

SEMANTIC ROLES – THE LANGUAGE SPEAKER'S CATEGORIES (IN KALA LAGAW YA)

Rod Kennedy

0. LIST OF ABBREVIATIONS

ABL	Ablative case
ALL	Allative case
CR	Having a concrete referent
COM	Comitative
COMP	Completive
DU	Dual
GEN	Genitive case
HAB	Habitual
IMMP	Immediate past
KLY	Kala Lagaw Ya
LOC	Locative
ICOM	Incompletive
INC	Inclusive
PL	Plural
YESP	Yesterday past

1. INTRODUCTION¹

During the past five years I have studied the language and culture of the Kala Lagaw people of the Western Torres Strait and increasingly I am convinced that in order to communicate I must learn not only new words and grammar rules but new schema for categorising ideas. These schema harmonise with a way of life that is peculiarly the people's own.

The three examples given below are indicative of Kala Lagaw patterns of semantic organisation.

1. Kulay! baydham sena boey amadhan.
beware shark there approaches close
Look out! a shark there, it's coming close.
2. Kayn wath sena boey amadhan.
new year then approaches soon
The new year then will arrive soon.

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The comparison of these two sentences illustrates that while English tends to use separate sets of words for time indication and for space indication Kala Lagaw Ya uses almost identical sets of words. The cultural basis for this difference will be discussed below.

3. Kulay! kula sena boey amadham.
beware rock there approaches close
Look out! (we are) about to run into a rock.

The third example would typically be uttered by an observer in a canoe as a warning to the person steering. The close similarity of the Kala Lagaw Ya wording used in each of the three sentences is in marked contrast to the widely different constructions needed to translate the ideas into English. Were we to transliterate example 3. after the pattern of example 1. 'Look out! a rock there, it's coming close.' this would not be a very acceptable way of warning an English speaking helmsman. Kala Lagaw Ya and English have quite different rules controlling choice of reference origin. Where apparently different semantic elements cluster to the same Kala Lagaw Ya morpheme I have taken this as evidence that there is a semantic relationship between these elements and I have searched for further evidence of grouping or unity. In making such a search I have been helped and inspired by the work of Hopper and Thompson (1980), Foley and Van Valin (1977, 1979, 1980), and Marion Johnson (1981). Personal consultation with Ray Johnston of Summer Institute of Linguistics and Marvin Mayers of University of Texas, Arlington, have also helped me to formulate ideas.

The paper sets out to describe the search for meaningful groups of semantic roles as they are mapped onto noun case morphemes. Later the search for underlying unity is extended and an attempt is made to bridge across the grammatical categories of nominal and verbal and to demonstrate that there is a uniform pattern in Kala Lagaw Ya for dealing with sequences whether these be

- (i) Sequences of things, living and/or non-living
- (ii) Sequences of events
- (iii) Sequences of ideas.

Westerners will tend to treat these as three essentially different sequence types, relating them to space, time, and cognition respectively, but there is ample morphological and semantic evidence that Kala Lagaw Ya speakers place far more emphasis on what is common to the various sequences. Systematic use is made of the same terminology when Kala Lagaw Ya speakers discuss each of the different sequence types. This will be featured below. Further it will be shown how morphemes of the same shape occur on nouns to indicate case and on verbs to indicate tense/aspect but that there are very close semantic links in meaning between equivalent morphemes occurring on nouns and on verbs. The same set of morphemes which occur on verbs to indicate various levels of decisiveness of the argument of that verb, also occur on nouns. When they occur on nouns they indicate various levels of decisiveness of interaction between participants. The correspondence between nominal and verbal hierarchies of decisiveness is surprisingly close.

