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Learning about Language in Papua New Guinea Villages: Some Personal Vignettes

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This article is somewhat of a linguistic autobiography of some of my experiences while studying languages in the Sepik region of Papua New Guinea. It does not deal with personal experiences of day to day life in the villages, but rather with some of the linguistic insights I have gleaned from my studies there, across sub-fields like phonology, morphology, discourse, linguistic ideology and language change. I have reported on a few of these in other scattered publications, but I thought it would be good to gather them together here, as an illustration to others of the riches that the languages of Papua New Guinea offer to linguistic science.

First to phonology. I am not a phonologist, but rather a grammarian and anthropological linguist, so I will have the least to offer here. In the reference grammar that I have written (Foley 1991), I offered a serviceable account of Yimas phonology, but clearly focused on the morphology (extremely complex!) and syntax. Still, any fieldworker has to pay attention to phonology, because phonology, the sounds of the language, needs to be mastered to go on to anything else. From my training as a postgraduate student at the University of California, Berkeley, with Professor Mary Haas, a student of Edward Sapir, I was aware of Sapir's work and his theory of the psychological reality of the phoneme. During his work with Alex Thomas, a native speaker of the Nuu Chah Nulth language (formerly Nootka), Sapir was teaching him to write down the language so as to collect a large volume of native texts. Nuu Chah Nulth has a complex phonemic system consisting of ejectives, *p', t', k', q',* as well as preglottalized sonorants *ʔm, ʔn, ʔw, ʔy* (written by Sapir as *'m, 'n, 'w, 'y).* These are phonetically quite different, but both can arise from a similar morphological process when a so called hardening suffix like '*-ahs* 'in container' is attached to a root ending in a sound of either type: + *wik-* 'be not' + '*-ahs* > *wi**k'**ahs, kan- 'kneel'* + '*-ahs* > *ka'**n**ahs.* In spite of this phonetic difference, to Sapir's surprise, Alex Thomas wrote the two types of sounds identically: *p!, t!, k!, q!, m!, n!, w!, y!.* Sapir interpreted this to mean that regardless of the phonetic difference, the two types of sounds belonged to one class psychologically, glottalized consonants, for native speakers and hence were written alike.

I had a similar experience when working with a native speaker of Iatmul, an Ndu language. The vowel phonology of Iatmul and other Ndu languages has been a source of some debate since descriptive work on them began in the 1960s. Early researchers like Laycock (1965) and Staalsen (1966), argued for a three central vowel phoneme analysis for Iatmul with allophonic rules along the following lines:

/ɨ/ → [i] / ____y,ɲ
[ɪ] / y,ɲ____
[u] / ____w
[ʊ] / w____
[ɨ] / elsewhere

Examples of these rules are [ɨkandɨ] /ɨkəntɨ/ 'it's here', [nduw] /ntɨw/ 'man' and [yuwiy] /yɨwɨy/ 'grass'.

/ə/ → [e] / ____y,ɲ
[ɛ] / y,ɲ____
[o] / ____w
[ɔ] / w____
[ə] / elsewhere

Examples of these include [ndow] /ntəw/ 'shrunken', [məriy] /məlɨy/ 'mud flats'.

The low central vowel phoneme /a/ is always realized as a long [a:]. Note that in this analysis the high and mid front and back vowels are allophones of the corresponding central vowel phonemes by assimilating to adjoining palatal or labiovelar sonorants. More recent analyses such as Jendraschek (2012) maintain a seven vowel analysis, arguing that the high and mid front and back vowels are separate phonemes, ie. /i/, /e/, /u/ and /o/, and not allophones of the respective central vowels. I asked a native speaker of Iatmul, from the village of Tambunum, who was fully literate in Tok Pisin, how he would spell the word for 'tree' in Iatmul. Now the Iatmul word for 'tree' is phonetically [mi], completely homophonous with the Tok Pisin first person singular pronoun *mi,* and I fully expected that he would spell it identically. But, like Sapir, I was surprised – he spelled it *mwy.* Clearly, this is an attempt to render the underlying phonemic form in the three vowel analysis /mɨy/, using *w* to write the /ɨ/, for which he had no symbol in his Tok Pisin orthography. It would seem that whatever analysis is right for the descriptive and theoretical purposes of linguists, the three vowel analysis is psychologically real for (at least some) native speakers.

I had a similar sobering experience when working on the complex morphology of Yimas, a Lower Sepik language. Languages of this family are known for their daunting morphology and long words, especially verbs. Verbs often consist of up to three verb roots serialized together, with other morphemes for tense-aspect-mood and agreement for grammatical relations flanking them, as in this example:

(1) *ya-mpu-párk-mpi-kápik-mpi-wárk-t*
VII.SG.NOM-3PL.ERG-split-SEQ-break-SEQ-tie-PERF
'they split them (branches), broke them into pieces and tied them'

That this corresponds to a single word, at least as far as the morphology is concerned, is clearly demonstrated when we negate it. The negative prefix *ta-* takes the first slot, forcing the nominative agreement prefix *ya-* VII.SG.NOM to now appear at the end of the word as

the suffix *–ra* VII.SG.NOM and at the same time forcing the perfective suffix *–t* to now appear in its non-word final allomorph *–r*. These facts clearly argue that as far as the morphology is concerned, this string constitutes a single word:

