

PARAGRAPH AND SENTENCE STRUCTURE IN NEW GUINEA

HIGHLANDS LANGUAGES

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In spite of the ambitious title of this paper, it is impossible in a brief report such as this to give an adequate idea of the nature and range of Paragraph and Sentence structures in New Guinea Highlands languages.¹ My goal in this paper is rather to present initial evidence of units which can reasonably be called paragraph and sentence in languages of the chaining variety in the Highlands and other parts of New Guinea. This means that we must sort out certain obvious features of surface structure in these languages so as to evaluate better their real function. In fact, we might almost entitle this paper 'The Destalinization of the Final Verb'. By the 'final verb', I mean a peculiar surface structure feature which has inordinately held the centre of attention in the linguistic analysis of these languages. By 'destalinization', I mean: recognizing this verb form for what it is, a feature of surface structure, and not taking it to be as focal as we have heretofore.

1 Final Verb as a Feature of Surface Structure.

1.1 Predication is no doubt a cultural universal so that clause structures with such component units as Predicates, Subjects, Goals, and adjuncts of Time, Location, and Manner, are also considered to be cultural universals. It seems obvious that we cannot talk without some unit of predication. Equally universal are inter-clausal connections into larger units. These connections usually occasion some sort of sentence level as well as a paragraph level — if we broadly conceive sentence and paragraph to be chunks of different sizes. In many languages, such as English, compound sentences are found, e.g. 'I went downtown but Mary stayed home'. In this sentence there are two sentence bases: 'I went downtown', and 'Mary stayed home', and the verbs within both bases are of equal rank, so that neither verb is in any way structurally superior or inferior to the other. We can, of course, have several bases in the same sentence, as in 'I was at the Club, Mary was out bowling, and the children were watching television'. Such sentences may also have peripheral clauses in subordinate function, as in 'While all this was going on, I was

at the Club, Mary was out bowling, and the children were watching television'. Here the clause 'While all this was going on' goes with the entire sentence nucleus which consists of three bases. It is peripheral to the entire sentence of which it is part.

From consideration of structures such as these, we derive a model of sentence structure found in many parts of the world, viz. a unit consisting of one or more independent clauses, plus or minus one or more dependent (subordinate) clauses.

1.2 The peculiarity of many New Guinea languages is immediately evident in the fact that for such languages there exist chains of clauses with one and only one clause — usually the last—containing a verb distinct in structure from those found in all preceding clauses. It has been customary to call this verb of distinctive structure the independent or the final verb, and the other verbs dependent or medial. Medial verbs in many of these languages contain affixes which tell us if the subject of the next clause is to be the same or different from the subject in the clause under consideration; such medial verbs may even mark explicitly the person and number of the subject in the clause which is to follow.

This is essentially a different model of sentence structure from that sketched above for English, Philippine languages, and many languages of Mexico and other parts of the world. The contrasting model evidenced in New Guinea chaining languages may be compared to a number of railway cars pulled by one and only one engine. This means that even when we are expressing relations which would be coordinated in an Indo-European language, we must put them into a mould so that one and only one clause has a final verb, and any and all other clauses have medial verbs.

Another relevant fact is the disproportionate length of so-called sentences in some of these languages, if the medial-final chain be equated with the sentence. The plausibility of these long units as sentence units becomes even more suspect when we note that there is detectable articulation and segmentation into parts within such long chains, so that they tend to fall apart into a series of sub-units.

2 It becomes therefore necessary to challenge some of the assumptions which have more-or-less unconsciously guided the analysis of languages of the chaining variety as just described.

2.1 One assumption which should be challenged is that the final verb is to be identified with the independent verb in Indo-European languages while the medial verb is to be

	No Relationship	Specific Relationship
Simple	a) Final Verb <u>wakiye</u> 'he will go'	c) Medial Verb <u>wamagina...</u> 'he goes and he...'
Adapted	b) Equative <u>namáne</u> 'it is a house'	d) Subordinate Verb <u>wakibipa...</u> 'if he goes...'

