have produced both [bərəhəbiwi] 'black' and variant [bərəhabiwi]. This variation could easily be the listener's error, and warrants further investigation.

Second, /ɨ/ is a foreign sound for the author. Some words seemed certain to have /ɨ/ in them, such as /ədɨr/ 'indeed', but the author fears he has sometimes resorted to transcribing *any* unfamiliar sound as /ɨ/. Some students have reported hearing /ø/ and /y/ in Mr. Sonin's speech, and the author feels that he may have heard them in some forms (e.g. /atubør ehibør/, 'a single hair'), but this bears further investigation. Using Praat to analyze the formants of these vowels, while cumbersome, may be worthwhile.

2.2.2 Diphthongs

Arapesh has a number of sequences which may be considered diphthongs. The author has at times heard [d**oə**k] 'today', [**əɪ**t͡ʃ**ɐʊ**] 'string bag', [mokəd**ɐi**], [**ei**k] 'I', [**oi**t͡ʃup] '(Lise) lies'. Some segments exist that are not diphthongized, as in [weror**o.i**ni] (not *[weror**o͡i**ni]) 'young', leading us to believe that at least some diphthongs have a robust existence. Others such as [əɪ] seem to be allophones of other phonemes, like /e/.[2]

2.3 Syllable Structure

The syllable structure of Arapesh hinges on our analysis of [w]. Complex onsets and codas are *never* observed except when [w] is present after one of the consonants with which it co-occurs, identified in §2.1.3. If we accept /w/ as a phoneme with full status, we would have to posit a syllable structure (C)(C)V(C)(C)[3]. Accepting a labialized series of consonants thus yields a syllable structure (C)V(C).

2.4 Notable Allophony

The words for 'I' and 'you 2SG' both end in /k/. Mr. Sonin, even when not specifically asked for these forms, has produced /eik/ and /ɲək/ the two, respectively. But when these forms are not cited in isolation, the /k/ appears optionally:

(6) ei manəgəs sanwe
I cold feel.1SG
'I feel cold'

(7) ei**k** manəgəs sanwe
I cold feel.1SG
'I feel cold'

An identical process also happens with /ɲək/.

[2]There is this configuration in lower sociolects of Delhi Hindi, where [əɪ] is an allophone of /ɛː/.

[3]A (V) may or may not be necessary depending on whether we decide to treat any of the diphthongs as a sequence as two monophthongs. For now, all diphthongs are assumed to each form a single phonemic unit.

(8) ɲək ɲiɾiɓain
you.2SG hungry
'You are hungry'

(9) ɲək ɲumanəgəs sanin
you.2SG cold feel
'You are cold'

(10) ei yaka ɲə ɲənaki
I want you.2SG come
'I want you to come'

An obvious objection might be that /ɲə/ occurs intrasententially and /ɲək/ does not. To the author's recollection, Mr. Sonin has also produced both forms in both contexts, implying a free variation.

This pattern has not been observed in other instances of /k/ outside of pronouns. For example, /do͡uk/ 'today' can never be, or at least has not been observed as, */do͡u/.

2.5 Unresolved Questions

1. Is voice neutralized word-finally?
2. Are /x/ and /ɸ/ phonemes?
3. What is the difference between [h] and [ɦ], and does it matter in Arapesh?
4. Is it better to understand [w] as an independent phoneme or to posit labialized consonants?
5. Are [l] and [r] distinct?
6. Does Arapesh have front rounded vowels? Could comparing the formants of the "trouble" vowels give information that untrained ears cannot?
7. Does Arapesh have vowel harmony?

3 Morphology

Arapesh is a fusional language, leveraging nonconcatenative morphological processes like reduplication, ablaut, and infixation, among others, to construct its words. It is a little premature to say that Arapesh has a case system, but there are hints in that direction in the data.

It is clear that Arapesh has word classes, at least on the level of the different collections of morphemes that clothe each respectively. A first division can be made between nouns and verbs, with adverbs, conjunctions, and maybe adjectives also being discernible. Arapesh has no apparent determiners.

3.1 Nouns

Nouns in Arapesh determine much of the morphology of a sentence. Coreferential verbs and adjectives also inflect with them at least in part. The ways of forming a plural form from a singular are many, varying depending on the noun class. These are shown in figure 4, arranged in order of increasing "complexity".