(2) *ta-mpu-park-mpi-kapik-mpi-wark-r-(r)a*
NEG-3PL.ERG-split-SEQ-break-SEQtie-PERF-VII.SG.NOM
'they didn't split them (branches), broke them into pieces and tie them'

But what about the phonology? If you look back at example (1), you will note that each verb root takes its own individual primary stress. Individual primary stress is a sign of a phonological word, and if we were to rewrite (1) along the lines of phonological words, it would look like (3):

(3) *ya-mpu-párk-mpi* *kápik-mpi* *wárk-t*
VII.SG.NOM-3PL.ERG-split-SEQ break-SEQ tie-PERF
'they split them (branches), broke them into pieces and tied them'

What do native speakers do when they write Yimas? This is almost never done, and the language is now moribund, but it was more vigorous at the time of my field work. I asked a well-educated native speaker, who could write well in both Tok Pisin and English to write down a traditional text that I had recorded from another native speaker. And he mostly wrote phonological words, as in this excerpt:

(4) NS: *kikay minta krana wapalbi taiak*
WAF: *kikay mnta kranawapalmpitayk*
kikay mnta kra-n-(n)a-wapal-mpi-tay-k
PN then 3PC.NOM-3SG.ERG-DUR-climb-SEQ-see-IRR

NS: *kanta nanan apisambi ilimtut*
WAF: *kanta nanaŋapisampiirmtut*
kanta nanaŋ-apisa-mpi-irm-(n)tut
but DUR-hang-SEQ-stand-REM.PAST

Note that where I (WAF) wrote the long complex verbs as one word on the basis of the morphological properties, he (NS) broke them up into separate words on the basis of phonological properties. Given the conflicting nature of the signals for wordhood in this language (phonological versus morphological), neither approach is right or wrong; they are just keying on different traits. Still, from a practical point of view, the approach of the native speaker may have more to recommend it, as the shorter words would probably make reading texts in the language easier. The theoretical and formal needs of linguists for tidy and impressive descriptions may often conflict with the practical needs of native speakers for literacy in the language for community development goals.

Moving on to syntax and discourse, similar issues may emerge. All the languages I have worked on are oral languages; there is very little, if any, writing in them, though some, like Iatmul, may have a New Testament translation. It is typically claimed that in languages with a literate tradition there is a major split in styles between oral styles and written styles along the lines of Figure 1(Chafe 1982):

literate	**oral**
detached	involved
integrated	fragmented

Figure 1: Parametric Differences in Literate-oral Texts

Some linguistic reflexes of these parameters in texts are: for writing as detached, the frequency of passives, nominalizations and other obviating and backgrounding structures, and for writing as integrated, frequency of subordinate clauses, marked information structure options like *it was rice that Bob ate*, and high numbers of participants per clause, especially those mentioned in prepositional phrases. For speaking as involved, the features include high frequency of first and second person, i.e. speech act centered, pronouns, tag questions, and highly expressive or colorful vocabulary like *heaps of money*. For fragmented speaking, as diagnostics, are the high frequency of simple juxtaposition of phrases and clauses, simple coordination using *and* as well as flow monitoring words like *well*, *anyhow*, etc. While working on a grammar of Watam, a Lower Ramu language spoken near the mouth of the Sepik river, I collected a wide range of narrative texts from speakers of diverse ages, genders and educational backgrounds. It turns out that these differences had a major effect on the structural types of narratives that they gave me. But I also introduced a second variable, one closer to the effects of literacy. Inspired by Berman and Slobin's (1994) work on the crosslinguistic comparison of narratives, I undertook the same experiment that they did in the Watam speech community. I presented the children's book *Frog, Where are You?* (Mayer n.d.) to a number of Watam speakers and recorded their responses. *Frog, Where are You?* is an unusual children's book in that the story is completely narrated through a sequence of pictures; there is no language text, however basic, accompanying the illustrations. The book was given to Watam speakers to work through, and then they were asked to tell the story, again if they liked, working through page by page, an option all consultants took. Hence, the actual illustration was in front of the narrator as he or she narrated the events depicted on that page, but the overall text delivered had the sequential event structure of a typical Watam narrative. The version of the text presented here was given by a man then in his late 30s, a first language speaker of Watam, but bilingual in Tok Pisin. He is not literate in Watam (no members of the language community are), although he has basic literacy skills in Tok Pisin due to six years of village based schooling in English; he has no functional literacy in English, although the effects of schooling itself (and certain types of vernacular literacy practices) on metalinguistic awareness have been demonstrated in Scribner and Cole (1981). The language of his prompted narrative differs, as we shall see, in a number of important respects, from a traditional Watam narrative, and these differences parallel those of the literate-oral continuum discussed above. This prompted narrative will be contrasted with a traditional Watam narrative about the origin of the moon. The narrator was a woman, now deceased, but then in her 50s; again, a first language speaker of Watam and a second language speaker of Tok Pisin (although less proficient in that language than the first narrator). She has no literacy skills in any language and no formal education and overall could be regarded as a more 'traditional' member of the language community than the first narrator.

