IAU VERB MORPHOLOGY

NUSA

Linguistic Studies of Indonesian
and Other Languages in Indonesia

VOLUME 26

1986

ADDRESS:

NUSA
Lembaga Bahasa
Universitas Katolik Indonesia Atma Jaya
Jalan Jenderal Sudirman 49A
Kotakpos 2639/Jkt
Jakarta Selatan, Indonesia

ISSN 0126 - 2874

EDITORIAL

The present volume is the twenty sixth of the Series Nusa, Linguistic Studies of Indonesian and Other Languages in Indonesia.

Beginning 1982 Nusa appears periodically three times a year. Starting with Volume 25, Nusa is type-set differently. There is only one column on each page and the right margin is adjusted. We hope that the improvement will bring Nusa more to your expectations.

The Series focuses on works about Indonesian and other languages in Indonesia. Malaysian and the local dialects of Malay will be accepted, but languages outside these regions will be considered only in so far as they are theoretically relevant to our languages. Reports from field works in the form of data analysis or texts with translation, book reviews, squibs and discussions are also accepted. The works appearing in Nusa can be original or translated from languages other than English.

Although our main interest is restricted to the area of Indonesia, we welcome works on general linguistics that can throw light upon problems that we might face. It is hoped that Nusa can be relevant beyond the range of typological and area specializations and at the same time also serve the cause for deoccidentalization of general linguistics.

Contributions from linguists in the field are solicited. Guest editors are also welcome.

INFORMATION ABOUT NUSA

Beginning volume 12, 1982, Series Nusa is published periodically three times a year at a fixed rate. Individuals residing in Indonesia are to make a one-year-prepayment of Rp 10.000,00; those residing abroad are to pay US$ 17,50 (including surface mail postage). A 60% additional charge is requested for airmail shipment.

Payments from foreign countries are to be made by

(a) bank transfer to the Chase Manhattan Bank, N.A., Chase Plaza, Jalan Jenderal Sudirman, Kav.21, P.O. Box 311, Jakarta, Indonesia, to the order of Yayasan Atma Jaya (NUSA), acc.no.: 665-0-10403-5,

or

(b) bank or personal check payable to Yayasan Atma Jaya (NUSA), but must be sent to Lembaga Bahasa Universitas Atma Jaya, Jalan Jenderal Sudirman 49A, Kotak Pos 2639/Jkt, Jakarta 12930, Indonesia.

Subscribers residing in Indonesia are to send money orders to Yayasan Atma Jaya (NUSA), Jalan Jenderal Sudirman 49A, Kotak Pos 2639/Jkt, Jakarta 12930.

Back volumes (6-23) are still available at a total cost of Rp 50.000,00 (for individuals in Indonesia), US$ 100.00 (for individuals outside Indonesia). Single issues are also available at different costs (see back cover) by pre-payment.

Manuscripts for publication, including reviews, should be sent to the Editorial Board, NUSA, Lembaga Bahasa Universitas Atma Jaya, Jalan Jenderal Sudirman 49A, Kotak Pos 2639/Jkt, Jakarta Selatan, Indonesia.

Contributors are to follow the format of the Linguistic Society of America with the exception that in the footnote and bibliography articles are to be put in quotation marks and books or journals underlined. Content words in the bibliography (nouns, verbs, adjectives) in a title of a book or article must be capitalized.

Non-native speakers of English are requested to have their manuscripts checked by a native English speaker.

Information for librarians: The outside front covers of volumes 1 through 5 were, also bibliographically, the title page. Beginning with volume 6, the front cover is no longer the title page.

IAU VERB MORPHOLOGY

by

JANET BATEMAN

1986

Badan Penyelenggara Seri NUSA
Universitas Katolik Indonesia Atma Jaya
Jakarta

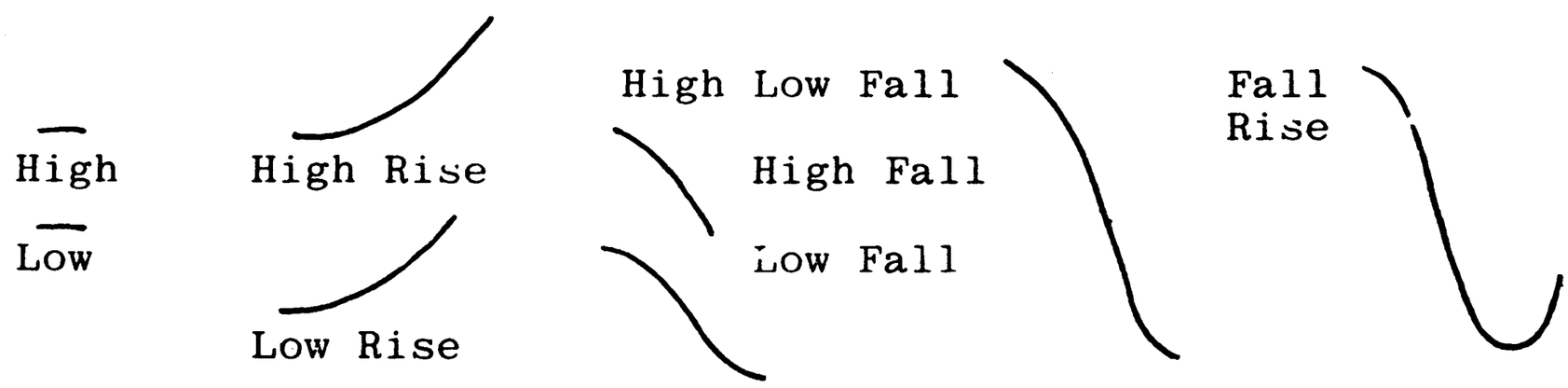
TABLE OF CONTENTS

THE TONE MORPHEMES AND ASPECT IN IAU

The eight basic tone morphemes in Iau form a complex system of eight different aspects. The parameters of the aspect system are Punctual, Durative, Incompletive; and Totality of Action, Resultative, Telic. The Iau aspect tone morphemes indicate both the semantic aspectual character of the verb and grammaticalized aspect functions in the discourse.

