

Being so fathered and so husbanded: kinship verbs in Iwaidja

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1. Introduction to the phenomenon

Kin expressed by nouns (*nominal kin terms* or *kinship nouns*):

- (1) “*Ngabi karlu artayan*” *abiny ba kama,*
 ngabi karlu aK-(rt)aya-n *aK-mi-ny ba kama*
 1sg NEG 1sgA>3sgO-see-NPst 3sgS:say-PP DET mother:REF

 “*lda nuyi kart-ayan*” ...
 lda nuyi kaK-(rt)aya-n
 CONJ 2sg 2sgA>3sgO-see-NPst

 “*Ngabi nganduwurrakan, kamu. Lda nuyi malany?*”
 ngabi ngandu-wurraka-n kamu lda nuyi malany
 1sg 3A>1sgO-stare-NPst mother CONJ 2sg why

 ‘I can’t see him’ said the mother, ‘but you can see him.’ ...
 ‘He’s staring at me, mother. But what’s wrong with you?’ M_JW_050114_yirrwardbart

Kin expressed by verbs (*verbal kin terms* or *kinship verbs*).

Kinship reference is derived by treating these verbs as ‘headless relative clauses’, e.g. *the one such that she is mother to me*. Analytic note: in Iwaidja, pronouns like *ngabi* can mean ‘I’, ‘me’, or ‘my/mine’, so that syntactically they can either be analysed as either an argument or a possessor.

- (2) “*Nuyi kabana-wun ngabi ngandu-wulang,*
 nuyi kaK-mana-wu-n ngabi ngandu-wula-ng
 2sg 2sgA>3sgO-IRR-kill-NPst 1sg 3A>1sgO-be.mother.to-PP
- lda ngabi abana-wun nuyi kundu-wulang!*”
 lda ngabi aK-mana-wu-n nuyi kundu-wula-ng
 and 1sg 1sgA>3sgO.IRR-kill-NPst 2sg 3A>2sgO-be.mother.to-PPst

 ‘You kill my mother, and I’ll kill your mother!’ Mirrnayaj 00:00:37
 Lit. ‘you kill her (such that) she is mother to me, and I will kill her
 (such that) she is mother to you.’

Both nouns and verbs can be used in parallel function (for some functions only - see below):

- (3) *Ngabi ngandu-wulang karlu rahardalkbiny.*
 ngabi ngandu-wula-ng karlu K-ldahardalkbi-ny
 1sg 3A>1sgO-be.mother.to-PP NEG 3sg-be.born-PP

<i>Ngabi</i>	<i>ngandu-mardyarrwun</i>	<i>karlu</i>	<i>rahardalkbi-ny.</i>
<i>ngabi</i>	<i>ngandu-mardyarrwu-n</i>	<i>karlu</i>	<i>K-ldahardalkbi-ny</i>
1sg	3A>1sgO-be.father.to	NEG	3sg:be.born-PP

<i>Ngabi</i>	<i>babam</i>	<i>arlarrarr</i>
1sg	mother's.father	nothing

‘Before my mother was born, before my father was born, before my (maternal) grandfather was born.’ Walkarnu 8

It is possible to mix kinship verbs and kinship nouns in an iterated possessive construction:

- (4) *ngabi kamu janad kawurakbung*
ngabi kamu janad K-nga-wurakbu-ng
 1sg mother 3sg 3sgO-3sgFA-be.older.sibling.to-PP
 ‘my mother’s older sister’ (lit. ‘my mother, her (one such that) she was older sibling to her’)¹ dvR_040721_T1.eaf Mary Yarmirr 00:25:29.058

1.1 Evidence for verbal status of kinship verbs

Like normal transitive verbs,

- (a) all kinship verbs take prefix forms from subject+object prefix set
- (b) the ‘be older sibling’ verb, at least, can take the (verbal) reciprocal suffix *-injildi-*, with accompanying reduction of valency from two to one, as with a normal transitive verb

- (5) *Wanad barda awurakbunjildiny* *wanadjanad.*
wanad barda a-wurakbu-njildi-ny *wanadjanad*
 3pl DEM 3plS-be.older.sibling.to-RECIP-PP 3du
 ‘The two of them are siblings’ (lit. ‘they are older sibling to each other’)

- (c) tense-aspect-mood suffixes tend to be fixed at a conventional value, sometimes reflecting the etymology of the word (e.g. *-wulang* is etymologically ‘brought out (into the world)’, but there is nonetheless some scope for varying them.