CHART 1

	Same Subject Anticipated (SS)				Different Subjects (DS)
	Compound Actions	Simultaneous Actions	Sequence Actions	Coordinate Actions	Coordinate Actions
Relationship marker	<u>-gi</u>	<u>-tegi</u>	<u>-magi</u>	<u>-nta</u>	< <u>-ogá</u> > (class)
Short form	<u>-∅</u>	<u>-te</u>	<u>-ma</u>		

CHART 2

	Past Tense			Present Tense			Future Tense		
	Sing	Dual	Plur	Sing	Dual	Plur	Sing	Dual	Plur
1st	<u>-uwága</u>	<u>-úwage</u>	<u>-úwaka</u>	1st <u>-óga</u>	<u>-ogá</u>	<u>-oká</u>	1st <u>-aká</u>	<u>-ága</u>	<u>-áka</u>
2nd	<u>-uku</u>	<u>-usúgu</u>	<u>-úgu</u>	2nd <u>-aká</u>	<u>-agá</u>	<u>-ága</u>	2nd <u>-aga</u>	<u>-isígi</u>	<u>-ígi</u>
3rd	<u>-ogá</u>			3rd <u>-agí</u>			3rd <u>-aka</u>		

CHART 3

identified with the dependent or subordinate verb in such languages.² A final clause, one and only one of which can occur in a long chain, is obviously not analogous to an independent clause, several of which can be coordinated in the same sentence in a language like English. This difference would remain even if other parallels were thought to occur.

2.2 A further assumption which should be challenged is the assumption that we are to equate a chain of medial verbs ending in a final verb with the sentence. Undoubtedly in some languages of the chaining variety, such chains are to be equated with the sentence. There are, however, other analytical possibilities which certainly are valid for some languages of the area. Specifically, I suggest that in some New Guinea languages, e.g. Fore, Kanite, and Kosena of the Eastern Highlands, the chain ending in a final verb is roughly equivalent to a paragraph, and contains within it smaller units identifiable as sentences. This implies more grammatical closure for the paragraph than we are accustomed to find in English; and less grammatical independence for the sentence than we are accustomed to find in English. It is time, however, that Bloomfield's definition of a sentence as a maximum independent unit be challenged.³ This definition has indeed been a source of confusion the world over. Sentences occur within paragraphs and discourse and betray the fact that they are embedded within context. Their independence is therefore only relative at the best, in any discourse in any language of the world.

3 I will now proceed to illustrate the allegations just made in reference to the Fore language. The data are from Graham Scott in a paper which he is preparing, called 'The Higher Levels of Fore Grammar'. The interested reader should check the brief report we are making here against the fuller paper which Graham Scott is submitting for publication.

3.1 First we should note some features of Fore verb suffixes. Chart 1 is a summary by Scott of four types of verbs which occur in Fore. The final verb and medial verb contrast as we have indicated above. Note that the final verb on the chart ends with -e, which is an indicative marker, and that the medial verb has a suffix -magi (which indicates same subject in the following clause), followed by the suffix -na, which marks third person singular subject in the following clause. I will not say anything more at present regarding the equative and subordinate verbs. Equative predicators are derived from nouns. Subordinate verbs are derived from either final verbs or medial verbs and reflect

6) The suggestion is that if we define paragraph and sentence this way for New Guinea chaining languages of the sort exemplified by Fore, we obtain paragraph-level chunks of plausible size, and sentence-level chunks of plausible size, and that these build well into the structure of discourses -- aside from a bit of irregularity in the realm of Aperture and Closure of discourse.

3.3 Note the text material which is appended at the end of this paper. Neither of the accompanying bits are a complete text. The first stretch of text is from Scott's Narrative Discourse C-- 'Small People Can Be Useful' and involves only Aperture, Stage, and the first four Episodes of that Fore legend. The second bit of text has only the Stage and the first surface structure Episode.