2. SEQUENCES AS PARTIAL ABSTRACTIONS

It appears significant that Kala Lagaw Ya not only uses the same terminology for locating events in time and for locating things in space, it goes further and uses morphemes of the same shape attaching to both nouns and verbs. The parallel is inescapable, verbs are predominantly event oriented while nouns are

predominantly oriented to things. As I struggled to understand how the abstractions of time and space could be perceived as essentially analogous, Dr Mayers pointed out to me that it could be more productive to focus attention on sequences of events rather than on time as a highly abstracted concept. He has gathered considerable evidence to the effect that different cultures have different propensities to order events either in relation to other significant events or else in relation to a mathematical conceptualisation of time as an abstraction. There is considerable evidence to suggest that the Kala Lagaw people tend to focus attention on event sequences rather than on time as an abstraction. Likewise there is a lot of evidence to suggest that within the culture, sequences of things and of people are more in focus than is space as an abstract concept. It appears that this tendency away from abstraction enables the Kala Lagaw person to think about the various types of sequences according to a common schema. It is significant that in Kala Lagaw Ya, distant past tense and future tense are not paralleled by noun cases with morphemes of the same shape. Yesterday past, immediate past, completive aspect, and incompletive aspect all find exact parallels with noun cases having morphemes identical in form. (See Tables 5 and 6). Plausibly the distant past tense and the future tense are more highly abstracted from event sequences than are the other tense/aspects. It would be interesting to explore the possibility that among English speakers there is an inverse correlation between propensity for abstract thinking and propensity to apply space oriented terminology to time sequences and cognitive sequences.

Even in Western man's experience there are situations which tend to blur our tight separation of object from event and of space from time. Consider the following sequence of object/events, a gala parade. A spectator watching the gala parade from the footpath will tend to perceive it as a time sequence, 'First I saw the elephants, then I saw the marching girls, etc.,'. A newscaster, however, who views the spectacle from a helicopter tends to see items sequenced in space, 'Just below me I can see the juggling act, immediately in front of them clowns are riding miniature bicycles, while far into the distance I can just see the girl guides entering the archway,'. This example has been chosen deliberately because it blurs the distinctions between space and time as well as between object and event. This may give some hint as to the Kala Lagaw Ya perspective which emphasises what is common between different types of sequences.

On the other hand it must not be thought that Kawa Lagaw Ya speakers are unaware of distinctions between objects and actions. Despite the unusually high degree of similarity between noun morphology and verb morphology, the differences are even more obvious. Other Pama Nyungan languages also have some examples of morphemes of the same shape occurring on both nouns and verbs. The present high degree of similarity between noun and verb suffixes in Kala Lagaw Ya can perhaps be explained as the product of lesser similarity in the proto language, combined with a strongly developed view of uniformity of sequences in space, time, and cognition. We can find evidence of one such possible shift by comparing Mabuig and Saibai dialects of Kala Lagaw Ya. In both dialects the word for yesterday is *ngul*, and again in both dialects the Ablative Case marker is *-ngu*. The Saibai dialect form of the yesterday past tense marker is *-ngu* the same as for Ablative case whereas the Mabuig form is *-ngul*, the same as the free form of the word yesterday. All that is certain is that Saibai dialect now has a greater degree of uniformity between noun and verb suffixes.

It is significant that in the neighbouring Trans-Fly Papuan language *Bine* there is a much more elaborate set of correspondences between tense/aspect suffixes not far removed from the present time and free form time words such

as 'yesterday' and 'today'. (Personal communication with Lilian Fleischmann)

3. SEQUENCES, THINGS, EVENTS, AND IDEAS, MAPPING ONTO NOUNS

Table 1 shows syntactic case relations which are grammatically defined and quite frequently have a one-to-one correspondence with morphemes. The semantic roles shown in the right hand column have been labelled largely in terms of a native English speaker's preferred categories.

MORPHEMES	SYNTACTIC CASE RELATIONS	SEMANTIC ROLE
-ngu	Ablative	Motion from Source Avoidance
-pa	Allative	Motion towards Goal Purpose Benefactive
-ia <-pu>	Comitative	Path Companion Vehicle
-nu	Locative	With/In/Near
	Instrument	Controlled means
-n	Ergative	Transitive actor
<-nu> <-∅>	Set plural (anti-passive)	Complete set (all members of a given set. See Bani and Klokeid 1976.)
-∅ <-n>	Accusative	Patient

Table 1

(There are some elaborate morphology interchanges and partial reversals as between masculine nouns, neuter nouns, and pronouns. This results in some overlapping of allomorphs between ergative and accusative cases.)