For example *makandung* is the past imperfective form of *makan* ‘be husband of’, and can be used to refer to a deceased or divorced spouse, e.g. *rimakandung* ‘his late wife, his ex-wife’; likewise the future prefix can be employed in an example like *banawurakbun* ‘his (future, still to be born) younger sibling’. The only inflectional category not attested yet in kinship verbs is that of direction (towards or away forms), but this likely reflects semantic restrictions, i.e. it is hard to see how an abstract relation like kinship can be visualized as a vector of spatial movement. In all semantically plausible inflectional categories, then (and one derivational one), kinship verbs have the same possibilities as canonical transitive verbs.

¹ Another possible reading is ‘my mother’s younger sister’ (i.e. the one to whom she is older sister).

A CAVEAT: there is a subtle emergent difference between kinship verbs and other verbs: kinship verbs are used with a preceding pronoun with higher frequency than with normal verbs.

Further, in this context pronouns appear to exhibit phonological reductions (e.g. *ngabi* > *ngab*; *janad* > *jad*) that occur less often when they combine with canonical verbs. It would take us too far afield to pursue this difference here but it is an important avenue for further research (and also demonstrates the value of having a large corpus).

1.2 Interaction of semantics of verb root and subject/object prefixes

Note that the meaning of all kinship verb roots is ‘downward’, i.e. the subject is the older kin², the object the younger.³

Core meaning of kin-verb root	<i>ngandu-</i> ‘he/she/they > me’	<i>aK-</i> ‘I > him/her’	<i>ri-</i> ‘he > him/her’	<i>ka-</i> ‘she > him/her’
<i>mardyarrwun</i> ‘be father to’	<i>ngandu-mardyarrwun</i> ‘my father’ (<i>ngabi bunyi</i>)	<i>abardyarrwun</i> ‘my child (male sp.), my brother’s child’ (<i>ngabi ngawiny</i>)	<i>rimardyarrwun</i> (a) ‘his child (male sp.), his brother’s child’ (<i>janad ngawiny</i>) (b) ‘his/her father or father’s brother’ (<i>janad bunyi</i>)	<i>kamardyarrwun</i> (a) ‘her brother’s child’ (<i>janad ngawiny</i>) (b) ‘his/her father’s sister’ (<i>janad makamaka</i>)
<i>wurakbun</i> ‘be older sibling to’	<i>ngandu-wurakbun</i> ‘my older brother or sister’ (<i>ngabi wulku</i>)	<i>aburakbun</i> ‘my younger brother’ (<i>ngabi ngunbuj</i>)	<i>riwurakbun</i> (a) ‘his younger brother or sister’ (<i>janad ngunbuj</i>) (b) ‘his/her older brother’ (<i>janad wulku</i>)	<i>kawurakbun</i> (a) ‘her younger brother or sister’ (<i>janad ngunbuj</i>) (b) ‘his/her older sister’ (<i>janad wulku</i>)
<i>makan</i> ‘be husband to’ ⁴	<i>ngandu-makan</i> ‘my husband; my sister’s husband’	<i>abakan</i> ‘my wife, wife’s brother’	<i>rimakan</i> (a) ‘his wife’ (b) ‘her husband’	<i>kamakan</i> (a) ‘his/her sister’s husband’s sister’ (b) ‘her brother’s wife’
<i>ldakbaminy</i> ‘be father’s father to’	<i>nganbu-ldakbaminy</i> ‘my father’s father, my father’s father’s brother or sister’ (<i>ngabi wiwi</i>)	<i>arakbaminy</i> ‘my son’s son (male speakers), my brother’s son’s son’ (<i>ngabi wiwi</i>)	<i>rildakbaminy</i> (a) ‘his son’s child; his/her brother’s son’s child’ (<i>janad wiwi</i>) (b) his/her father’s father; his/her father’s father’s brother’ (<i>janad wiwi</i>)	<i>kaldakbaminy</i> (a) ‘her brother’s son’s child’ (<i>janad wiwi</i>) (b) ‘his/her father’s father’s sister’ (<i>janad wiwi</i>)