Most simply, some nouns (*ɲegɨr, glas, mugas*) are invariant, keeping the same form in both the singular and plural. Next are the nouns whose plurals are formed by concatenation of more material onto the end of the word (*bog, ki, et͡ʃau*). Next, there are some nouns that modify the endings of words (*numbat, buk*), and some that modify the endings and concatenate onto the beginning (*arupa*). Finally, some nouns have only a couple segments in common with their plural forms, the rest of the material being changes or additions to the singular form (*ohorug, wab, yərih*).

3.2 Adjectives

Adjectives are not morphologically distinguished from nouns, which is why it is not yet clear whether we should distinguish them from nouns. Adjectives are acceptable both before and

SG	PL	Gloss	SG	PL	Gloss
ɲegɨr	ɲegu	'stick, name'	numbat	numbau	'dog'
glas	glas	'glass'	buk	bumep	'book'
mugas	mugas	'nose'	nugur	nuguguh	'jaw'
bog	bogəs	'utensil, pen'	arupa	harupweh	'cloth'
ki	kihəs	'key'	ohorug	ohɨribɨs	'knee'
et͡ʃau	et͡ʃauruh	'bag'	wab	webɨs	'night'
rowem	rowep	'fruit'	yərih	yoruweruh	'legs'

Figure 4: Singular and plural nouns

following their head noun. It is not yet clear what, if any, difference in meaning there is between the two positions. Concretely, there is no apparent difference between *bərəhəbiwi bumep* and *bumep bərəhəbiwi* 'black books'.

(11) biwotuk bərəhəbiwi bumep
three black books
'Three black books'

This form demonstrates how quantifying adjectives can combine with qualitative adjectives to both modify a head noun, with the quantifying adjective coming first, though it is not yet clear whether other orders (perhaps QUANT N ADJ?) are possible.

The morphology of adjectives is more regular than that of nouns. Remembering that we think of noun classes as having "thematic sounds" (which are motivated in part, as we will see, by adjective morphology), it seems that all qualitative adjectives (i.e. adjectives that aren't natural numbers like 1,2,...) have a "theme slot" (which we will signify with ⊗) which is populated with the thematic sound of the noun. Thus in citation form we have the adjectives *choku*⊗*i* 'small' and *worubai*⊗*i* 'many, more than four', yielding forms like *umai**p**i chu**p*** 'white paper' as well as *choku**ber**i uta**ber*** 'small stones'. Some adjectives are a little less well-behaved. Consider the forms in Figure 5. We can derive a citation form for 'red' ⊗*auhi*, and that works for both 'fruit' and 'fruits', but it provides no way of explaining the

Form	Gloss
mauhi rowem	'red fruit'
pauhi rowep	'red fruits'
pauhwi chup	'red leaf'

Figure 5: 'red' with different nouns

labialization of /h/ in the 'red leaf' form, perhaps (if we find more evidence that the *hw* was either a mishearing or unimportant) shooting down our hypothesis that all the morphology of the adjective is predictable from information about the noun.

3.3 Pronouns

Arapesh has three numbers—singular, dual, and plural—and makes gender distinctions in only some of them. The pronoun forms under discussion were used in possessive constructions as well as more prototypical settings as the subject.

Singular:

(12) ei yati patrick
I see Patrick
'I see Patrick'

(13) ɲe ɲeatu
you.SG stand
'You are standing'

(14) okok kwapwe gandək
she stand there
'She is standing there'

(15) michael ənən ərpeɲ
michael he man-person
'Michael is a man'

As seen, singular forms distinguish gender only in the third person.

Dual:

(16) ohobiyop ɲumanəgəs sanup
we.DUAL.F cold feel
'We two (women) feel cold'

(17) ohobiəm ɲumanəgəs sanum
we.DUAL.M cold feel
'We two (men) feel cold'

(18) ipobiyo ɲumanəgəs sanip
you.DUAL.C cold feel
'You two feel cold'

(19) michael ənən ərpeɲ
michael he man-person
'Michael is a man'

(20) owobio owowi-g-et͡ʃau
they.DUAL.F they.DUAL.F-POSSESSIVE-bag
'The bag of the two females'

The pronouns for the dual are differentiated by gender in the first person, but not in the second person. In the third person, we only have data for a form that was glossed as feminine.