I wish to argue that the retention of some of the 'native English speaker' categories shown in Table 1. above is unhelpful to an adequate appreciation of indigenous semantic categories. For example Kala Lagaw Ya uses the allative case in each of the following three examples. The suffix -pa is used in each instance.

4. Nuy Townsvill-apa
he Townsville-ALL
He went to Townsville

5. Nuy ay-pa.
he food-ALL
He went to get food
6. Nuy ay-pa amal-pa.
he food-ALL mother-ALL
He went to get food for mother

I believe that in the indigenous view the above three concepts are related, perhaps even inseparable. In other words, the etically differentiated concepts of motion towards, purpose, goal and benefactive are all very closely related. This relationship applies to time orientation as well as to spatial orientation and to the realm of cognition. I realise that here I am engaging in the dangerous practice of imputing thought patterns to the speakers of a language imperfectly known to me. It is probably better, however, to make explicit assumptions than to make implicit assumptions. I claim as supporting evidence:

- (i) There is a growing body of literature showing that for a wide variety of languages, analysts consider that their appreciation of structure and meaning have been enhanced by aligning semantic evidence with grammatical evidence. (N.B. Hopper and Thompson survey (1980) and work by Foley and Van Valin (1979).)
- (ii) Using the assumptions set out above has helped me to understand what Kala Lagaw Ya speakers are saying. Also many assertions by Kala Lagaw Ya speakers suggest directly and indirectly that they perceive their environment in this way.
- (iii) The dialects spoken on Saibai, Dauan, Boigu and previously on Prince of Wales use the morpheme -pa as incompletive aspect marker on verbs and as Allative Case marker on nouns. The dialects of Mabuyag and Badu use the morpheme -ka in the same two applications.
- (iv) In Kala Lagaw Ya the various semantic components that map onto one noun case find a parallel with those mapping onto each of the other noun cases and this parallelism of semantic components would seem to extend to the meanings of various verb tense/aspect suffixes.

I now wish to discuss in more detail parts (i), (ii), and (iv), beginning with the phenomenon of semantic mapping onto morphemes. In the argument above I set out to establish the usefulness of postulating semantic categories which cut across those typical of English thought patterns. I now wish to argue further that it is frequently unhelpful to retain English semantic concepts in thinking about Kala Lagaw Ya where clearly these concepts cut across categories suggested by the grammar of Kala Lagaw Ya. A careful examination and comparison of semantic roles which are distinctively mapped onto various contrastive syntactic cases will reveal the spurious nature of what has been a supposed unity. Other ways of describing these supposedly united semantic components will demonstrate that the components properly belong with several different semantic roles. Each of these has its own unity of thought patterns for speakers of the language.

MORPHEME	CASE	ROLE
-ia	Comitative	Path Companion
-nu	Locative	Vehicle With/In/Near
-n	Instrument	Controlled Means

Table 2
(A detail from Table 1)

An example of such a focus in Kala Lagaw Ya is Vehicle as a semantic role, see Table 2 above. Dotted lines (2), (3) and (4) on the table represent the supposed semantic role vehicle, mapping onto Comitative; Locative, and Instrument cases respectively. Closer examination soon reveals that Comitative case is used where the Actor is a passenger in a vehicle such as a car, plane, or speed-boat. Locative case is much more likely to be used if the Actor is a passenger or crew member in a slow-moving vehicle such as a sailing craft. Instrument case is used to mark a vehicle driven by the Actor.

ACTOR AS:	TYPE OF VEHICLE	CASE MARKING ON VEHICLE
Passenger	Fast vehicle	Comitative
Passenger or Crewman	Slow vehicle	Locative
Person in charge	Any vehicle	Accusative

Table 3
(The motive unit such as the sail or outboard motor will be marked instrument.)

I suggest that it is far more meaningful in terms of Kala Lagaw Ya speaker world view to break up the English speaker's concept of vehicles. Three essentially separate concepts join separate concept clusters. They are mapped onto Comitative, Locative, and Accusative cases respectively. Taking the view of an outsider would cause us to want to unite roles which do not readily unite in the semantico-syntactics of the language.