Table 1. How pronominal prefixes combine with verb roots to give specific kin relationships.⁵

² Or the husband in the case of *-makan*. Restrictions to ‘downward’ kin terms are not uncommon in languages with kinship verbs of the ‘be K’ type (Evans 2000), and rare in languages where kinship is expressed by nouns, though found in Somali (Serzisko 1983). Of course, the husband was typically a much older man, so the age parameter is still there.

³ Gender is almost absent from the Iwaidja prefix system, except with transitive subjects: *ri-* ‘3sg.masc.A > 3sgO’ vs. *ka-* ‘3sg.fem.A > 3sgO’. Objects do not distinguish gender.

⁴ Another verb commonly used to refer to spouses is *-wunbani* ‘two sit (together)’, e.g. *awunbani* ‘they two sit together’, *ngadbunbani ba janad riwurakbung* ‘we two sit down together, including his/her elder brother’ which could mean either ‘I am married to his/her older brother’ or ‘my husband, who is his/her older brother’ among other meanings.

⁵ Ilgar, unlike Iwaidja, systematically distinguishes gender in the third person singular, and thus makes additional distinctions: *nganimardyarrwun* ‘my father, father’s brother’ vs *nganngamardyarrwun* ‘my paternal aunt’, *amardyarrwun* ‘my son (of man), my brother’s son’ vs *anymardyarrwun* ‘my daughter (of man), my brother’s daughter’.

In general there is a one-to-many (superordinate) relationship of kinship verb roots to kinship nouns, except with a few self-reciprocal kinship nouns like *wiwi* ‘FF(FFB, FFZ); mSC’ ‘paternal grandfather or sibling thereof or reciprocal thereof’.

I.e. with kinship verbs the semantics is typically more general than with kinship nouns:

mardyarrwun ‘be.FATHER.to’ corresponds to

bunyi ‘father, father’s brother’;

makamaka ‘father’s sister’,

ngawiny ‘(man’s) child; brother’s child’

wulang ‘be.MOTHER.to’ corresponds to

kamu ‘mother, mother’s sister’

yaja ‘mother’s brother’

ngayang ‘woman’s (sister’s) child’

kanyuny ‘man’s sister’s child’

This raises the issue of how best to translate a root like *mardyarrwun* or *wulang*: most accurately, it should be along the lines of ‘be patrilineal relative of, in first ascending generation’ and ‘be matrilineal relative of, in first ascending generation’. Since these are cumbersome here we will represent them by the shorthand capitalized expressions be.FATHER.to and be.MOTHER.to.

Crucial note: Grammatically the referent will normally be the non-speech act participant; the kinship verb effectively forms a *headless relative clause* on either the subject or the object. Headless relatives are a way of assimilating the behaviour of kinship verbs to the standard syntactic behaviour of verbs, i.e. of getting referential readings from predicates.

Subject-pivot headless relative clause: (the one_i such that) he_i saw me

Object-pivot headless relative clause: (the one_j such that) I saw him_j

(6a) *aburakbung*
a-K-wurakbu-ng
1sgA-3sgO-be.older.sibling.to-PP
‘my younger brother, i.e. the one whom I am older sibling to’ (object pivot)

(6b) *nganduwurakbung*
ngandu-wurakbu-ng
3A>1sgO-be.older.sibling.to-PP
‘my older brother, i.e. the one who is older sibling to me’ (subject pivot)

When both subject and object are third person, this creates ambiguity, since the referent can be either the subject or the object of the verb:

(6c) *ri-wurakbung*
3sg.mA>3sgO-be.older.sibling.toPP
‘his/her older brother, i.e. the one who is older sibling to him’ (subject pivot)
‘his younger brother/sister, i.e. the one to whom he is older sibling’ (object pivot)

2. Why kinship verbs are interesting to linguistic theory

- Why do languages have word-classes (parts of speech)?
- How far do they coincide?
- How far can we predict what meanings will go into what word classes, both within a given language and across languages?