Note in Narrative Discourse C the occurrence of final verb at the end of 1, 2, 3, 13, 19, 27, and 35. The final verbs at the end of 13, 19, 27, and 35 mark the end of paragraphs within this story. The termination of paragraph in 13, 19, 27, and 35 is in fact double marked by the occurrence of final verbs. Not only do the specific final verbs occur, but also the verb ie, 'so they say'. Each paragraph expounds an Episode of the Story. The final verb at the end of 3 marks the end of a one-sentence paragraph which expounds Stage. Both C1 and C2 together expound Aperture of the story, although both end in final verbs. I have already noted that there is a typical area of irregularity in regard to paragraph and sentence structure in and about Aperture and Closure of discourses, e.g. it is not unusual or uncommon for the Aperture of a discourse to be a sentence (or even clause) which is part of the first paragraph so that the first surface structure paragraph of a discourse expounds what is the deep structure Aperture and first Episode. Similarly, we sometimes find that the Closure of a discourse is part of the final paragraph. At this point of this text, we find the Aperture consists of two one-sentence paragraphs. If this seems unsatisfactory, we could modify our analysis by saying that Fore also contains compound paragraphs composed of sub-paragraphs, and that such units may be found in Aperture.

Look now within Episode 1, that is, from 4 to 14. We note immediately that the suffix -oga, third person singular past tense coordination with different subject in the following clause, occurs in 4, 7, 8, and 13. Notice its use in 4. 'A certain man made a very large sugar cane garden, and was there (-oga).' Then in 5 we are told that a monster arose out of the lake. The monster is a different subject than the man who made the sugar cane garden in 4. Therefore, an \langle -oga \rangle class suffix is called for.

Occurrence of this <ogá> class suffix marks the end of the preceding sentence, the domain in which the monster is the Actor. Similarly in 7, 8, and 13, we find shifts of subject in the following clause. Then note the occurrence of the suffix -nta in 6, 9, and 12. There is no shift of subject between 6 and 7. 5 and 6 together comprise one sentence in Fore. It could have ended with a verb with the suffix -magi in that what follows in 7 is in chronological sequence with what happened in 5 and 6, and there is no change of subject between 6 and 7. The monster is the Actor in 5 and 6, and is also the speaker in 7. Nevertheless, apparently there is some feeling for the size of units on the sentence level and as a result the -nta suffix is used at the end of 6 and a new sentence is begun in 7. Similarly, between 9 and 10 there is no change of subject and -nta is used to conclude a sentence composed of 9. In 10, 11 and 12 a further sentence occurs, in which the monster continues to be the Actor, and in 13 still another sentence occurs with the monster as the Actor. It would be similarly possible to go through Episodes 2, 3, and 4, noting the distribution of <ogá> suffixes, the -nta suffix and final verbs. In every case, we obtain a plausible dissection into units of approximately paragraph and sentence size.

3.4 I have been over a moderately large corpus of analyzed text prepared by Graham Scott, that is, a total of twelve texts on differing subjects such as legends, first person accounts, how to build a house, how to bake bread, prayer, lecturing a new bride, and sermonical material. In every case, sentence and paragraph as thus defined prove viable—although sentence and paragraph differ in length and complexity according to the various discourse types. The only interesting exception is presented in the second fragment of text material attached to this article, Scott's Narrative Discourse D, 'A Yam Origin'. Here a Stage and Episode 1 are combined into the same surface structure unit—a long chain of medial verbs followed by the final verb at the end of D32. As before noted, this is not so surprising in that features of beginning and end of discourse often display irregularity. What is surprising in this text is the fact that the surface structure Episode 1 is clearly two deep structure Episodes. There is very clearly fresh recycling of familiar lexical material from D19 on. Thus, just as D1 mentions a teenage girl from a certain village, so D19 for the first time again contains the phrase 'teenage girl'. You will also note through D20 and following clauses the repetition of lexical items which occur in D2 following. Undoubtedly, a new lexical cycle has begun which indicates a new deep structure Episode. These are both combined, however, to form the same surface structure Episode in that they occur within the same surface structure paragraph with a final verb

at the end of D32.

Note, however, that there is no possibility of confusion in a text of this sort. In spite of the fact that two deep structure Episodes are combined in the same surface structure paragraph, there can be no feeling of confusion on the part of the hearer. We may say that surface structure can be loose in proportion as deep structure units are well marked lexically.

4.1 NARRATIVE DISCOURSE: "Small People can be Useful"

APERTURE:

C₁SC1: ka amanipa maya puntiye, iye
One spirit-being like this did, so they say.