Now consider the structural differences between the two types of texts. First, the written style emulator in the form of the *Frog, Where are You?* text:

(5)	*aes*	*an*	*tok*	*bibrak*	*mbo*	*ŋga-birka-r-a*
	father	this	bum	sit.NOMZ	OBL	FOC-sit-R-DEP

itiŋ ma na kiau kiau an un nakan an mbo
son 3SG POSS dog dog this jar big this OBL

kukurtamak nakae ndo-r ma-iri-tak
frog toward see-PAST PROG-go.down-PROG

'the father (of the dog (i.e. boy)) sat down on a chair, while the son (i.e. dog) looked down on the frog in the jar'

(5) is a clause chaining structure, in realis with *-r* R on the dependent verbs and the final verb *ndo-r* 'see' inflected as PAST. There are two clauses, the first ending in the dependent verb inflected with *-r* R and the DEPendent echo vowel, which repeats the final vowel of the verb stem, in this case *-a* (the stem is *mbirak-* 'sit'). Both clauses are information rich, having high lexical density with many NPs and PPs; the second has no less than five. The boy and his dog are set up in a kinship relationship of 'father' and 'son', quite commonly extended like this in Watam culture. The first clause is relatively simple: 'the boy sat on a chair' (a chair is a 'bum-sitter'). The second is very dense, with multiple appositions: 'the son (i.e. dog), his dog, this dog…'. The clause ends in a serial verb construction, 'see' 'go down', 'look down', with the PROGessive aspect (*ma- ... -tak)* realized on the second verb in the construction, but the overall PAST tense on the first. (5) is a highly atypical Watam sentence, far too much lexical density compressed into too few clauses, although this is a typical feature of the integrated structure of literate language.

Now consider the strictly oral traditional text without any visual prompt delivered by the older female speaker:

(6) *karir namtiŋ an irki-r, irki-r kor*
then child this go.down-PAST go.down-PAST canoe
'then the child went down, went down to the canoe'

yokpaka-r irki-r, anup aŋgi-r ausu-r saŋga-r-a,
push-R go.down-R oar take-R row-R go-R-DEP

simuk mbo mbirka-r ma-ndo-tak
point OBL sit-PAST PROG-see-PROG

'(he) shoved (it, the canoe) down (into the water), took (his) oar and rowed away and sat down on the point and watched'

The first short sentence of (6) introduces the main character of this scene, a boy. He goes down, and then the going down is repeated with the goal, a canoe. Note that the goal NP *kor* 'canoe' follows the verb (this is not an afterthought construction because no pause separates the verb and the NP, which would necessarily be the case in such a construction). Watam is actually not rigidly verb final; although the verb is most commonly last, a wide variety of NP and PP role types can follow it, including object NPs, but one would never discover this by studying the text prompted by *Frog, Where are You?,* which has a rigid verb final structure in keeping with its written-like integrated structure. Now look at the next sentence. What is really remarkable in comparison to (5) is the high preponderance of serial verb constructions, no less than three in three chained clauses (the first not marked by the DEPendent echo vowel, which is not required, but the type of falling pitch transcribed by the comma is sufficient) and the lack of overt NP participants. The number of events narrated is about the

same as that of (5), but instead of two chained clauses and no serial verb constructions, there are three chained clauses and three serial verb constructions. Further, the serial verb construction of the second clause, 'take' 'row' 'go', 'take and row away' is a more complex string than the simple 'see' 'go down', 'look down', of (5). What is salient here is a preference for compression and parataxis over explicitness and overt coordination and subordination, diagnostic of literate-like integrated structures. Also, the lexical density of (6) is very low. The sentence contains seven verb roots and only two NPs, while (5) contains three verb roots and seven NPs - an almost opposite ratio. NPs with discoursally established referents, whether subject, object or oblique NPs, are completely elided. NPs of new information are overtly mentioned, but only one per clause, following a clear discourse preference rule: only one XP per clause and that bearing new information (Du Bois 1987).