2.1 Kin terms and word classes in the world's languages

In most languages, kinship terms are nouns

In a very few (c. 20) they are expressed by verbs – all in Northern America (as far south as Mexico), Northern Australia, plus one Khoisan example (ǀGui). See Amith & Smith-Stark (1994a,b), Evans (2000)

2.2 Factors influencing word-class assignment of kin terms

To nouns:

- time-stable (Givón 1984)
- managed as entities in discourse (Thompson 1988)
- referents are entities, ontologically (Bach et al 1995)
- prototypical function is to establish reference (Hengeveld 1992), whereas prototypical function of verbs is to predicate

To verbs:

- kin-constituting acts (begetting, birthing, contracting of marriage etc.) can be time-bounded
- kin terms establish 2-place logical relations; multi-place relations are generally lexicalised as transitive verbs
- some uses predicate rather than refer ('she is my cousin')

[T]he apparent uncertainty [in Oneida - N.E.] whether to treat kinterms as verbs or nouns is perhaps not to be treated as a random vagary of superficial structure but rather may have something to do with the semantic/pragmatic fact that kinterms (and other relational nouns) are in fact used both to assert that certain relations hold between given individuals and to identify individuals. (Kay 1975:206)

I.e. this lexical class is subject to *competing motivations* with regard to its word class - which would explain its cross-linguistic variability

Plausible, but

- (a) how come kinship verbs are so rare
- (b) the explanation is post facto and risks being a just-so story

Iwaidja is an ideal test case for examining the question, because it is a language where kinship can be expressed by either verb or noun. This allows us to examine what factors favour each use within the one language

3. Returning to the question: evidence from the DoBeS corpus

- Concordance using ELAN search function on all key kin terms
- Close study of a few highly curated texts

Category	Nominal	Number of uses per lexeme	Number of uses per superordinate category	Verbal (root)	Number of uses (lexeme=superordinate category)	Ratio N:V
FF(B/Z)/SC	<i>wawu</i>	35	35	<i>ldakbaminy</i>	5	7
MF/DC	<i>babam</i>	44	45	<i>mungkidbinyung</i>	11	4.09
	<i>angbany</i>	1				
F(FB)/FZ/mC	<i>bunyi</i>	59	116	<i>mardyarrrun</i>	52	2.23
	<i>makamaka</i>	37				
	<i>ngawiny</i>	20				
MM(B/Z)/DC	<i>wiwi</i>	60		<i>manyirri</i>	37	1.62
M(MZ)/MB/fC	<i>kamu</i>	75	108	<i>wulang</i>	72	1.5
	<i>yaja</i>	16				
	<i>ngayang</i>	17				
	<i>kanyuny/kanyung</i>	0				
Sib	<i>wulku</i>	27	36	<i>wurakbun</i>	32	1.125
	<i>ngunbuj</i>	11				
Spouse / sibling-in-law	<i>ilkumu</i>	0		<i>makan</i>	7	0.28
	<i>nanung</i>	2				
All nominal uses			345	All verbal uses	216	1.6

Table 2: comparison of nominal and verbal uses for superordinate kin types (in general K + siblings + their reciprocals)

Note:

- huge differences in ratios across corpus, ranging from 7:1 in favour of nouns for patrilineal grandkin to nearly 4:1 in favour of verbs for spouse and sibling-in-law.
- even holding generation constant, there are big differences – cf MM/DC, where kinship verbs approach kinship nouns in frequency, with FF/SC, where nouns outnumber verbs 7:1.