1.0 INTRODUCTION

Iau is a basically monosyllabic language with a rich lexically contrastive tone system. The 8 basic contrastive tones consist of 2 level tones and 6 contours.[1]



Iau Contrastive Tones: Levels and Contours

These 8 basic tones are superimposed on syllables with both simple nuclei and complex nuclei of up to three vowels. In addition, combinations of more than one contrastive tone can occur on a single syllable. Most of these are Rise-Fall patterns.

On nouns, the 8 basic tones and combinations of tones give rise to at least 70 different sets of lexically contrastive nouns that differ by tone alone. There is no apparent correlation between the tone of any given monosyllabic noun and its meaning.

In addition, there are at least 68 different sets of monosyllabic verbs that contrast by tone alone. The contrasts on monosyllabic verb stems are illustrated below.

Set 1

tai^{9}	(High Level)	to pull
tai^{6}	(Low Rise)	to land on,
tai^{5}	(High Low Fall)	to have fallen
tai^{2}	(Fall Rise)	to be falling
tai^{3}	(Low Fall)	to come in toward

tai^{8}	(Low Level)	to have pulled off
tai$^{7-8}$	(High Rise-Low Level)	to pull on

Set 2

ba^{9}	(High Level)	to come
ba^{6}	(Low Rise)	to come to
ba^{5}	(High Low Fall)	to come to a particular spot
ba^{2}	(Fall Rise)	to be sticking to or attached to something
ba^{3}	(Low Fall)	to throw at, to shoot
ba^{8}	(Low Level)	to shoot and hit, to kill
ba$^{6-3}$	(Low Rise-Low Fall)	to chase after

Set 3

di^{9}	(High Level)	to hit
di^{6}	(Low Rise)	to be startled
di^{3}	(Low Fall)	to hit
di^{8}	(Low Level)	to hit and kill

Set 4

doe^{9}	(High Level)	to see
doe^{5}	(High Low Fall)	to have looked over
doe^{3}	(Low Fall)	to look at, to watch
doe^{8}	(Low Level)	to have seen

Set 5

da^{9}	(High Level)	ate, ate up
da^{6}	(Low Rise)	dip in water
da^{5}	(High Low Fall)	to have eaten
da^{3}	(Low Fall)	to load onto a vehicle
da^{8}	(Low Level)	to have loaded onto a vehicle, to carry

In some cases, the difference in tone on a verb stem gives rise to a different lexical gloss in English, eg. da^{9} 'ate' vs da^{6} 'dip in water'. In other cases the lexical gloss is the same, but the resultant verbs have obviously differing temporal viewpoints of the same situation, ie they represent different aspects. One such example from the contrastive sets above is the contrastive set based on the segmental stem doe. Doe^{9} 'to

see' is punctual. Doe^{3} 'to watch, look at' is durative, while doe^{5} 'to have looked over, examined' is telic, and doe^{8} 'to have seen' is resultative.

The tone morphemes on Iau verb stems form a system of 8 different dynamic aspectual viewpoints. These aspectual viewpoints will be defined, compared and contrasted in Section 2.0 of this paper.

There are 8 different tone morpheme clusters that occur on monosyllabic verb stems. Each of these tone combinations represents a different type of change of state and will be discussed in detail in Section 3.0. Finally, stative aspect in Iau as marked by the postverbal particle de will be discussed in Section 4.0.

2.0 ASPECTUAL VIEWPOINTS OF THE IAU TONE MORPHEMES

2.1 An Overview of the Iau Aspects

Comrie (1976:3) defines aspect as 'different ways of viewing the internal temporal constituency of a situation.' Some of the different kinds of aspectual viewpoints represented in language are:

1. Static: views the situation as homogeneous and unchanging over a period of time.
   vs Dynamic: views the situation as characterized by change.
2. Punctual: views the situation as temporally bounded both initially and terminally.
   vs Durative: views the situation as temporally unbounded. (Givón:1982)
3. Totality of Action: presents or views the situation as a single indivisible whole with beginning, middle, and end rolled into one. (Comrie:1976)
   vs Ingressive: focusing on the beginning of the situation.
   vs Telic: focusing on the endpoint of the situation.
4. Complete: views the situation as completed.
   vs Incomplete: views the situation as not yet complete.
5. Current Relevance: views the situation as still having relevance at a later point in time. (Li, Thompson, and Thompson:1981)
6. Resultative: views the situation as having results/effects that continue on in time. (Friedrich:1974)

Dynamic aspectual viewpoints on verbs in Iau are indicated by a set of eight contrastive tones each of which represents a different aspect. The eight dynamic aspects in Iau can be defined in terms of six aspectual viewpoints: punctual, durative, incompletive/unrealized, totality of action, resultative, and telic. The following sentences illustrate each of the eight dynamic aspects in Iau using the verb stem tai. All verbs based on the verb stem tai involve movement of an entity towards a goal. In the

action all arguments are affected to some extent.

1. PUNCTUAL TOTALITY OF ACTION Viewpoint.

Ty^{7}	a^{7}se^{9}	fv^{7}	fv^{3}	tai^{9}.
person	Seq Mkr	canoe	rope	pull-PUN.TOT

'The people pulled the canoe by the rope.'

In the sentence above the agent acts on the canoe causing it to move toward him. The High Level tone morpheme (9) views the whole of the action of motion toward a goal without focusing on any one phase of that action (ie TOTALITY OF ACTION Viewpoint). In addition, tone (9) views the action as both initially and terminally temporally bounded (ie PUNCTUAL Viewpoint).

2. PUNCTUAL RESULTATIVE Viewpoint.

Fv^{7}	a^{7}se^{9}	a^{5}	tai^{6}.
canoe	Seq Mkr	Land	land on-PUN.RES

'The plane landed (ie made contact with the ground).'