The implications of these differences between these two texts are far reaching. Although Watam has no literate tradition and these texts were delivered in a completely oral channel, they contrast in a number of features typical of texts drawn from the ends of the literate-oral continuum. The text prompted by *Frog, Where are You?* is lexically dense, explicit and syntactically integrated, with relatively fixed word order and neat, set coordinated clause chains, all salient features of literate texts. The traditional oral narrative, on the other hand, is low in lexical density (lexical elaboration, if anywhere, is in the complex serial verb constructions), highly implicit, with much information needed to be recovered from context, and often structurally fragmented and freer, with more variable word order and extensive use of parataxis or juxtaposition, as in the serial verb constructions. These are all distinctive features of oral texts. Both texts are oral in an absolute sense, but the prompted text had the visual stimulus of the book and its illustrations in front of the narrator, and this undoubtedly lead to a greater reflexive awareness of the participants and events of the story as he narrated it and yielded the structural patterns exemplified (though the effects of his six years of schooling cannot be ruled out as a contributing factor here). The implications of this for educational policy are important. Although it has since been reversed, the Department of Education of Papua New Guinea had moved to promulgate a policy of vernacular medium education in the first few years of schooling rather than the previous English only policy. This was an important step, greatly to be applauded, and one that, hopefully, in the long run, would have aided the long term survival of the many small endangered languages of Papua New Guinea. But even if that policy were to be re-instated today, I sound a word of caution. I wonder whether the use of Watam in the village school and Watam literacy will promote over time a valorization of structures like those of the text prompted by *Frog, Where are You?,* rather than those of traditional oral narratives. Given the similarity of this text to that of literate texts elsewhere in the world, I suspect it might. And, ultimately, this is likely to lead to the devaluation of the rich and creative poetic structure of traditional oral narratives and perhaps their loss. This would be a loss of the variety of human creative expression, not only of the Watam language community, but the world. The only way to counterbalance this, I think, is to be aware of the potent normative effects that linguistic work and tradition and the schooling practices derived from this have upon us and our understanding of the world. Developing multilingual nations like Papua New Guinea need to beware adopting wholesale the educational policies of developed nations like Australia, which even there in many respects are failing. Literacy may have costs as well as benefits, and it is vital that we be mindful of that and work assiduously to minimize the costs.

It is well known now that language death is well advanced in many languages of the Sepik region. While Watam does not appear to be seriously endangered at this point, Yimas is already quite moribund, and the signs for Iatmul, in spite of its large number of speakers, are not good. But it does seem that some of the local beliefs about language, linguistic

ideology, could be a factor facilitating such rapid language shifting to Tok Pisin. Sepik cultures conceive of language as action, as a way to get things done. All of these cultures make a distinction between what can be loosely glossed as 'understanding/care/heart' (Yimas *wampuŋ*) and 'will/image/spirit' (Yimas *aŋkaŋkaŋa*) (Harrison 1990; Kulick 1992; Telban 1998). The Yimas word *wampuŋ* also means literally the bodily organ heart, the phonological form of the word an obvious onomatopoeic icon of the sound of its beating, so I will henceforth gloss it as 'Heart'. It is also clearly linked to the idea of 'insideness', the postposition 'inside' being a derivative of it: *wampuŋ-n* < *wampuŋ* 'Heart' + *-n* OBLIQue, and through this, to the pith of a tree and so softness: *wampunŋ* 'sago flour' (the soft, washed pith of the sago palm, the society's staple food). The *wampuŋ* 'Heart' is the seat of desire and affect, and from the culture's moral perspective this should be socially directed. One should be mindful of one's social embeddedness and show concern for others; hence, my alternative translation of 'care'. Properly *wampuŋ* should 'hear' *ant-* the call of others' needs. To heed the calls of others results in generosity, a very highly valued trait in Yimas culture; stinginess is, not surprisingly, deplored, and such behavior is described as *kalck-* 'hard' (like the hard outside bark of a tree), the opposite of the softness and 'insideness' associated with *wampuŋ* 'Heart'.

But, when grappling with the Yimas word *wampuŋ* 'Heart', it is very important not to fall back on Western atomistic, voluntaristic conceptualizations of morality and ethics. Sepik moral norms are not understood as constraints on permissible actions, but rather a mode of enacting a pre-established sociability. Moral behavior is already embodied as habits to act socially in defined ways from the earliest periods of personhood. We can see this native conceptualization of *wampuŋ* 'Heart' in its uses in Yimas. The expression for 'worry, be concerned, be disturbed' is *wampuŋkra-* < *wampuŋ* 'Heart' + *kra-* 'cut, sever (as a rope)'. This construction illustrates the noun root *wampuŋ* 'Heart' undergoing noun incorporation to the verb root *kra-* 'cut':

(7) (a) *ama-na-wampuŋ-kra-n*
1SG.NOM-PRES-Heart.V.SG-cut-PRES
'I'm worried /concerned/disturbed'

(b) *na-ka-pay-ira-wampuŋ-kra-n*
3SG.NOM-1SG.ERG-now-ALL-Heart.V.SG-cut-PRES
'I'm worried/concerned/disturbed about her now'

kra- 'cut' is normally a transitive verb 'someone severs an object into two parts', but (7a) is intransitive and this indicates that the incorporated noun is filling the role of the object cut. Hence, when one is worried, concerned, disturbed, they are severing their Heart, separating it from someone it should be connected to; prior sociability is taken for granted. When the person from whom proper sociability is severed is overtly mentioned, an applicative affix is required, as in (7b). Notably, the applicative affixed stipulated (Yimas has six) is that marking allatives, motion toward a goal. Properly, the Heart should be reaching out to others in sociability, but in this case, untoward circumstances are causing that path to be severed. *Wampuŋ* 'Heart' is also where anger is felt, inside as a 'pain':

(8) *mpu-na-nti* *malak-t-nti* *wampuŋ*
3PL-POSS-act quarrel-NFN-act Heart.V.SG

tia-ŋa-na-ira-kkt-n
act.NOM-1SG.ACC-PRES-ALL-hurt-PRES
'Their quarreling angers me' (literally, 'their quarreling hurts my heart'