As noted in 2. p.154, different types of sequences are systematically mapped onto each of the syntactic cases. The morphology used for any syntactic case will be the same for all sequence types; event sequences, generally time related; sequence of things, generally space related; and idea sequence, cognition related. For convenience these sequence types will generally be referred to as time, space, and cognition respectively.

The following three examples for Allative case are oriented to space, time and cognition respectively.

7. Ngay lag-apa.
I house-ALL
I will go home.
8. Bathaynga-pa yawa.
tomorrow-ALL farewell
Goodbye until tomorrow.

9. Sena ngay-apa gegeyadh.
that I-ALL bad
To me that is bad.

The next three examples are all for Locative case and are likewise oriented to space, time and cognition respectively.

10. Ngay lag-oenu.
I house-LOC
I am at the house.
11. Sena-bi wath-oenu.
that-CR year-LOC
In that year.
12. Nga-w wakay thoemamay-nu balbaygi-nga.
I-GEN pattern thought-LOC correct-having
To my way of thinking that is acceptable.

The next three examples show the application of Ablative case to space, time and cognition respectively.

13. Ngay lag-oengu.
I house-ABL
I come from the house.
14. Seta-bi goeyg-ingu ngapa
those-CR day-ABL till+now
From those days until now
15. Za nga-w-ngu yakanur-iz.
thing I-GEN-ABL forget-COMP
I had forgotten that.

Examples 16 to 18 are of Comitative case applying to space, time and cognition respectively.

16. Nuy mura lag-ia.
he all house-COM
He moved among all the houses.
17. Sager mura wath-ia pagay-pa.
S.E. wind all year-COM blow-ICOM
The southeast wind blows continually from year to year.
18. Ngay ngi-bia asi-pa.
I you+SG-COM become-ICOM
I am beginning to agree with you.

Example 19 following relates Ergative case to the physical environment (time and space) whereas I regard example 20 as relating Ergative case to cognition because a discovery relates more to the planning of a constraint upon the undergoer rather than a physical constraint. Planning is cognitive.

19. Nuy-dh na-n matham-an.
he-ERG she-ACC strike-COMP
He struck her.
20. Nuy-dh n-an im-an.
he-ERG she-ACC see/discover-COMP
He spotted her.

	APPLICATION TO SPACE INDICATES	APPLICATION TO TIME INDICATES	APPLICATION TO COGNITION INDICATES
ALLATIVE -pa	to a location, person, or object	Until a time or with respect to a time	cognitive response, evaluation
LOCATIVE -nu	at, in, on, near	at a time, within a timespan	in a person's opinion
ABLATIVE -ngu	movement from, avoidance	from a time	fear of, forgetting
COMITATIVE -ia	movement in a vicinity, vehicle	continuity through a timespan	sharing an opinion
ERGATIVE -n	physical modification		mental constraint, loss of independence

Table 4: A summary of noun case applications
to space, time and cognition

Table 4 above sets out in summary form the pattern of usage of the various syntactic cases which lead me to believe that Kala Lagaw Ya speakers have a unified view of the semantic roles which map onto each case.

4. PARALLELS IN MORPHOLOGY AND SYNTAX BETWEEN NOUNS AND VERBS

I wish now to discuss evidence for a common semantic thread linking noun case morphemes with verb tense/aspect morphemes of the same morphological shape. Tense/aspect markers in Kala Lagaw Ya break readily into a dichotomy of those which define event boundaries precisely and those which do not (see Table 5).

The set of tense/aspect markers used to indicate precise event boundaries includes distant past (completed before yesterday) -dhin, yesterday past (completed yesterday) -ngu, immediate past (already completed today) -nu, and future (not yet begun) -ne. The set of tense/aspect markers which do not define event boundaries precisely are the completive -n, and the incomplete -pa. Habitual aspect is also indicated, the suffix -pu is used. The language also distinguishes continuous aspect for past, present and future but these are not dealt with in the present paper.