An entity, the plane, moves toward its goal the ground. The Low Rise tone morpheme (6) views the situation as having subsequent results or effects that last over time (ie RESULTATIVE Viewpoint). The plane contacts the ground and locates there. The Low Rise tone morpheme (6) also views the situation tai as temporally bounded both initially and terminally (ie PUNCTUAL Viewpoint). The PUNCTUAL RESULTATIVE tai^{6} refers to the moment or point of contact between the moving entity and the goal/location.

3. PUNCTUAL TELIC Viewpoint.

U^{8}	a^{7}se^{9}	tai^{5}.
tree	Seq Mkr	fall-PUN.TEL

'The tree has fallen.'

An entity, the tree moves toward a goal or endpoint. The High Low Fall tone morpheme (5) views the situation as temporally bounded both initially and terminally (ie PUNCTUAL Viewpoint) and also as focusing on the endpoint of the situation (ie TELIC Viewpoint). The tree has moved toward and has reached its endpoint.

4. DURATIVE TOTALITY OF ACTION Viewpoint.

Au^{7}	a^{7}se^{9}	be^{6}di^{9}e^{8}	ui^{8}	bv^{8}	tai^{3}.
he	Seq Mkr	later	house	to	come into-DUR.TOT

'Later, he came into the house.'

The Low Fall tone morpheme (3) views the situation as a process. It views the whole of the action of moving toward a goal (ie the inside of the house) without focusing on any one part (ie TOTALITY OF ACTION Viewpoint). But it also views the situation as it occurs over time (ie DURATIVE Viewpoint). The motion into the house is viewed as a process.

5. DURATIVE RESULTATIVE

Ty^{7}	a^{7}se^{9}	ui^{8}	bv^{8}	tai^{8}.
person	Seq Mkr	house	to	came into-DUR.RES

'The people have come into the house.'

The Low Level tone morpheme (8) focuses on the result of effect of an entity moving to a goal/location (ie RESULTATIVE Viewpoint) and views the situation as temporally unbounded (ie DURATIVE Viewpoint). The person, the moving object, has come into the house and is there.

6. DURATIVE TELIC Viewpoint

U^{8}	a^{7}se^{9}	tai^{2}.
tree	Seq Mkr	fall-DUR.TEL

'The tree fell (toward the ground).'

The Fall Rise tone morpheme (2) views the moving entity, the tree as moving toward a natural endpoint (ie TELIC Viewpoint), and also views the situation as temporally unbounded (ie Durative Viewpoint). The tone morpheme (2) as a process with a telic endpoint focuses on the movement of the tree towards that telic endpoint.

7. INCOMPLETIVE TOTALITY OF ACTION Viewpoint

A^{9}	fv^{7}	fv^{3}	tai^{7}	se^{5}.
1s	canoe	rope	pull-TOT.INC	Int-NP.FACT

'I will/am going to pull the canoe by the rope.'

The High Rise tone morpheme (7) views the whole of the action of an entity moving toward a goal (ie TOTALITY OF ACTION Viewpoint). In addition, it views the situation as either incompleted or as unrealized (ie INCOMPLETIVE Viewpoint). The High Rise tone morpheme is frequently used with intention particles, imperatives, negatives, etc. as an indication that the situation has not actually occurred.

8. INCOMPLETIVE TELIC

Di^{9}	te^{7}bv^{9}	bv^{8}	tai^{4}
1s	why	to	pull-TEL.INC

'Why do you still not understand (an idiom; Lit. still being pulled toward it)?'

The High Fall tone morpheme (4) views the situation as having a natural endpoint (ie TELIC Viewpoint). In addition, it views the situation as either unrealized or as INCOMPLETIVE. In the sentence above, the actor has not reached the telic endpoint of the situation indicated by the segmental stem tai. He still has not reached the endpoint of understanding.

As we have seen in the sentences above, each of the eight Iau tone morphemes is a portmanteau of two aspectual viewpoints. Figure 1 below contrasts the aspectual viewpoints of the aspect tone morphemes on the verb stem tai and shows the contrastive components of the Iau aspect system in chart form. Each of the aspect tone morphemes will be discussed in detail in Section 2.2.

Figure 1. The 8 Iau Aspects on the Verb Stem Tai

	Punctual	Durative	Incompletive
Totality of Action	tai^{9} 'pull'	tai^{3} 'come in toward'	tai^{7} 'pull-irrealis, inceptive, partitive'
Resultative	tai^{6} 'land on'	tai^{8} 'have come into'	--
Telic	tai^{5} 'has fallen'	tai^{2} 'fall, falling'	tai^{4} 'still being pulled toward'

2.1.1 Iau Aspect is Not Tense. The aspect system in Iau does not give information about the relationship of the situation to the time of speech or to some referential time point. Aspect tone morphemes can be used on situations that are past, present, or future relative to the time of speech. This is illustrated by the following sentences.

PUNCTUAL TOTALITY OF ACTION Viewpoint

9. Ty^{7} a^{7}se^{9} fv^{7} fv^{3} tai^{9}.
person Seq Mkr canoe rope pull-PUN.TOT

'They pulled the canoe by the rope.'

10. Ty^{7} fv^{7} fv^{3} tai^{9} a^{9}.
person canoe rope pull-PUN.TOT D.UBd-FACT

'They are pulling the canoe by the rope.
/They pull the canoe by the rope.
/They usually/customarily pull the canoe by the rope.'

In 9) the situation tai^{9} refers to a completed event in the past. The sequence marker a^{7}se^{9} indicates that the situation tai^{9} precedes some other situation in the context, or that it precedes the speech time. In a narrative text, the situation tai^{9} would be interpreted as an event that is a part of a sequence of events. A^{7}se^{9} implies that there would be other events following tai^{9}. In a speech context, the a^{7}se^{9} implies that the situation tai^{9} has taken place before the speech time.