In general:

- the greater the generational distance, the more verbal use is disfavoured
- matrilineal kin favour verbal use over patrilineal kin
- spouse relation favours verbs

Anthropologically interesting, but doesn't help us pin down what conditions choice in individual cases

4.1 Contexts favouring nominal use

4.1.1 Combinations for which no verb is available

E.g. MF (*kumbala*) MMM / DDC (*wulubulu*)

4.1.2 Address, real or reported – nominal set always used (see also (1))

- (7) *Wiwi! Yaja! Ngandu nganamini? Ngamaju nuwurrung!*
ng-ana-mi-n nga-maju-ø
 FF MB how 1sgS-IRR-do-NPst 1sg-die-NPst 2plOBL
 ‘Grandfather! Uncle! What am I going to do? I’ll die and you’ll be sorry!’
 (Discipline 00:21:04)

4.1.3. Character selection – i.e. where a relationship has been set up between two (sets of) protagonists, both now central in the story, and it needs to be clarified who is in focus. (Recall that an expression like *kawulang* ‘she is mother to her’ can mean, in context ‘her mother’ or ‘her daughter’ – plus ‘the two of them, mother and daughter’ as we’ll see below – so kinship verbs are not effective at disambiguating which of these is required)

- (8) *Wanadjanad buldaharrun wingamakud*
bu-ldaharrun wi-ngama-kud
 3du 3plA>3sgO-tell.lies pl-mother-pl
 ‘The two mothers had been telling lies.’ (Mirrnayaj 0:06:37)
 (see also (1) above)

4.1.4 Generic statements about relatives

- (9) *babam, wiwi, wulubulu, yaja, kamu*
 ‘one’s father’s mother, one’s mother’s mother, one’s maternal great-grandmother, one’s maternal uncle, one’s mother....’

4.2 Contexts where kinship verbs are favoured

4.2.1 Kinship relations where nouns don’t exist (typically certain affinal contexts, e.g. spouse)

4.2.2 Dyads [side-note: dyad terms are expressions with meanings like ‘father and son’, ‘mother and daughter’ (Evans 2006). Though they’re common in Australia, until we started getting detailed data we thought they were absent from Iwaidja.]

- (10) *wanadjanad ngaldaj rimakan awunbani*
ri-maka-n a-wun-bani
 3du together 3sg.mA>3sg.cO-be.husband.to-NPST 3plS-DU-sitNPST
 ‘they are husband and wife; they two, who are husband and wife’
 [lit. ‘they two together, such that he is husband to her’]

- (11) *Ajungan barda ijbanakaniny kawulang*
aK-yu-ngan barda ijba-naka-niny K-nga-wula-ng
 3sgS-lie-PstImp PART 3plAWAY-go:du-PstIMP 3sgO-3sg.fA-be.mother.to-P

‘He was lying there when the girl and her mother passed by.’ [Yirrwartbart]
 [Lit. ‘He was lying there when they were going (the ones such that) [one] is mother to [the other]]

- (12) *wularrud animanbukbung kawulang*
wularrud an-i-manbu-kbu-ng K-nga-wulang
 before 3plO-3mA-bite-ITER-Pst 3sgO-3fA-be.mother.to-Pst
 ‘A long time ago when he bit them, that mother and daughter.’

Grammatical note: this introduces a third possibility in terms of pivot – effectively this forms a relative clause whose pivot is the group formed by unifying the subject AND the object, i.e. ‘those two, such that she is mother to her’. We call this a *unifying pivot*.

Such structures are unheard of in the general literature on pivot possibilities for relative clauses. We had overlooked this third translation possibility until we were forced to make the very careful translations needed for producing a book to be used in the school language program.

Note that there is a fourth possibility, in addition to subject pivots, object pivots, and unifying pivots: that the pivot is a subset of one of the arguments. This is found in some oblique ‘triangular’ terms:

- (13) *kurr-yarrwi-ny*
 2pl-be.bound.by.marriage.to.someone.unmentioned-PPf
 ‘the one who is my brother-in-law and your brother, given that you are my wife or cross-cousin’ [i.e. you are both in the same lineage]
 lit. ‘you (sg.) such that you two [including your sister, my wife] are bound to me in marriage’

Examples of this possibility – again with kinship verbs! – do exist in the literature, though without comment on the structure. A Mohawk example (Mithun 1996:636) is:

- (14) *uṭyatyóha uḱy-at-yó-ha*
 1:excl:du:patient-semi.reflexive-be.brother.in.law-diminutive
 ‘my brother-in-law’ lit. ‘the one such that we are each other’s brother-in-laws’

These two extra possibilities require us to expand our typology of pivot types as follows:

Pivot is	Productivity	Example
subject	regular option; forced when object is non-third person and subject is third person	2,3, 6b
object	regular option; forced when subject is non-third person and object is third person	6a
unified (subject + object)	marked option, available when combined with summative pronoun, adjective <i>ngaldaj</i> ‘together’ or stance verb taking summed group as object	10-12
subset (subset of subject group)	some triangular terms with second plural subjects	13

Table 3. Revised set of pivot possibilities suggested by Iwaidja kinship verbs

4.2.3 Side characters to main protagonists, characterised by kinship relation

- (15) *Burrwurr, kawalimangung ba karlu kaburtbang*
young.person 2sgA>3sgO-visit-PImpf DET NEG 2sgA>3sgO-be.afraid-PP
kaK-alima-ngung kaK-murtba-ng

ba rimardyarrwuny.
ri-mardyarrwu-ny
 DET 3sg.m.A>3sgO-be.father.to-PImpf

‘You used to visit your sweetheart without being afraid of her father (who might catch you out)’ (Discipline 0:21:43)

This can include introductions of new protagonists, relating them to others already established. In this part of the crocodile story two boys have already been introduced (one of the main character pairs - they later turn into crocodiles); in the following sentence their mothers are introduced:

- (16) *Ijbanakandung ba manbalda warrulany,*
Ijba-naka-ndung 3pl.S.away-go:du-PImpf DET pair children
wanadjanad anduwulang awunbaning bunguldiny alawi.
3du 3plA>3plO-be.mother.to-P 3plS-du-sit-P 3sgO-3plA-make-P net
andu-wula-ng a-wun-wani-ng K-wu-nguldi-ny

‘They were going along, those two kids, and their two mothers had made a fishing net.’ (Mirrnayaj 0:01:39)

4.2.4 When explaining kin relationships between subsections, or between subsections and people [subsections are a system of eight divisions of the whole of society, which serve as a template regulating possible marriage, and as a base for calculating kinship relationships between individuals]

- (17) *Ngabi ngandu**wulang** Ngalwahaj.*
ngandu-wula-ng
 1sg 3A>1sgO-be.mother.to-P
 ‘The Ngalwahaj subsection is in a mother relation to me.’

4.3 Ambivalent contexts – either permitted

Giving validation for who told story to narrator, or who he or she will tell it to

- (18) *Wardad, ngabi abalduwunduwinma, same,*
one 1sg 1sgA-3sgO-tell.storyNPst same
a-K-ba-lduwunduwinma
 ‘There’s one thing I’ll talk about, the same thing,

- in our work-flow, we are assuming a Babushka-doll model of material ratings:

*	raw text (recorded; basic metadata)
**	roughly annotated text (first mark-up for keywords or topics)
***	rough transcription (of target language), done by linguist, without written-in translation
****	rough transcription and translation, done by linguist and checked with speaker
*****	first full transcription and translation, done by linguist and checked with speaker
*****	double-checked transcription and translation
*****	curated transcription and translation, checked multiple times, ready for publication (e.g. in book form)

It is the texts at 5-star rating and above which play the most important role in understanding questions like those dealt with in this talk.

At a rough estimate, less than 1% of our > 250 hours of material is at 6- or 7-star level (i.e. less than 2.5 hours), and less than 4% is at 5-star level or above.

We also believe that future linguist users of the Iwaidja data will not find material below a ****-rating of much help (to use ****-material you would effectively need to have invested a lengthy period, probably years, studying the language). And material below *****-level won't be much use to non-linguist users. Obviously native speakers can use the material from *-level up – but they are a tiny group and we cannot be sure that such people will still exist in 70 years time.

To gain full value from the archive, then, the next priority is thus to substantially increase the proportion of high-quality material.

Ostler's question: how much material does an archive need before a future investigator could figure out most of the missing material for themselves?

We don't know, but if the language is unusual, certainly a lot more than we currently have!