Plural:

(21) əpə ɲumanəgəs sanuk
we cold feel
'We all feel cold'

It must be the case that plural forms of the 2nd person and 3rd person pronouns exist, but they have not yet surfaced, or at least the author has not noted them yet.

3.4 Verbs

Verbs are morphologically complex, taking affixes which agree with their subject and suffixes which can be used, presumably among other things, to express benefaction. For example,

(22) michael nə-ne-məp yəpogəni worigyɨn
michael 3SG.M-make.REAL-1PL.BENEF good food

'Michael made good food for us'

(23) michael nə-ne-mok yəpogəni worigyɨn
michael 3SG.M-make.REAL-3SG.F.BENEF good food
'Michael made good food for her'

(24) ya-wok əber
1SG-drink.REAL water
'I drink water'

Note how *nə* is prepended to the 'bare' verb form to indicate a 3SG.M agent, contrasted with *ya* for a 1SG agent.

3.4.1 Realis and irrealis

Arapesh makes a basic realis/irrealis (or non-future/future) distinction for statement-of-fact verbs. Distinction of the two morphologically is semi-regular. It is often accomplished via (a) ablaut or (b) application of phonological rule $a \rightarrow \emptyset / \mathtt{V}a$, where V is a segment that can act as a full vowel. Some forms, however, remain the same in realis and irrealis.

(25) ei yapwe
I sit.REAL
'I am sitting, I sat'

(26) ei nuhut ipwe
I tomorrow sit.IRR
'I will stay tomorrow'

(27) lise kwati patrick
Lise see.REAL Patrick
'Lise sees Patrick'

(28) lise nuhut kuti patrick
Lise tomorrow see.IRR Patrick
'Lise will see Patrick tomorrow'

(29) kukum mabup
fog comes_down.REAL
'Fog (snow) comes down'

(30) nuhut kukum omaimi mubup
tomorrow fog white comes_down.IRR
'White fog (snow) will come down tomorrow.'

(31) michael douk napwe
michael today sit.REAL
'I will stay tomorrow'

(32) nuhut napwe
tomorrow sit.IRR
'(Animate male) will stay tomorrow.'

The first pair of forms display the most common way of forming the irrealis, by removing an *a*. Note that the palatal glide then serves as a the vowel for the first syllable. Similarly with the next pair, but with the labiovelar glide now serving as the vowel.

In the next pair we see that even though a segment *a* is present, the phonological rule in (b) above cannot apply, because in Arapesh's phonology, *m* cannot act as a vowel. (Indeed, in this case it would need to act as an entire syllable on its own.) In this case it turns out that the *a* in the realis form surfaces as a *u* in the irrealis form, though this does not always happen. In the final pair, we see that in a similar environment, the *a* remains the same.

3.4.2 Volitionals

Volitional statements of the form 'P_1 wants to Y', i.e. where the entity expressing the desire is coreferential with the one who will carry out the desire, seem to be formed via a prefixation, closer to the verb stem than the pronominal prefix. There are only a few observed forms that fall into this category, but all exhibit this pattern.

(33) ei yə-nak
I 1SG-sit.REAL
'I go'

(34) ei yə-**kai**-nak
I 1SG-VOL-go
'I want to go'

(35) ei ya-wok əber
I 1SG-drink.REAL water
'I drink water'

(36) ei yə-**kai**-wok əber
I 1SG-VOL-drink water
'I want to drink water'

The most immediate explanation is that *kai* has been prefixed. A slight irregularity whose explanation is not immediately clear is why *a* is paralleled by a *ə* in the volitional form. Vowel reduction in polysyllabic words may be an active process in Arapesh. Error on the listener-transcriber's part is also possible. More data is necessary to settle the matter.

The prefix is not the same for all persons:

(37) əpə ma-pwe morahwin
we 1PL-sit resting
'We are resting'

(38) əpə ma-**kamu**-pwe morahwin
We 1PL-VOL-sit resting
'We want to rest'

We might suspect that because these volitional forms are constructed from the realis forms that there might be *ir*realis volitionals, e.g. 'I will want to rest'.

The other class of volitionals is of the form 'P_1 wants P_2 to Y'. This will be covered in the next draft.

4 Syntax

Arapesh's basic word order is SVO.