The counterpart of *wampuŋ* 'Heart' in Yimas, as in other Sepik languages, is 'Will, spirit' *aŋkaŋkaŋa* (Manambu *kaiyik* (Harrison 1990). The concept of Will is less developed and central in Yimas culture, as opposed to Manambu and Iatmul (Harrison 1990; Bateson 1958), but is important nonetheless. *Aŋkaŋkaŋa* 'Will' is the powerful life force of a person, expressing itself in assertive claims to one's prerogatives and staking claims to those of others. 'Will' can be increased in power by ritual, especially those involving the calling of secret totemic names and associated myths. In contrast to *wampuŋ* 'Heart', *aŋkaŋkaŋa* 'Will' is associated with the individuality of the person, it is the image one sees reflected in a still pool, or nowadays, a mirror. A man in whom 'Will' is strong is described as *kalck-* 'hard', but in the context of *aŋkaŋkaŋa* 'Will', this is a term of admiration rather than the opprobrium attached to it when used in commenting upon *wampuŋ* 'Heart'. Whereas hearing the calls of others through prior sociability is proper to *wambuŋ* 'Heart', *aŋkaŋkaŋa* 'Will' finds its articulation through speaking. *Wampuŋ* 'Heart' is linked to the ear, but *aŋkaŋkaŋa* 'Will' is tied to the mouth. Speaking is metaphorically linked to hitting and striking in Sepik thought and, hence, copulation. Speaking is penetration by the 'Will'. The Yimas verb *malak-* 'converse, talk' is polysemous with 'quarrel', as is the Manambu equivalent *ma'andj* (Harrison 1990).

Again, it is important to situate the local ideology about speech within the Melanesian conceptualization of personhood as entailing inherent and prior sociability. In line with its atomistic and individualist ideology, speaking in Western thought is commonly viewed as the externalization in spoken language of an internal state of thought. This is the basis of the Conduit Metaphor (Reddy 1993): words are the public social containers of our private individual thoughts. Further, the only conceptualizations we can have of these internal states, thoughts, are the effects they can have on other thoughts or external vocalizations – our speech. Consequently, the precise use of language requires bringing our external words into as close an alignment as possible with our internal thoughts. And, because each word should be a unique container for a precise concept, the role of context, the embedding of speech in its social world, is systematically derided. Rhetoric, the use of language to bring clarity to an obscured situation in context, is rejected as too ephemeral and untrustworthy, often a systemic and deliberately imprecise mapping of concepts and words for less than honest ends.

But such an understanding of language is unintelligible in a Sepik understanding of inherent and prior sociability. Language cannot be taken as the externalization of internal states to create sociability because sociability already exists inalienably in the definition of a person. In fact, the Yimas approach is exactly to reverse the direction of the Western determinism: instead of speech being externalized thought, thought is internalized speech. Yimas lacks a noun for 'speech, talk', although it does have one for 'language' *karm* 'lip, language', but also 'harsh words, dispute, slander' (note the parallel polysemy in English: *watch your language!*). Rather, 'speech, words, talk' are signaled by a set of verbal affixes, a prefixal form *pia-* and a suffix *–mpwi*:

(9) (a) *pia-mpu-nanaŋ-mampi-tmi-ɲcut*
talk.NOM-3PL.ERG-DUR-again-say-RM.PAST
'They were talking again'

(b) *apu-i-ɲc-ak-mpwi*
NEG.IMP-tell-PRES-3SG.DAT-talk.NOM
'don't tell her'

'Talk' *pia-* ~ *-mpwi* in the public domain is always risky; all too often it leads to *karm* 'harsh words, disputation'. Indeed the statement *karm papk* language.VII.SG COP.VII.SG, literally, 'there's language', actually means 'there's a quarrel, a dispute'. Such a view also provides a motivation for special pidgin languages in trade encounters in the Sepik region (see below and Foley 1988, 2006, 2013); clearly in such economic transactions there are strong reasons to minimize disputation. It is safer for 'talk' to remain in *yaŋkuraŋ* 'mind, consciousness'. But talk is not so much internal, inside the 'mind', as it is hidden there, waiting to be revealed and hence a likely source of trouble:

(10) (a) *karmp-n* *t-i-c-mpwi* *apiak*
language.VII.SG RECP-tell-NFN-talk COP.talk
'They were quarreling with each other' (literally 'there is telling talk to each other in language')

(b) *pia-mpu-nanaŋ-tar-pakara-ntut*
talk.NOM-3PL.ERG-DUR-CAUS-open.ITR-RM.PAST
'They were revealing the information'

(c) *pia-mpu-nanaŋ-makn-takal-ɲcut*
talk.NOM-3PL.ERG-DUR-quietly-touch-RM.PAST
'They were keeping the information secret'

If the 'talk' is said, the way to avoid trouble and disputation is for it to be 'heard' *ant-*. This is much more than just being understood, but rather it needs to lead to proper behavior in line with the relatedness and sociability that constitutes *wampuŋ* 'Heart'. 'Understand and behave appropriately' is a closer translation in contexts with *pia-* ~ *-mpwi* "talk':