C₂SC1: Agonamapine, iye.
(Here) is the gist of it, so they say.

STAGE:

C₃SC1: Yabu yuguba, pabita, agasiya yabu yuganamane, iye
A sugar garden, wait, it was an extreme sugar garden, so they say.

EPISODE₁ :

C₄SeqC1 : Agasiya yabu yuganamakana puma'ma

An extreme sugar garden he did and did and

mintogana, ka yagarama, C₅SeqC1 : kotupisa

was there, one man (was), and out of a lake

awanama tara uma ba pabita, agasiya
(a being with) two tusks was there and, wait, extremely

puma awa e'ernataga karinamampa imagina,
it did and the being with the very long tusks came up, and

C₆CompC1 : pi ntabu yugaba kagisa awamora asu

at the fence-edge of that sugar garden it came up

mintana C₇SC1 : "Warana pe," yogana,
and was there, and "Fall down," it said, and

C₈SC1 : pabigo kagisaba warara pawaogana,
completely the fence fell down flat, and

C₉SeqC1 : pabigo yabuba asu maema

completely the sugarcane it went up and took and

asu maema asu maemutantana, C₁₀SC1 : pabigo
up and took and up and took, and completely

maegina, C₁₁ SeqCl: kotupintiya momo puma
 it took it, and into the lake down it did and
momo pumutategina, C₁₂ SC1: pigo to tumigaintana,
 down down it did, and alright again it went down
 completely, and C₁₃ SC1: "Ituru pe," yogana, C₁₄ SC1:
 "Stand up," it said, and
ituru puwaewantive, iye.
 (the fence) all stood up, so they say.

EPISODE₂:

C₁₅ SC1: Piya pogana, C₁₆ CompCl: agaga
 Like that it did, and he looked and looked and
pugagategina, C₁₇ SC1: "Nanaenama pive," ugagategina,
 did and did, and "What is it doing?" he said and
 said, and C₁₈ SC1: pabigo ampagina, C₁₉ CompCl:
 completely he came there, and
ampa ka yagara kabima mintantive, iye.
 he came and (that) one man watched and was there, so they say.

EPISODE₃:

C₂₀ Comp Cl: Namapa pabi yabu yugabinti ampa kita magina,
 A house in that sugar garden he went and built, and
 C₂₁ SeqCl: kabima mintogana, C₂₂ SeqCl: ima
 he watched and was there, and it came up
pi karinamampa imagina, C₂₃ Comp Cl: asu
 and that being came up, and it went up and
mintana, C₂₄ SC1: "Warara pe," yogana, C₂₅ SC1:
 was there, and "Fall down," it said, and
pabigo yabuba tatau pumagina, C₂₆ SC1:
 completely the sugar-cane fell around, and
pabigo kana yagara tumpagina, C₂₇ SC1:
 completely on that man it fell down, and
airari kaewantiye, iye.
 covered him up, so they say.

EPISODE₄:

C₂₈SC1: Airari kaewaogana, C₂₉SC1: apasa puntogana,
 It covered him, and he peeped through at it, and
 C₃₀SeqC1: pabigo tagama tagamutamagina,
 completely it piled up and piled up (the sugar-
 cane), and C₃₁SC1: pabigo kotupinti momo
 completely into the lake down down
pumutamagina, C₃₂SC1: pabigo maetegina,
 it did (take) it, and completely it got it, and
 C₃₃SC1: tumigaintana, C₃₄SC1: "Ituru pe,"
 went down completely, and "Stand up",
yogana, C₃₅SC1: pabigo kaga ituru
 it said, and completely as one (the fence)
puwaewantiye, iyē.
 all stood up, so they say.