(39) ei yə-kən brady əkudək buk
I 1SG-give brady this book
'I give Brady this book'

(40) brady na-kɨri pok=um ənen-baraim
brady 3SG-tell.REAL her=DAT 3SG.POSS-speech_datum
'Brady told her something'

(41) brady na-kɨri michael=um ənen-baraim
brady 3SG-tell.REAL michael=DAT 3SG.POSS-speech_datum
'Brady told Michael something'

In the first example we see something exactly analogous to an English ditransitive sentence, 'I give Brady this book'. Note however that in the next two sentences we see a case marker, which seems like more of a clitic than a regular morpheme, attaching in the first to a specific (oblique, perhaps?) form of the 3SG.F pronoun *okokw*, and in the second to a proper name, Michael. There are a few reasons for this. The first hint was that Mr. Sonin enunciated *um* in a way that suggested he conceived of it as a separate word, as is usually the case with speakers' perceptions of case clitics.[4] The case is further supported by how, in contrast with how much of Arapesh's morphology works, *um* is merely concatenated and does not intrusively alter the structure of its host word.

Thus although Arapesh does not have a fully developed case system, we see traces of it in pronouns and sometimes in "grammatical words" like *um*. Thus in this respect Arapesh is strikingly like English, which maintains differences e.g. between *I* and *to me* but not *Michael* and *to Michael*.

[4]Cf. Mopan Maya genitive, and esp. Hindi case clitics, both of which are orthographically separated from other words. If orthography systems are a valid proxy for laymen's perceptions of 'wordhood', this is evidence that these case clitics are thought of as separate words.

4.1 Copula

Arapesh has no copula word. The subject is by default the first NP of a sentence, and the predicate follows. However, this is questionable.

(42) hannah eli ənən-ik-mohokwik
hannah eli 3SG.M-POSS-sister
'Hannah is Eli's sister'

(43) eli ənən-ik-mohokwik hannah
eli 3SG.M-POSS-sister hannah
'The sister of Eli is Hannah; Hannah is Eli's sister; Eli, his sister is Hannah'

Mr. Sonin suggested these two phrasings are equivalent, and indeed they are truth-conditionally, but one could imagine the two arising in different organic discourse situations.[5] The first would arise in a situation where we know Hannah but don't know her relation to Eli, and the second would arise in a situation where we're aware of Eli's sister but don't know that she is Hannah. Thus we can still make the case that in both these utterances, we have a subject followed by a predicate.

Whether there are sentences that must be analyzed as having the predicate followed by the subject remains to be seen.

4.2 Pronouns and Proper Nouns

As has been seen in the examples, pronouns can, with apparently no significant difference in meaning, often be (a) dropped, (b) present, or (c) included after an NP.

(44) nuhut napwe
tomorrow sit.IRR
'(Animate male) will stay tomorrow.'

(45) ənən niɨriɓan
3SG.M hungry

[5]Note that we're making the rather large assumption that Arapesh discourse conventions for new and old information are the same as they are in English, which may not be true.

'He is hungry'

(46) lara okok ərmatok
lara 3SG.F woman-person
'Lara, she is a woman; Lara is a woman'

Obviously in some cases not all three possibilities may be possible: in the second example, removing *ənən* would leave it ambiguous as to *who* is cold, since the 'cold' word seems to carry no information about the subject in it. Japanese and other extreme pro-drop languages have no problem doing this, however, so it would be best practice to probe this further and ensure that Arapesh does not exhibit this tendency. But because Arapesh has so many pronouns elsewhere (as opposed to Japanese, which often lacks pronouns entirely), we can be reasonably confident **niɨriɨban* 'he is cold' would be ungrammatical, or at best very confusing.

4.3 Adverbs

To be completed. (of manner, kworahain (lise goes walking))

4.4 Possession

To be completed.

4.5 Conjunction

To be completed.

4.6 Deixis

To be completed. Discuss possessive construction, adverbial positioning, noncopular predications, case clitics.

4.7 Indirect Constructions

To be completed.

Discuss *лe* with involuntary verbs.

5 Semantics

To be completed.

5.1 Verbs of motion

Discuss Mr. Sonin's refusal to say certain things (applying a color word to a class of objects, saying something will happen in the future that he "does not know", etc.)

Counting nouns only go up to four, after which

References

1. Dobrin, Lise. Instructor.

2. Sonin, Jacob. Consultant.