In 10) the situation tai^{9} refers to a situation that is true for some unspecified undefined period of time. It is the postverbal particle a which indicates that the situation tai^{9} is an actual reality either at the present speech time or at some referential time and that it is realized multiple times or is realized over some unspecified period of time. Depending on the context, it can be interpreted as being realized at the time of the speech act or as realized in a habitual customary or generic truth sense.

In both of these sentences, the aspect remains constant. Tai^{9} is a PUNCTUAL TOTALITY OF ACTION viewpoint of the segmental stem tai. The agent acts on the canoe causing it to move toward him. The High Level tone morpheme (9) views the whole of the action without focusing on any one part

and also views the action as temporally bounded both initially and terminally.

In the following sentences, the TELIC DURATIVE Viewpoint tone morpheme occurs in several different time contexts.

11. U^{8} a^{7}se^{9} tai^{2}.
tree Seq Mkr fall-TEL.DUR

'The tree fell/was falling.'

12. U^{8} a^{7}se^{9} bui^{4} da^{8}dv^{9} tai^{2}.
tree Seq Mkr cut down-TEL.INC MVC1 Con fall-TEL.DUR
a^{9}.
D.UBd-FACT

'When a tree is cut down, it falls.'

13. Y^{9}v^{6}! u^{8} tai^{2} a^{9}.
exclam tree fall-TEL.DUR D.UBd-FACT

'Watch out! The tree is falling!'

On the basis of the sequence marker a^{7}se^{9}, Sentence 11 is interpreted as: occurring prior to some other verbal situation or, in the absence of any other situation in the context, as occurring prior to speech time. Tai^{2} (Fall Rise tone morpheme) views the situation of motion toward a goal as TELIC, ie having an inherent endpoint. It also imposes a DURATIVE viewpoint of the motion toward an inherent endpoint.

In Sentences 12) and 13), the situation tai^{2} is occurring at the present time or at some reference time for an undefined period of time. This is indicated by the post verbal reality status particle a^{9}. In 12), the preceeding medial verb clause, 'when a tree is cut down', defines the reference time for which the following clause marked by a^{9} is a reality. In 13), the situation tai^{2} is a reality at the time of speech. All three of the sentences above, 11), 12), and 13) have the aspectual viewpoint of the verb stem tai^{2}.

The following sentences show the RESULTATIVE DURATIVE aspectual viewpoint in two different time contexts.

14. Ty^{7} a^{7}se^{9} ui^{8} bv^{8} tai^{8}.
person Seq Mrk house to come in-RES.DUR

'They have come into the house.'

15. Sa^{4}dy^{4} ui^{8} bv^{8} tai^{8} dy^{3}.
Urge action house to come in-RES.DUR Imp-RS.SA

'Come on into the house!'

Sentence 14) is marked by a^{7}se^{9} and is interpreted as occurring prior to speech time or prior to some other verbal situation if it is in a text. Tai^{8} (Low Level tone morpheme) is RESULTATIVE, that is it focuses on the result of the action of approaching a goal. In this case the result of the action is that the moving entity is in the house. Tai^{8} also has a DURATIVE viewpoint, that it views the situation of either having achieved a goal or an endpoint as continuing over time.

Sentence 15) is an imperative. Unlike Sentence 14), Sentence 15) is

not defined as to time of occurrence. Since it is an imperative, it is not a reality at the time of speech.

The aspectual viewpoints in both 14) and 15) are the same. They both visualize that the actor has approached a spatial reference point and is there. Sentence 14) states that this is so. Sentence 15) tells the hearer to cause it to be so.

2.1.2 Dynamic Aspectual Viewpoints Independent of Statives and Negatives. The Iau aspectual viewpoints also function independently of other postverbal particles such as statives and negatives. The following examples show the segmental stem tai as a stative verb constructed by adding the postverbal stative particle de to the verb stem.

16. U^{8} a^{7}se^{9} tai^{5} de^{8}.
tree Seq Mkr fall-TEL.PUN Sta-CRLZ

'The tree is lying on the ground.'

17. Fv^{7} a^{7}se^{9} Bu^{8}di^{8}a^{3} a^{5} tai^{3} de^{8}.
plane Seq Mkr Mulia land land at-TOT.DUR Sta-CRLZ

'The plane has landed (and is now at) Mulia.'

18. Sai$^{6-8}$ a^{7}se^{9} tai^{9} de^{9}.
clothes Seq Mkr sew-TOT.PUN Sta-FACT

'The clothes are sewed up/are sewed.'

19. Sai$^{6-8}$ a^{7}se^{9} bay^{5} tai^{7} de^{9}.
clothes Seq Mkr thorn-With pull-TO.INC Sta-FACT

'The clothes/cloth has been caught/pulled by a thorn (ie, there are threads pulled out and the cloth is damaged).'

In each of the sentences above there is an affected entity which is in a state. That state is the aftermath of the situation tai. In 16), the affected entity is a tree on the ground. In 17), the affected entity is a plane on the ground, and in 18) and 19) it is some clothes. In these sentences, it is the aspect on the verb stem tai that indicates what has happened to the entity in question. For example, in 16) tai^{5} has TELIC PUNCTUAL Aspect. The tree has reached the endpoint of the action of motion toward a goal. The stative particle de indicates that the tree is in the subsequent state of having fallen, ie it is lying on the ground.

In 17) tai^{3} has a TOTALITY OF ACTION DURATIVE aspectual viewpoint. It views the total action of an entity approaching a goal as it occurs over time. The situation involves the total action of the verb stem tai without focusing on any one phase of the situation. The addition of the stative particle de indicates that the plane is in a state of having landed (process) at Mulia.