Of the two suffixes used where event boundaries are not in positive focus -n, the completive aspect marker is used to refer to events throughout the past and also to events in present and future to which the speaker foresees no problem hindering their prompt fulfilment. It conveys decisiveness or rapid pace of action. -pa is the incomplete aspect marker. It is used for general references to the future and to incomplete actions in the present, including present continuous actions. It may be used for actions in the past where the speaker wishes to emphasise purposiveness or goal orientation. Thus it bears similarity semantically to Allative case on nouns. These and the other tense/aspect morphemes are shown in Table 5.

COMMON MORPHEME	NOUN CASE	VERB TENSE/ASPECT	POSTULATED COMMON UNDERLYING SEMANTIC CONCEPT
-n	Ergative/ Accusative, Instrument	Completive	Strong control. With noun case, involves control of involvee. With verb tense/aspect, a decisive occurrence.
-pa	Allative	Incompletive	Purposive approach or attempt.
-pu -ia	Comitative	Habitual	Continual occurrence. Involvee not under a forceful constraint from involver.
-ngu	Ablative	Yesterday Past	Movement from.
-nu	Locative	Immediate Past	State of rest/occurrence complete.

Table 6

(Both the allomorphs <-ia> and <-pu> occur for comitative case, though <-ia> is by far the more common. Habitual aspect has only the one allomorph <-pu>.)

Having made some direct comparisons between noun cases and verb tense/aspects that are indicated by identical suffixes, I now wish to give a few examples illustrating how the selection of noun case is a significant indicator of the interaction of participants. The semantic roles which map onto the subjects of both transitive and intransitive clauses, will here be referred to by the general term involver. Roles mapping onto objects or onto nominals which behave somewhat like objects will be referred to as involvee roles. The terms have been chosen in an effort to embrace roles relating to both action and non-action verbs. In examples 25 and 26 below the same verb-stem is illustrated in its transitive and intransitive forms. In the transitive example, no.25, the involver is very forcefully placing a constraint on the involvee. Example 26 describes a moderately forceful attempt by the involver to constrain the involvee. The possibility is left open for the involvee not to answer thereby refusing to be constrained. By contrast, example 25 contains the underlying assumption that the involvee has no such option.

25. Tisa-n na-n yapu poeyba-n
teacher-ERG she-ACC word ask-COMP
The teacher questioned her (demanding an answer).
26. Tisa nabe-pa yapu poeyb-iz
teacher she-ALL word ask-COMP
The teacher asked her a question (answer optional).

Where the speaker wishes to indicate deferential behaviour on the part of the questioner, a different verb must be used as well as a different noun case for the involvee.

27. Tisa-n kuyku mabayg-ia kuyk wakaya-n.
teacher-ERG head person-COM origin search+for idea-COMP
The teacher sought the information by going to the head man.

The use of noun case to make such distinctions is basic to Kala Lagaw Ya semantics and comparable examples are extremely common. (See Bani 1979). Although the shapes of morphemes vary somewhat between Saibai Dialect and the Mabuiag Dialect Bani refers to, clearly the same principles are operating. Re-reading Bani's article after preparing the first draft of this paper was a great help in enabling me to see that a hierarchy of involvee constraint was an important factor in the selection of noun case.

Those suffixes, (-n, -pa, and -ia/-pu) which on nouns behave as a hierarchy of indicators of involvee constraint, appear to operate in a very similar way with verbs where tense/aspect markers are important indicators of the decisiveness a speaker associates with an event. The three examples below illustrate this.

28. Nuy wap-ia lume-pu
he fish-COM search-HAB
He searched around for fish, (not knowing whether any were to be found.)
29. Nuy-dh kay wapi lumay-pa
he-ERG then fish search-INCOM
He will search for fish, (known to be in the area.)

See Bani (1979:38-40). Even though Bani addresses himself primarily to the issue of different noun cases and their relationship with pre-supposition, there is a high correlation in Saibai speech patterns between noun cases and verb tense/aspects. Those utterances where the noun case selected indicates a high level of involver/involvee interaction tend also to employ verb tense/aspects which indicate a decisive event. See example 30 below.