4.2 NARRATIVE DISCOURSE_D: "A Yam Origin"

STAGE:

D₁SC1: Karagarisa ka aragawae'namampa iro'magina,
 From Karagari a teenaged girl appeared, and

EPISODE₁:

D₂CompC1: kasabi tumpa aetaogana,
 in a 'kasa' tree she went down and shook with her foot, and

D₃SimuC1: ka'yu iro'ute waogana, D₄SC1: "Maro
 a possum appeared and went, and "Over

nka'eriba kampa abeno, kampa abeno, ka'yu
 in that village, don't you know, don't you know, a possum

maro piye, maro piye," yogana, D₅SC1: ka
 is over there, is over there," she said, and a

yagarama asimagina, D₆SimuC1: "Mebiye, mebiye,"
 man stood up, and "Watch out, watch out,"

otate kanamagina, D₇SC1: kanamagina, D₈SC1: "Mebega,
 he said and came, and he came, and "Watch out,

kabagaitegi asu
 I'll shoot you first (have relations with you) and then go

pakameno," yogana, D₉SC1: "A'a
 up and shoot it and give it you," he said, and "No,

marumpa nabakibena, igaga asu panamite
 before you shoot me, the possum go up and shoot for me,

yo," (please) say, "yogana, D₁₀SC1: imagina, he went up, and
D₁₁CompC1: pigo asu pataogana, D₁₂SC1:
 alright he went up and shot it, and
tumogana, D₁₃SC1: igawa maeritegina, D₁₄SeqC1:
 it fell down, and her possum she got, and
kanuwa akima pabita atantana, D₁₅SimuC1:
 his arrow she pulled out and there she put it, and
 "Kanu kanugapa mebiye," otate maeritegina,
 "Arrow, your arrow is there, she said and took (the possum).
D₁₆SC1: wa'napinti pai'waogana, D₁₇SC1: mo
 and into the bush path she fled, and that
ntagara yaba atategina, D₁₈SC1: wa'eri
 man from the tree left there, and home
umintogana, D₁₉SC1: mo nkaragawae'ma to
 went and stayed, and that teenage girl again
pabita asimagina, D₂₀SimuC1: wa'napisa iro'ute
 there stood, and from the bush path appeared
imagina, D₂₁CompC1: pabi areba kasabi
 and went up, and that same "kasa" tree
asu aetaogana, D₂₂SimuC1: ka'yu iro'ute
 she went up and shook it, and a possum appeared
waogana, D₂₃SC1: "Maro nka'eriba kampa abeno
 and went, and "Over in that village, don't you know,
kampa abeno, ka'yu maro piye, maro piye,"
 don't you know, a possum is over there, is over there,"
yogana, D₂₄SimuC1: mo ka yagarama pabigo,
 she said, and that man completely,
 "Mebiye, mebiye," otate pabigo irebu
 "Watch out, watch out," he said and completely a bow
maete kanamagina, D₂₅SC1: "Mebega, kabagaite
 he got and came, and "Watch out, I'll shoot you
asu pagameno,"
 and then I'll go up and shoot and give it to you,"
yegana, D₂₆SC1: "Kampaye, ma tumpa
 he said, and "No, here you will come down and
nabakibena, ima igaga asu
 shoot me, but first go up and the possum go up and
panamite yo," yegina, D₂₇SC1: imagina,
 shoot and give me, so say, she said, and he went up

and ^{D₂₈}CompCl: pabigo asu pataogana,
 completely he went up and shot it, and
^{D₂₉}SC1: tumoggnaba, ^{D₃₀}SimuCl: maerite,
 it fell down, and she got it and,
 "Kanu kanugapa mebiye," utegina, ^{D₃₁}SC1:
 "Arrow, your arrow is there," she said, and
mo maeritegina, ^{D₃₂}SC1: wa'napinti
 down there she got it, and into the bush path
pai'wantiye.
 she fled.

FOOTNOTES

1. This is a preliminary report on a project still in progress under the Office of Education (United States Government Department of Health, Education, and Welfare), entitled 'Hierarchy and Universality of Discourse Constituents (New Guinea Languages)', Contract No. OEC-O-9-097756-4409 (014).
2. This point is also made by Dorothy James in 'Embedding and Coordinating Transforms in Siane', an article now in press for Pacific Linguistics. Karl Franklin argues similarly regarding Kewa in pp. 169-70 of his Dissertation, A Grammar and Dialect Study of Kewa, New Guinea (Australian National University, 1969).
3. Language, p. 170.