In 18) the segmental stem tai refers to the action of sewing clothes. Sewing clothes is not a traditional activity since the Iau did not have clothes as such until recently. The Iau have chosen to use the verb stem tai to represent this activity. The action of sewing involves the pulling of thread through the cloth towards the person sewing. There is an affected entity, the cloth. In 18), tai^{9} has a TOTALITY OF ACTION PUNCTUAL viewpoint. The situation of tai^{9} is viewed as a single indivisible temporal unit and the aspectual viewpoint does not focus on any particular phase of the action. The Stative particle de views the affected entity, the

clothes as in a state of having been sewn.

In 19) a thorn has pulled out some of the threads in a piece of clothing. This is a partitive action, ie only some of the threads in the cloth are affected. This partitive viewpoint of the action of pulling is represented by the High Rise (7) tone morpheme which is TOTALITY OF ACTION INCOMPLETIVE viewpoint. The addition of the stative particle de indicates that the clothes are in a state of having been pulled (partitive) by a thorn.

The following two sentences show aspectual contrasts on verb stems followed by a negative particle.

20. Ty^{7} a^{7}se^{9} ba^{8}day^{8} da^{8}dv^{9} y^{8} da^{9}ki^{3}
person Seq Mkr flee-RES.DUR MVC1 Mkr we well

di^{9} ai^{9} y^{3}.
kill-TOT.PUN Neg-FACT Info-SNC.ADT

'They fled and so we didn't get any good shots at any of them.'
(Discussing a raid on an enemy villlage.)

21. Da^{6}da^{8} tui^{2} bv^{8} tai^{9} y^{9} tui^{2} di^{8}
now enemy for look-PUN.TOT Nomin enemy kill-RES.DUR

ae^{9} be^{3}?
Neg-FACT Uncer-RS.SA

'Just now when you sent after the enemy, you didn't kill any?'

The verb stem di in both of the sentences above has the meaning 'to kill'. In 20) above, the TOTALITY OF ACTION PUNCTUAL tone morpheme (9) indicates that it is the entire scope of the action that is in view and being negated. The particle ai^{9} negates the entire predicate including the adverb da^{9}ki^{3}. Sentence 20) says that although they may have hit one or two of the enemy, they were not 'good' hits, ie they did not kill any of the enemy.

In contrast, the verb stem in 21) has a RESULTATIVE DURATIVE Aspectual viewpoint. The focus is on the effect of the action rather than the quality of the action as it is in 20). In 21) the resultative endpoint of the action is negated, ie none of the enemy died as a result of the action.

2.2 Aspectual Viewpoint Parameters of the Iau Aspect System.

Figure 2 Contrastive Parameters of Iau Aspect System

	Punctual	Durative	Incompletive
Totality of Action	9	3	7
Resultative	6	8	--
Telic	5	2	4

Figure 2 displays the six contrastive parameters of the Iau aspect system which form an eight box aspectual system. These six parameters are: TOTALITY OF ACTION,RESULTATIVE, TELIC, PUNCTUAL, DURATIVE, AND INCOMPLETIVE. Section 2.2.1 will define the TOTALITY OF ACTION viewpoint and contrast it

with the RESULTATIVE and TELIC Viewpoints. Section 2.2.2 will contrast the PUNCTUAL and DURATIVE viewpoints. Section 2.2.3 will discuss the INCOMPLETIVE Viewpoint tone morphemes.

2.2.1 Contrast of TOTALITY OF ACTION and TELIC Viewpoints. Some aspectual viewpoints focus on one phase or spatial segment of a situation. Other aspectual viewpoints visualize the situation as a single unanalysable whole with beginning, middle, and end rolled into one, ie the TOTALITY OF ACTION Viewpoint (Comrie 1976:3). The TELIC and RESULTATIVE viewpoints contrast with the TOTALITY OF ACTION aspectual viewpoint in that both viewpoints focus on the endpoint of the action rather than on the whole.

Figure 3 below shows the contrast between the Iau TOTALITY OF ACTION viewpoint verbs and the RESULTATIVE and TELIC viewpoint verbs.

Figure 3 Contrast Between TOTALITY OF ACTION AND RESULTATIVE/TELIC Viewpoints

Verb Stem	TOTALITY OF ACTION Verbs		RESULTATIVE/TELIC Verbs	
tai	tai^{9}	'pull'	tai^{6}	'land on/land at'
	tai^{3}	'come into (process) boil grow'	tai^{8}	'have come into have pulled off'
			tai^{5}	'have fallen'
			tai^{2}	'be falling/fall (process)'
ba	ba^{9}	'come'	ba^{6}	'come to get' (come: resultative)
	ba^{3}	'come (process) throw at, shoot, shoot at'	ba^{8}	'have shot, have killed'
			ba^{2}	'be sticking to attach sthg to sthg'
doe	doe^{9}	'see'	doe^{8}	'have seen'
	doe^{3}	'look at watch see (process)'	doe^{5}	'have examined have completely looked over'
			doe^{4}de^{8}	'be in a state of seeing, ie know, understand'
di	di^{9}	'hit	di^{8}	'have hit have killed'
	di^{3}	'hit (process) kill (process)'	di^{6}	'be startled'

Both of the verb stems tai and ba are motion verbs and refer to motion of an entity towards a goal or location. However they view the motion from differing spatial and transitivity orientation. Tai views the action from the viewpoint of the goal or affected entity. All arguments of the verb are viewed as affected in some way. Ba views the action from the viewpoint of the actor, agent, or moving entity.

The TOTALITY OF ACTION verbs formed from the verb stems tai and ba, as shown in Figure 3, all visualize the action of motion toward a goal or location without focusing on the beginning, middle, or endpoint of that action. In contrast, the RESULTATIVE and TELIC verbs all focus on either the end result of the action (RESULTATIVE), or they view the action as having a natural endpoint (TELIC). The verbs meaning 'to land on or at, to have come, to have pulled off, to have fallen, to be falling, to come to get, to have shot, to have killed, to be attached to, to be sticking to', all view the action of motion toward a goal or location from the point of view of either having an endpoint, having achieved the endpoint or moving towards the endpoint. They are all 'endpoint oriented' in contrast to the TOTALITY OF ACTION verbs.