30. Kunamaynbayga-n bangal ngi-n luma-n
policeman-ERG later you-ACC search-COMP
The policeman will certainly search for you.

This example shows the use of a verb form normally used to indicate present or past action but it is used here of the future to indicate determination. Otherwise -pa would be used, or if the speaker wished to emphasise that the event had not begun yet, he would use -ne. More research needs to be done in this area and hopefully there will be a substantial contribution from several indigenous islander linguists. One more radical solution which requires investigation is as follows.

4.1 Alternate analysis of noun verb parallels

Of the morphemes shown in Table 6 we would argue that the five noun case morphemes are not just the same shape as 5 corresponding verb tense/aspect morphemes with related underlying semantic concepts but that they are the same morphemes and have the same underlying semantic concepts whether they happen to be attached to nouns or to verbs. We may argue that the morpheme -n indicates a decisive trend towards closure or the attainment of a sequence boundary. In example 21 there is a decisive trend towards the onset of motion along a path, a new stage in a sequence of activities. This is indicated by the morpheme -n on the verb. In example 24 the collective plural involved carries this suffix -n indicating closure (see Bani and Klokeid 1976). In example 25 this same

morpheme occurs three times. Normally these three occurrences are analysed as ergative case, accusative case and completive aspect respectively but all three of these occurrences along with the cases and aspect classifications relate to a decisive trend towards closure or completion. The argument that -pa is similarly an indicator of an indecisive trend towards closure may be supported by comparing example 22 with example 21 and by considering examples 7-9. Likewise -pu/-ia may be associated with the absence of a decisive closure trend - no sequence boundary. See examples 16-18. -ngu may be associated with a clear trend to anti-closure, or the separation of two referents by an intervening item. See examples 13-15. -nu may be associated with closure attained. Two referents are together in a sequence thereby defining a sequence boundary. See examples 10-12.

It has been argued above that the morphemes -n, -pa, -pu/-ia, -ngu, and -nu attaching to nouns indicate differences in closure of a sequence. Likewise these same morphemes indicate similar differences in decisiveness of a verb argument. See above examples 21-23. Because these three examples all refer to actions in the near future the verbs carry different suffixes only to indicate different event probabilities. If we equate high event probability with high closure then we may say that the suffixes have the same signification whether occurring on verbs or on nouns. -n indicates determination or high closure, -pa indicates probable closure, while -pu indicates indecisiveness or lack of closure. Parallel examples occur using -nu and -ngu but only for events in the immediate past and yesterday past respectively.

31. Nuy-dh wapi luma-nu.
he-ERG fish search-IMMP
He has searched for fish, (and now has stopped).

This is an example of a static situation; it has present closure.

32. Nuy-dh wapi luma-ngu
he-ERG fish search-YESP
He searched for fish yesterday.

This is an example of anti-closure. Whereas the immediate past form indicates that the event and the reporting of that event are adjacent events in a sequence, the use of yesterday past indicates that there is separation or anti-closure between the event and the reporting of that event. The start of a new day is another event in the sequence which divides event from report.

The concept of closure appears to have valuable explanatory power with respect to the phenomenon described by Bani and Klokeid (1976:269-283) as Ergative switching. By way of illustration the two examples following give normal ergative morphology and switched ergative morphology respectively.

33. Yoepkazi-n wapi gasam-pu.
woman-ERG fish catch-HAB
The woman generally catches fish.
34. Yoepkaz wapi-n gasam-pu.
woman fish-COLLECTIVE+PLURAL catch-HAB
She was quite a fisherwoman, just consider all the fish she caught.

In this example it is the collective plural which is in focus and could be said to have a high degree of closure because it is a complete set representing all the fish the woman ever caught. Of course it is meaningless to divorce the completeness of this set from the woman's relationship with the elements of the set. The Kala Lagaw people tend to emphasise events in totality and to have

a lesser enthusiasm for analysis. It is initially very puzzling to an outsider to observe the apparently disparate range of uses of -n as a morpheme. Its uses include:

- Ergative case on common nouns
- Accusative case on singular pronouns
- Accusative case and genitive case on masculine proper nouns
- Collective plural marker on common nouns whether these nouns occur in what would otherwise have been ergative, nominative or accusative slots
- Completive aspect marker on verbs

Dealing with all these occurrences of -n will require another whole paper. It is sufficient to say here that all these uses can be related to definite or probable closure.