(11) *pia-mpu-nanaŋ-ant-ntut*
talk.NOM-3PL.ERG-DUR-hear-RM.PAST
ta-mpu-nanaŋ-tar-pakara-ntuk-mpwi
NEG-3PL A-DUR-CAUS-open.ITR-RM.PAST-talk NOM
'They were listening and didn't reveal the information'

Sepik villagers are consummate pragmatists in their understanding of language: language is conceptualized in terms of the effects it has, and these are taken to be largely negative. It is not surprising then, with a view of language like this, that it has been held in comparatively low value, hence the lack across the Sepik of any shared cultural identity based on a shared language and the ease historically and currently with which whole villages have shifted languages (see Kulick 1992). Such a distrust of language has been reported as a widespread feature of Papuan communities (Robbins 2001).

Interestingly, one area in which language may have held a higher prestige was in the intervillage trading relationships. Reciprocal exchange is central to Sepik understandings of personhood, and the rights to intervillage trade were closely guarded by the clans that had such access. In some Sepik communities, special trade pidgins were developed to be used in trade encounters with neighboring villages. This trade language was not normally the native language of either party, but a pidgin language using the language of the dominant partner as superstratum. Such trade, based pidgin languages, have has been reported for the Iatmul, Manambu and Yimas, but only in the last case is there any significant documentation of the pidgin language(s). Yimas villages traditionally had their main trading relationships with villages speaking three languages, the closely related Karawari, and the unrelated Arafundi

and Alamblak (these last two also unrelated to each other). A trade pidgin was used in all three trade encounters, and this fact is particularly notable in the case of the Karawari speaking villages. Yimas and Karawari are closely related languages, on a par with Dutch and German, and nearly mutually intelligible. Needs of intelligibility did not mandate the use of a pidgin in Yimas-Karawari trade encounters. The trade encounter itself did that; the pidgin language was an index of this kind of secular exchange between villages. The pidgins themselves were the property of the clans that had the rights to trade with these villages. They were not publicly available to all. They were not actually secret because they were used in public trade encounters, but they were the birthright of individual clans, and passed on by fathers to their sons like other items of the clan's birthright. Table 1 provides a short comparative lexicon between Yimas and two of its lexifier pidgins, one for the Arafundi speaking village of Auwim, and the other for the Alamblak speaking village of Chimbut (the Alamblak data are drawn from Williams (2000); the rest are data from my fieldwork):

	Yimas	Arafundi Pidgin	Alamblak Pidgin
'man'	*payum*	*payum*	*yenmisɨnawt*
'woman'	*ŋaykum*	*aykum*	*yerimaŋwi*
'village'	*num*	*kumbut*	*yimuŋga*
'betelnut'	*patn*	*patn*	*yabu*
'pig'	*numpran*	*numbrayn*	*yimbian*
'sago'	*tupwi*	*tupwi*	*sɨpi*
'cassowary'	*awa*	*karima*	*awa*
'basket'	*impram*	*yamban*	*yamban*
'water'	*arɨm*	*yim*	*mɨray*
'tobacco'	*yaki*	*yaki*	*yagi*
'canoe'	*kay*	*kay*	*kay*
'flyingfox'	*kumpwi*	*arɨŋgum*	*kumbut*
'I'	*ama*	*ama*	*apia*
'you'	*mi*	*mi*	*mi*
'he/she'	*mɨn*	*mɨn*	*masaŋgum*
'talk'	*malak-*	*mariawk-*	*mariak-*
'give'	*ŋa-*	*asa-*	*seri-*

Table 1: Lexicon of Yimas Based Pidgins

Both pidgin languages exhibit a mix of Yimas and substrate lexical elements. The Yimas percentage is higher in the Arafundi pidgin and significantly lower in the Alamblak pidgin. The non-Yimas lexicon in Arafundi is of Arafundi origin, but most of the non-Yimas forms in the Alamblak pidgin are not in fact from Alamblak, but from Karawari, and identical to the lexical forms in the Yimas-Karawari pidgin. It is not clear whether the poorly attested Yimas-Karawari pidgin should be classified as a Yimas based pidgin or a Karawari based one, as the Karawari sourced lexicon does seem dominant in it. While the Alamblak pidgin

does seem to be based on the Yimas-Karawari one and hence heavily of Karawari sourced lexicon, it was used in Yimas-Alamblak trade encounters and has been relexified in the direction of Yimas, and this justifies treating it as a Yimas-based pidgin for our purposes here.

Like all pidgins, the Yimas based ones show structural simplification from the superstrate language. Yimas (and Karawari) are morphologically complex polysynthetic languages with multiple agreement. There is no case marking for core argument NPs; rather their function is indicated by verbal agreement. The alignment system for agreement is person-based, essentially nominative-accusative for first and second persons and ergative-nominative-dative for third person. Consider these transitive verbs in both Yimas and Yimas-Arafundi Pidgin:

(12) Yimas:
ta-ka-tay-c-rm
NEG-1SG.ERG-see-PERF-3DL.NOM
'I didn't see those two'

Yimas-Arafundi Pidgin:
mɨn kundamwin ama tay-ŋan kakan
3 two 1SG see-NONFUT NEG
'I didn't see those two.'