The Iau verbs formed from the verb stem doe as shown in Figure 3 are all perception verbs. Specifically, they are all verbs of seeing. The TOTALITY OF ACTION viewpoint tone morphemes 9 and 3 view the action of seeing as an event and a process respectively. In contrast, the RESULTATIVE and TELIC verbs of seeing focus on the endpoint or result of the action. The verb doe^{8} 'to have seen', focuses on the resultative endpoint of the action relative to the perceived object. The object 'has been seen'. The TELIC verb doe^{5} 'to have examined' focuses on the natural finished endpoint of the action. The use of the TELIC viewpoint verb stem doe^{4} on the stative verb doe^{4} de^{8} 'to know, understand' focuses also on a natural endpoint of the action to see.

The Iau verbs formed from the segmental stem di all have to do with the impingement (either physical or psychological) of one entity on another. The RESULTATIVE verbs 'to have hit, to have killed, and to be startled' are endpoint results of one entity impinging on the other, In contrast, the TOTALITY OF ACTION verbs di^{9} and di^{3} view the whole action of impingement as an event or as a process respectively.

2.2.2 Contrast Between RESULTATIVE and TELIC Viewpoints. We have seen in the preceding section, 2.2.1, that both the TELIC and RESULTATIVE aspectual viewpoints are endpoint oriented, ie they view the situation relative to or in terms of an endpoint. However, the TELIC and RESULTATIVE aspectual viewpoints have contrastive endpoint viewpoints. While the TELIC viewpoint simply views the situation as having or being at a natural endpoint, the RESULTATIVE viewpoint views the situation in terms of its results or effects.

Figure 4 below shows the contrast between some TELIC and RESULTATIVE verbs in Iau.

Figure 4 Contrasts Between TELIC and RESULTATIVE Viewpoints

Verb Stem	TELIC Verbs		RESULTATIVE Verbs	
tai	tai^{5}	'have fallen'	tai^{6}	'land on/at'
	tai^{2}	'fall, falling catch a pig in a falling trap'	tai^{8}	'have come into have pulled off'

ba	ba^{2} 'be sticking to attach s. to s.'	ba^{6} 'come to get' ba^{8} 'have shot have killed'
doe	doe^{5} 'have examined looked over completely' doe^{4} de^{8} 'be in a state of seeing, ie know, or understand'	doe^{8} 'have seen completely have been seen'

The TELIC verbs based on the motion verb stems ba and tai all view the moving entity as having reached its endpoint or as moving toward a natural endpoint. In contrast, the RESULTATIVE verbs based on tai and ba view the motion of an entity towards a goal or location in terms of its end result. The verbs meaning 'to land on (ie resultative contact), to have come into, to have pulled off, to have come to get, to have shot and to have killed', all view the action in terms of an end result of the action.

The verb stem of perception, doe, likewise illustrates the contrast between TELIC and RESULTATIVE verbs in Iau. The TELIC verb 'to have examined' views the action of seeing as finished, ie as having been carried to its natural endpoint as does the TELIC viewpoint on the verb stem of the stative verb 'to know, or understand'. In contrast, the RESULTATIVE verb doe^{8} views the end result of the action of seeing. The perceived object 'has been seen'.

2.2.3 Contrast Between PUNCTUAL and DURATIVE. One of the basic ways of relating situations to one another is to relate them temporally in terms of boundedness (Givón 1982:277). A PUNCTUAL viewpoint views the situation as both initially and terminally bounded relative to other situations or time. A DURATIVE viewpoint views the situation as neither initally nor terminally bounded.

Figure 5 shows pairs of contrastive PUNCTUAL and DURATIVE verbs in Iau taken from verbs based on the verb stems tai, ba, doe and di.

Figure 5 Contrast Between PUNCTUAL and DURATIVE Viewpoints

Verb Stem	PUNCTUAL	DURATIVE
tai	tai^{9} 'pull	tai^{3} 'come into grow boil'
	tai^{6} 'land on'	tai^{8} 'have come into have pulled off'
	tai^{5} 'has fallen'	tai^{2} 'fall be falling'

ba	ba^{9}	'come (event)'	ba^{3}	'come (process) throw at shoot'
	ba^{6}	'come to get'	ba^{8}	'have shot have killed'
doe	doe^{9}	'see (event)'	doe^{3}	'look at watch'
di	di^{9}	'hit (event)	di^{3}	'hit kill'
	di^{6}	'be startled'	di^{8}	'have hit have killed'

The DURATIVE verb in each contrastive set above views that situation as it occurs over time in contrast to the temporally bounded viewpoints of the PUNCTUAL verbs. The two TOTALITY OF ACTION motion verbs tai^{9} and tai^{3} in Figure 5 contrast in terms of temporal boundedness, Tai^{9} (PUNCTUAL) views the motion towards a goal as an event, while tai^{3} (DURATIVE) views motion towards a goal as a process or as a motion occurring over a period of time.

The RESULTATIVE pair of verbs tai^{6} and tai^{8} also contrast in temporal boundedness. Tai^{6} gives a PUNCTUAL viewpoint of the resultative endpoint of the action, ie the point of contact between the moving entity and its endpoint location. Tai^{8}, on the other hand gives a DURATIVE viewpoint of the resultative endpoint, ie the result as it continues on over time. Tai^{8} means 'to have come into, or to have pulled off'. Both of these definitions have effects that continue on over time.

The TELIC pair of verbs tai^{5} and tai^{2} both mean 'to fall' but with contrastive PUNCTUAL and DURATIVE viewpoints. Tai^{5} (PUNCTUAL) views the action as a temporally bounded event, and can be glossed 'has fallen, or fell (event)'. Tai^{2} (DURATIVE), on the other hand, views the action as it occurs over time, ie 'is falling or fell (the process)'.