5. PARALLEL TERMINOLOGY APPLIED TO SPACE, TIME, AND COGNITION

As stated above, the use of parallel terminology for basic references to time and space, or should we say event sequences and sequences of things, suggests that this analogy is very strongly developed in the world view of Kala Lagaw speakers. I know of no words in the language which can be used to describe space but not time. I know of only three words used to describe time but not space; these are thonar meaning *time*, sob meaning *a moderately long time*, and bangal meaning *later*.

WORD	TIME ORIENTED MEANING	SPACE ORIENTED MEANING
sena	<i>then/earlier or later</i>	<i>there</i> (example 36)
ina	<i>now</i> (example 37)	<i>here</i> (example 38)

Table 7: Demonstratives that have omnidirectional references

- 35. Kayn wath sena boey amadhan. Time
new year then approach near
The new year is drawing close.
- 36. Waru sena. Space
turtle there
There is a turtle.
- 37. Ina kayb ngay kayn mabayg. Time
now today I young person
Now today I am a young person.
- 38. Ina dhamu. Space
here seaweed
Here is seaweed.

WORD	TIME ORIENTED MEANING	SPACE ORIENTED MEANING
paypa	<i>backwards in time</i> (example 39)	<i>to windward</i> (example 40)
pawpa	<i>forward in time</i> (example 41)	<i>to leeward</i> (example 42)
parunu	<i>before</i> (example 43)	<i>in front of/to windward of</i> (example 44)
kalanu	<i>after</i> (example 45)	<i>behind/to leeward of</i> (example 46)

Table 8: Direction words, where the direction of the wind is the analog of time passed

39. Kay paypa kulay ngay za-ginga. Time
then back+in+time early I thing-negative
Long ago I did not exist.
40. Waru kay paypa guythuy-an. Space
turtle there up+wind escape-COMPL
The turtle has escaped there upwind.
41. Ngalpa koezi pawpa matha zagethan. Time
we+PL from+there forward+in+time just work
From this time on we will continue to work.
42. Sapu-l kula-ngu pawpa katpalgi-moey-pa. Space
spray-PL stone-from down+wind jump-PL-ICOM
Spray is flying from the rock.
43. Wa koewbu paru-nu... Time
yes war before-LOC
Yes, before the war...
44. Thana kaypay paru-nu. Space
they+PL there+upwind face-LOC
They are there to windward.
45. Wa ngurpay kala-nu... Time
yes school after-LOC
Yes, after school, ...
46. Thana Kaypun kala-nu. Space
they+PL there+down+wind back+LO
They are there to leeward.

WORD	TIME ORIENTED MEANING	SPACE ORIENTED MEANING
kulay	<i>before</i> (example 47)	<i>In front of speaker</i> (example 48)
wagel	<i>after</i> (example 49)	<i>Behind the speaker</i> (example 50)

Table 9: Direction words where the direction of origin of the speaker or the direction he has his back to, is the analog of time past

47. Wa kulay thonar kedha. Time
yes previous time thus
Yes in early times it was like this.
48. Wa ngitha kulay. Space
yes you+PL ahead
Yes you all go ahead.
49. Ngalkan Kazi-w ngep-aw thonar boey wagem. Time
our+PL child-GEN grandchild-GEN time approach later
The time will come for our children and grandchildren.
50. Wa thana wagem. Space
Yes they+PL behind
Yes, they are behind us.

5.1 Wider evidence for space, time, and cognition parallels

It is well known that any language tends to develop highly efficient systems for dealing with items and concepts of general importance to native speakers of that language. There is a great deal of evidence to the effect that winds and wind directions are of central importance to Kala Lagaw Ya speakers.