References

- Amith, Jonathan D. & Thomas C. Smith-Stark. 1994a. Transitive nouns and split possessive paradigms in Central Guerrero Nahuatl. *IJAL* 60.4:342-68.
- Amith, Jonathan D. & Thomas C. Smith-Stark. 1994b. Predicate nominal and transitive verbal expressions of interpersonal relations. *Linguistics* 32:511-547.
- Bach, Emmon, Eloise Jelinek, Angelika Kratzer & Barbara Partee, eds. 1995. *Quantification in Natural Language*. Dordrecht: Kluwer Academic Publishers.
- Evans, Nicholas. 2000. Kinship verbs. In Petra M. Vogel & Bernard Comrie, eds. *Approaches to the Typology of Word Classes*. Berlin: Mouton de Gruyter. Pp. 103-172.
- Evans, Nicholas. 2006. Dyad constructions. In Keith Brown (ed.), *Encyclopaedia of Language and Linguistics*, Vol. 4. Oxford: Elsevier. pp. 24-27.
- Evans, Nicholas and Hans-Jürgen Sasse. 2007. [On-line reprint, slightly revised, of Evans & Sasse 2004]. Searching for meaning in the library of Babel: field semantics and problems of digital archiving. *Archives and Social Studies: A Journal of Interdisciplinary Research* Vol. 1.0:260-

320. Available at
http://socialstudies.cartagena.es/index.php?option=com_content&task=view&id=38&Itemid=33
- Givón, Talmy. 1984. *Syntax: A Functional-Typological Introduction, Vol. 1*. Amsterdam, Philadelphia: Benjamins.
- Gylberti, Maturina. 1558. *Arte de la Le(n)gue de Michuaca(n)*. Iuan Pablos.
- Halpern, A.M. 1942. Yuma kinship terms. *American Anthropologist* 44:425-441.
- Hengeveld, Kees. 1992. Parts of speech. In Michael Fortescue, Peter Harder & Lars Kristofferson (eds.), *Layered Structure and Reference in a Functional Perspective*, 29-56. Amsterdam: Benjamins.
- Kay, Paul. 1975. The generative analysis of kinship semantics: a reanalysis of the Seneca data. *Foundations of Language* 13:201-214.
- Mithun, Marianne M. 1996. Multiple reflections of inalienability in Mohawk. In H. Chappell & W. McGregor, eds., *The grammar of inalienability: a typological perspective on the part-whole relation*. Berlin: Mouton de Gruyter.
- Sasse, Hans-Jürgen. 1993. Das Nomen – eine universale Kategorie? *Sprachtypol. Univ. Forsch. (STUF)* 46.3:187-221.
- Sasse, Hans-Jürgen. 1998. Verwandtschaftsverben im Cayuga. Handout 12/5/98, Institut für Sprachwissenschaft, U. Köln.
- Serzisko, Fritz. 1983. Über Verwandtschaftsbezeichnung in Somali. In Rainer Voßen and Ulrike Claudi, eds., *Sprache, Geschichte und Kultur in Afrika. Vorträge, gehalten auf dem III Afrikanistentag, Köln, 14/15 Oktober 1982*. Hamburg: Helmut Buske Verlag. Pp. 125-44.
- Thompson, Sandra. 1988. A discourse approach to the cross-linguistic category 'Adjective'. In John A. Hawkins, ed., *Explaining Language Universals*. Oxford: Blackwells.

Text references

- Mirrnyaj: Archie Brown. The origin of crocodiles. dVR_060726_T1.eaf. Rec. Wanyjurrk, Northern Territory, by Nick Evans & Bruce Birch, 26/7/06, transcr. Minjilang, N.T. Feb 07.
- Discipline: Khaki Marrala and Ronnie Warduluj. dVR_060405_T1.eaf. Rec. Minjilang 5/4/06, by Bruce Birch, transcr. Minjilang N.T. Feb 07.
- Yirrwartbart: Joy Williams. *Yirrwartbart. Yiwaruj burdan Minjilang angbunman Joy Williams Malwagag*. Batchelor, N.T. : Batchelor Press.
- Warramurrungunji: Tim Mamitba. dVR_040916.eaf. Rec. Minjilang, N.T., by Nick Evans & Murray Garde, 16/9/04, transcr. Minjilang, N.T. Feb 06, Feb. 07.