The TOTALITY OF ACTION verbs ba^{9} and ba^{3}, doe^{9} and doe^{3}, and di^{9} and di^{3} also show the PUNCTUAL vs DURATIVE contrasts. The PUNCTUAL tone 9 verbs all view the action as a temporally bounded event in contrast to the DURATIVE tone 3 verbs which view the action as a temporally unbounded process.

The RESULTATIVE DURATIVE tone 8 verbs form a contrastive set with the RESULTATIVE PUNCTUAL tone 6 verbs. The RESULTATIVE DURATIVE verbs focus on the results or effects of the action as they affect the arguments over time while the RESULTATIVE PUNCTUAL verbs focus on the resultative endpoint of the action as a temporally bounded punctiliar event.

2.2.4 INCOMPLETETIVE Aspectual Viewpoint. The Incompletive aspectual viewpoint in Iau views the situation as either only partially completed, as never realized, as hypothetical, or as still pending realization. The following sentences illustrate the INCOMPLETIVE viewpoint tone morpheme 7 in contrast to the TOTALITY OF ACTION PUNCTUAL tone morpheme 9. Both of the tone morphemes 9 and 7 also have TOTALITY OF ACTION viewpoints.

22. Fv^{7} a^{7}se^{9} ba^{9}
canoe Seq Mkr come-TOT.PUN

'The plane came/has already come.'

23. Fv^{7} ba^{7} ba^{3}?
canoe come-TOT.INC Uncer-RS.SA

'Is the plane coming?'

24. Au^{7} da^{8}su^{6} ba^{7} se^{5}.
he tomorrow come-TOT.INC Int-NPRES.FACT

'He will come tomorrow.'

25. Fv^{7} ba^{7} da^{8}dv^{9} a^{9} foi^{4} dy^{3}.
canoe come-TOT.INC MVCl Con 1s tell-TEL.INC Imp-RS.SA

'When the plane comes, tell me./If the plane comes, tell me.'

The TOTALITY OF ACTION Viewpoint verbs in 23), 24) and 25) above, contrast with the TOTALITY OF ACTION verb in 22) in that they also have an INCOMPLETIVE aspectual viewpoint. In 22) the situation 'to come' is asserted as a completed reality. In 23)-25), the situation 'to come' is not being asserted as an actual reality. In the case of 23), the particle be indicates that there is some uncertainty as to whether it will occur. In 24) the actor intends to make the proposition a reality but has not yet brought it about as of speech time. Example 25) could be translated as an uncertain 'if' clause or as an as yet unrealized but later to be realized 'when' clause.

INCOMPLETIVE aspect can be also used to indicate only partitive realization of the situation. The following set of stative verbs show contrastive COMPLETIVE-INCOMPLETIVE viewpoints.

tai^{9}de9 'to be in a state of being sewn, sewn up'

tai^{7}de^{9} 'to be in a state of having been pulled (eg clothes with tears or pulled threads as result of having been caught on a sharp object)'

The stative verb tai^{7}de^{9} above has an INCOMPLETIVE aspectual viewpoint - in this case indicating the partial affectedness of the clothes. In contrast, the stative verb tai^{9}-de^{9} with a PUNCTUAL aspectual viewpoint views the situation as completed.

The following segment of a narrative text shows the aspectual viewpoint of both INCOMPLETIVE tone morphemes (7) and (4).

26. Dy^{4}be^{7} y^{8} be^{7} fv^{7} da^{8} i^{7} be^{8}
then we N Mkr canoe carry-RES.DUR go-TOT.INC SCl Mkr

"ba^{7}bv^{9} fu^{9} dav^{8} be^{4} be^{7}de^{8} y^{7}.
this must be lake is-TEL.INC infer Info-SNC.NADT

Ba^{9} bv^{6} a^{7}se^{9} bv^{8} bi$^{4-7}$ se^{4}."
here 1s Seq Mkr to climb-TEL.INC-TOT.INC Int-URLZ

da^{8} be^{4} A^{9} be^{7} a^{7}se^{9} bi^{7}.
RpSp-CRLZ SCl Mkr 1s N Mkr Seq Mkr climb-TOT.INC

A^{9} bi^{4}
1s climb-TEL.INC

be^{8}du^{7} u^{8} te^{8} bv^{6} tai$^{7-8}$
MVCl Mkr tree vine 1s pull-TOT.INC-RES.CHS

be^{7} a^{9} bi^{4} be^{8}du^{7} u^{8} a^{7}se^{9} si^{6}.
SCl Mkr 1s climb-TEL.INC SCl Mkr tree vine slip-RES.PUN

'Then, as we were paddling the canoe, "That one (ie that tree), (one) must be (able to see) a lake (from the top of that tree). I am going to climb it.", saying that, I began to climb it. But while I was climbing, while I was climbing by pulling on the tree vine, the tree vine slipped/tore loose.'

In the text above, the INCOMPLETIVE aspectual verb bi^{7} is ingressive, 'I began to climb the tree'. Only part of the action, the inception is in view. The INCOMPLETIVE viewpoint verb bi^{4} is also TELIC in viewpoint. Bi^{4} views the action as moving toward the TELIC endpoint but as not yet completed, ie 'I was climbing'.

2.3 Aspect: Discourse Determined Viewpoint

As we have seen in the preceeding sections of this paper, the verb stem tone morphemes in Iau provide aspectual viewpoints which have lexical significance. That is, contrastive verb stem tone morphemes in Iau serve to lexically distinguish one verbal situation from another. Lexicalized aspect has a labeling function in discourse. It specifies one action as opposed to another.

The difference between Iau and languages like English is that the semantic aspectual character of a verb in English is implicit in the lexical meaning of the verb itself; and is not overtly indicated on the verb. In Iau, however, the semantic aspectual character of the verb is indicated overtly by the choice of tone morpheme on the verb stem.