The Yimas verb is a complex structure, a single word, both morphologically and phonologically, composed of five bound morphemes. The grammatical relations are signaled by bound affixes that indicate person and number (and for inanimate nouns, gender) and case. Person and number is fused in a single portmanteau morpheme: *ka-* first person singular and *–rm* third person dual. Both negation and tense are indicated by bound morphemes as well. The Yimas-Arafundi Pidgin form could hardly be more different; it is largely an isolating analytical form with all meanings expressed by separate words, except for tense, which now collapses to a binary future versus non-future contrast in comparison to the eight tenses of Yimas. Word order is still somewhat free, though, as this sentence could also mean 'those two saw me', as there is no obligatory marking of subjects and objects in Yimas-Arafundi Pidgin, although an optional postposition *namban,* derived from Yimas *nampan* 'toward' can be used to mark animate noun phrases, functioning as objects. Note also: the two meanings of the portmanteau suffix *–rm* (third person dual) are now parceled out between two distinct morphemes, *mɨn* (third person) and *kundamwin,* 'two' for dual. This isolating structure of Yimas-Arafundi Pidgin is typical of what we find in pidgin languages and their derived creoles crosslinguistically, Tok Pisin being a good exemplar in this regard.

Lastly, I want to look at a very striking example of language change. Generally, it has been difficult to study language change over time in the languages of the Sepik region due to the very shallow time span of our documentation of these languages; extensive serious description of the languages of the region only began in the 1960s. Still, we are in a very fortunate position with respect to Angoram, another language, like Yimas, belonging to the Lower Sepik family. Donald Laycock undertook extensive documentation of this language in 1959 and passed on his field notes to me before he died. I undertook further field work on the language in 2005, nearly fifty years after Laycock's field work. To my surprise, the language had undergone quite extensive change over that period, and exactly in that area where Lower Sepik languages present especial difficulties: transitive verb inflection. All six Lower Sepik languages exhibit a direct-inverse pattern of transitive verb inflection, though no two do so in the same way. Direct-inverse transitive verb inflectional systems are found

mostly in languages in which grammatical relations are signaled by agreement, as do all the Lower Sepik languages. In languages with a direct-inverse inflectional pattern, the pronominal agreement affixes are ranked according to their person, first and second persons outranking third person. When a higher ranked person is the subject and a lower ranked person the object of a transitive verb, that is the direct inflectional pattern; when the linking is reversed, that is the inverse inflection. In the Lower Sepik languages the system works according to the following rule: the pronominal agreement prefix, which refers to the higher ranked person, occurs closer to the verb stem. But if the referents of both affixes are lowly ranked third persons, then that for the subject holds the higher rank and occupies that position (examples from Murik, but the pattern holds throughout the family): *do-bo-kərə-na* /3PC.NOM-3PL.ERG-hit-PRES/ 'they hit them'. But, if one of the pronominal agreement prefixes is first or second person, and the other – third person, the former (as the higher ranked) **always** occupies the position next to the verb stem, regardless of its role as subject or object, and, when the higher ranked person is the object (the inverse situation), the Murik verb necessarily takes an inverse circumfix *n-...-ŋa*: *g-**a**-kərə-na* /3PL.NOM-1SG.ERG-hit-PRES/ 'I hit them', but *n-umbwa-**ŋa**-kərə-ŋa-na* /INV-3PL.ERG-1SG.ACC-hit-INV-PRES/ 'they hit me'.

The system of Angoram in 1959 was particularly convoluted. Here are some direct and the third person acting on third person forms:

(12)

na-m-ti	*pa-m-ti-k-nde*
3SG.O-1.A-hit	3PL.O-1.A-hit-PRES-1PL
'I hit him'	'we hit them'
na-n-ti-k-n	*pa-n-ti-k-ndu*
3SG.O-2.A-hit-PRES-2SG	3PL.O-2.A-hit-PRES-2PL
'you (SG) hit him'	'you (PL) hit them'
na-na-ti	*pa-pwa-ti*
3SG.O-3SG.A-hit	3PL.O-3PL.A-hit
'he hit him'	'they hit them'

The third person acting on third person forms are the most transparent; they follow the same pattern as Murik. The subject prefix is the higher ranked and occurs next to the verb stem, while the object prefix occurs before that, on the left edge of the verb. The direct forms, first or second person subjects acting on third person objects, are similar, but a little more complicated. The higher ranking subject prefix only marks person, *m-* 'first person' versus *n-* second person'. More detailed information is provided by suffixes that indicate both person and number of the subject, i.e., *–n* 'second person singular', *–nde* 'first person plural', or *–ndu* 'second person plural'; first person singular is unmarked.