- (i) Sea currents are named for their direction relative to the wind blowing at the time because this combination determines the safety of canoe travel. Sea currents are called *kulis* if they flow approximately with the wind, causing waves to flatten. Currents against the wind which cause waves to rise sharply are called *guthaths*.
- (ii) In Kala Lagaw Ya mythology sorcerers frequently use magic to control wind direction thereby facilitating canoe journeys. Even today some people are believed to have this power.
- (iii) The place of departed spirits was regarded as being far to the west or downwind with respect to the prevailing trade wind. As a person journeyed towards the land of the spirits as he departed this life he was regarded as travelling *pawpa* in respect to space, *to leeward* and also of travelling *pawpa* in respect to time, *to the future*. It is probable that no sharp distinction was drawn between spatial sequence, event sequence, and idea sequence with respect to the passing of human life; rather the whole appears to be viewed metaphorically as the analog of a canoe blown and drifting on the sea. By way of contrast the expression *paypa* the command which means literally *travel up-wind*, is very frequently used as an injunction meaning, *Look lively there, do your best work*. It is just the command a bosun would give to a crew hoisting the sails.

Another interesting piece of evidence concerns an unexpected use of the verb *yakanuriz* meaning *forgot*. As would be expected this verb is almost always used to refer to idea sequences, not sequences in space. The following rather colloquial use is an exception.

Wapi-nu dagul yakanur-iz.
fish-LOC spear forget-COMP

The fish is swimming off with the spear stuck in it. Forgot or rather *yakanuriz* is here used to indicate a motion which produces separation between the user of

the spear and his spear. A similar utterance is made with respect to a person's sandal if he should temporarily lose it while walking through heavy mud. Both these utterances are metaphorical extensions of language but it is enlightening to note the direction the metaphors take. In English we may say 'It's gone from me.' as an alternative to saying, 'I have forgotten it.'. Though metaphoric extension of space oriented utterances to refer to time or cognition is common in English I am unaware of any extensions of cognitive oriented utterances to refer to time or space. This is another indicator that links between time, space, and cognition are more highly developed in Kala Lagaw Ya than in English.

6. CONCLUSIONS

There is a considerable body of evidence suggesting that for native speakers of Kala Lagaw Ya parallels between time, space, and the cognitive domain are highly developed. This evidence will here be reviewed briefly.

In section 2 it is argued that Kala Lagaw Ya speakers tend to take a less abstract world view than do English speakers. There is a tendency to think of sequences of events rather than of time, of sequences of things rather than space, and of sequences of ideas rather than of cognition. This trend predisposes Kala Lagaw Ya speakers to emphasise similarities between different domains whereas English speakers tend to emphasise differences. It may be, however, that as propensity to abstract varies widely between different English subcultures, related barriers to communication exist between these subcultures. There is need to discover how frequently working class school children are reprimanded by middle class school teachers for using space oriented terminology to refer to time or to cognitions.

In section 3 differences are noted between the ways in which English speakers group semantic roles and the patterns Kala Lagaw Ya speakers prefer. The morphology of Kala Lagaw Ya suggests the grouping of such semantic roles as source, with time or origin, with avoidance, and of destination, with time goal, with benefactive. These groupings lend further support to the argument that Kala Lagaw Ya speakers emphasise similarities between the domains of time, space, and cognition.

In section 4 semantic and morphological parallels are drawn between nouns and verbs. In that nouns tend to refer to things while verbs refer to events this further emphasises similarities between the ways in which Kala Lagaw Ya speakers draw parallels between space and time. Similarities between sequences of things and sequences of events are emphasised.

Section 5 sets out evidence on the use of the same functor words and patterns of morphology to discuss space, time, and cognition, further emphasising similarity.

Section 6 refers briefly to related cultural issues.

Kala Lagaw Ya speakers appear to take a less abstract view of the world than do English speakers. Similarities between different domains are emphasised where English speakers tend to emphasise differences. Anybody wishing to communicate effectively with the Kala Lagaw or Western Torres Strait people needs to examine such evidence of differences in world view.

NOTE

1. This is an expansion of a paper of the same name given at the LSA Conference at Monash University in August 1980. Sections have since been added to deal with (i) sequences of things, events and ideas and (ii) ways in which Kala Lagaw Ya indicates intensity of event or of interaction.

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