When we turn to the inverse forms, we find that some of the distinctions of the direct paradigm are collapsed:

(13)

apwa-ti-ka-n-ɨm	*apwa-ti-ka-nba-nde*
3.A-hit-PRES-SG-1SG.O	3.A-hit-PRES-PL-1PL
'he/they hit me'	'he/they hit us'
apwa-ti-ka-n-ɨm	*apwa-ti-ka-nba-ndu*
3.A-hit-PRES-SG-2SG.O	3.A-hit-PRES-PL-2PL
'he/they hit you (SG)	'he/they hit you (PL)'

Note, that only the person of the third person subjects in the inverse forms can be expressed, never the number. Note further, that the distinction between first and second person in the singular, so clear in the direct paradigm, in the inverse paradigm is also lost, the suffix *-im* being used for both first and second singular objects. In the plural, however, contrary to typological expectations, the contrast is preserved, using the same person-number suffixes which mark the subject in the direct paradigm, but now these suffixes mark the object in the inverse paradigm. Note also, that these forms violate the basic principle of the direct-inverse systems in the other Lower Sepik languages and operative in the direct paradigm of Angoram: put the affix for the higher ranked participant before the verb stem. In the examples (13), they occur as suffixes following the verb stem.

The examples in (14) present the forms I collected in 2005, which correspond to those of (12):

(14)

mi-nda-ti-ka-nin/ndum	*(na/pa)-mi-nda-ti-ka-nde*
1.A-?-hit-PRES-3SG.O/3PL.O	(3SG.O/3PL.O)-1.A-?-hit-PRES-1PL
'I hit him/them'	'we hit him/them'
apa-ti-ka-nin	*apwa-ti-ka-ndum*
2SG.A-hit-PRES-3SG.O	2PL.A-hit-PRES-3PL.O
'you (SG) hit him'	'you (PL) hit them'
apwa-ti-ka-nin	*apwa-ti-ka-num*
3.A-hit-PRES-3SG.O	3.A-hit-PRES-3PL.O
'he hit him'	'they hit them'

In contemporary Angoram, there is now a clear split between forms with first person subjects, on the one hand, and those with second and third person subjects, on the other. The former are built on a newly introduced prefix *nda-,* while the latter are now built on the pattern of the older inverse paradigm with *apwa-*. In other words, the marked inverse paradigm now becomes the basis for building the direct paradigm, a quite unusual grammatical change, as grammatical change usually favors leveling marked structures to the patterns of unmarked ones. In the first person forms, the first person subject marker *m-* is prefixed to this newly introduced morpheme *nda-* (with supporting vowel epenthesis). If the subject is singular, there is no further marking, as with the older direct paradigm, but the object is now indicated by a suffix, no longer a prefix, on the left edge. If the subject is plural, its person and number are indicated by the familiar suffix *–nde* 'first person plural', and no further suffixation is possible. Normally, this entails that the third person object is expressed by no overt affix, so its number is left unspecified, but it is possible in this case, for some speakers at least, to use the old third person object prefixes on the left edge of the verb. The forms with second and third person subjects all employ the older third person subject prefix of the inverse paradigm *apwa-,* but now for both second and third person. The distinctions between the various forms seem to be made up of ad hoc piecemeal adjustments of the paradigm. For instance, under this system, the forms 'you (SG) hit him' and 'he hit him' would be identical, so the /w/ in *apwa-* appears to have been elided in the forms with the second person subject, making them distinct. Similarly, the contrast between 'you (PL) hit them' and 'they hit them' would be lost, so again, a solution was found. The suffix *–num* is used when the subject is third person, but, if it is first or second, a different suffix is

employed, *-ndum,* very likely a contraction of *–ndu* 'second person plural' and *–(nu)m* 'third person plural object'.

Theories of language change in historical linguistics do not normally consider such rapid changes as here exhibited in the direct transitive verb paradigm of Angoram as likely or even plausible. Our theories of languages change and, therefore, our expectations about how and how fast languages can change were mainly developed on the basis of Indo-European languages and then extended to other language families, such as Austronesian and Bantu. These are, on the whole, conservative language families, in which language change has been quite slow. But these Angoram data demonstrate that our expectations in this regard may be quite mistaken. And it is unlikely that what has been observed here has been a unique development either in New Guinea or elsewhere in the world. These Angoram data tell us that we must revise our beliefs about language change. Perhaps the enormous complexity of the linguistic situation in New Guinea, and especially in the Sepik region, is the result of very rapid language change and, hence, diversification. And this may account for other areas of great linguistic complexity, such as California, the Caucasus and the Himalayas. Again, it appears that the languages of Papua New Guinea have many treasures yet for linguistic science. They have certainly enriched my life.

Abbreviations

I-XI	Yimas noun classes	NFN	non-finite
1	first person	NOM	nominative
2	second person	NOMZ	nominalization
3	third person	NON-FUT	non-future
A	transitive subject	O	transitive object
ACC	accusative	OBL	oblique
ALL	allative	PAST	PAST
CAUS	causative	PC	past
COP	copula	PL	plural
DAT	dative	POSS	possessive
DEP	dependent	PRES	present
DL	dual	PROG	progressive
DUR	durative	R	realis
ERG	ergative	RECP	reciprocal
FOC	focal	RM.PAST	remote past
IMP	imperative	SEQ	sequential
INV	inverse	SG	singular
IRR	irrealis		
ITR	intransitivizer		
NEG	negative		

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