In addition to determining the semantic aspectual character of the verb, aspectual viewpoints can also be marked grammatically in language. Grammaticalized aspect may be marked by verb inflection, by particles, or by word order (Hopper 1979; Li and Thompson 1982).

In contrast to the labeling function of lexicalized aspect, grammaticalized aspect has a relational, orientational and evaluative function in discourse. Grammaticalized aspect is used to indicate temporal relationships between situations such as overlapping, simultaneous, temporal or sequential ordering, and interrupted or partial occurrences of situations. These kinds of relationships are indicated by aspectual viewpoints such as PUNCTUAL, DURATIVE, INCOMPLETIVE, and INGRESSIVE.

Grammaticalized aspect can also be used to focus attention on the resultative or causative effects of situations on other situations within the discourse, or it can focus on the effects of situations on participants or props involved in a discourse. TELIC and RESULTATIVE viewpoint are examples of aspectual viewpoints with this function.

In addition, Hopper 1979, Hopper and Thompson 1982, Rafferty 1982, Jones 1979, and others have noted that in narrative discourse aspect has a foregrounding vs backgrounding function. Regarding the discourse function of aspect, Rafferty (1982:66) states that:

> "The discourse function of aspect is to call the reader's/listener's attention to the important points in a story, drama or conversation and to relate states/events/activities to one another within a unit of discourse by making some stand out while others remain in the background. In context, aspectual meanings are non-referential, or relational, in the sense that they do not necessarily reflect the actual objective duration or boundedness of a state/event/activity in

the real world, but rather reflect the evaluation of the speaker concerning the relationship of one event/state/activity to other events/states/activities in the discourse."

Perfective aspectual viewpoints, ie PUNCTUAL, COMPLETIVE, TELIC and TOTALITY OF ACTION viewpoints are usually found on foregrounded material in narrative discourse. Imperfective aspectual viewpoints, ie DURATIVE, INCOMPLETIVE, PROGRESSIVE, CONTINUOUS, HABITUAL, and ITERATIVE viewpoints are usually found on background material in narrative discourse (Hopper 1979, Hopper and Thompson 1982).

The choice of an aspectual viewpoint for any given verb in an Iau discourse is a function of the desired semantic aspectual viewpoint, and the role of the verb in the discourse context. Section 2.3.1 will discuss the lexicalized aspect system in Iau. The remaining sections will discuss grammaticalized aspect in Iau, ie the discourse functions of the Iau aspectual tone morphemes. Section 2.3.2 will discuss the functions of the tone morphemes in indicating temporal relationships between events and between events and the time line. Section 2.3.3 will discuss the functions of the tone morphemes in indicating the resultative effects of situations on other situations and participants. Section 2.3.4 will discuss aspect tone substitution patterns on medial verb clauses Finally Section 2.3.5 will briefly discuss the foregrounding and backgrounding functions of the Iau aspect tone morphemes in narrative discourse.

2.3.1 Lexicalized Aspect in Iau. Monosyllabic verb stems in Iau can be divided into three main classes based on lexicalized aspect distinctions. The first class are the TOTALITY OF ACTION verbs. The tone (9) TOTALITY OF ACTION PUNCTUAL verbs are events. The tone (3) TOTALITY OF ACTION DURATIVE verbs are processes. The following are some examples.

Event (9)		Process (3)	
tai^{9}	'pull'	tai^{3}	'come into'
ba^{9}	'come'	ba^{3}	'come'
di^{9}	'hit, kill'	di^{3}	'hit, kill'
da^{9}	'ate'	da^{3}	'load a vehicle'

The second class of Iau verbs based on lexicalized aspect distinctions are the RESULTATIVE verbs. These verbs take the tone (6) RESULTATIVE PUNCTUAL aspectual viewpoint. The following are some examples.

tai^{6}	'land on, contact'
ba^{6}	'come (resultative)'
di^{6}	'be startled'
da^{6}	'dip in water, wash'

The third class of verbs in Iau are the TELIC verbs. The tone (5) TELIC PUNCTUAL verbs are TELIC events while the tone (2) TELIC DURATIVE verbs are TELIC processes. The following are some examples.

TELIC Event (5)		TELIC Process (2)	
tai^{5}	'has fallen'	tai^{2}	'fall, falling'

ba^5	'come back to starting point'	ba^2	'be sticking to be attached to'
ai^5	'destroy (event)'	ai^2	'destroy (process)'
ti^5	'give (event)'	ti^2	'give (process)'

The remaining tone morphemes 7, 8 and 4 are for the most part used to mark grammaticalized aspect distinctions and do not serve to distinguish situations from one another lexically. The tone (7) INCOMPLETIVE morpheme normally occurs on TOTALITY OF ACTION events in the appropriate discourse contexts. The tone (8) morpheme normally occurs on TOTALITY OF ACTION Processes to add a RESULTATIVE viewpoint. Finally, the tone (4) INCOMPLETIVE morpheme normally occurs on TELIC events in the appropriate discourse contexts. See Sections 2.3.3 and 2.3.4 for discussion and examples.

2.3.2 Grammatical Aspect in Iau and Temporal Relationships. PUNCTUAL vs DURATIVE aspectual viewpoints can be used in discourse to distinguish different kinds of temporal relationships between situations or differing temporal characteristics of situations over time. INCOMPLETIVE vs COMPLETIVE viewpoints can also be used in discourse to distinguish temporal relationships between situations in the discourse.

We have said (2.1) that a PUNCTUAL viewpoint views the situation as having both initial and terminal boundaries relative to other situations in the context. Because of their initial and terminal boundedness, situations with PUNCTUAL viewpoints are presented as discrete occurrences of situations bounded initially and terminally by other PUNCTUAL situations in the context. As a result, PUNCTUAL aspect is frequently used in discourse to indicate sequential ordering of events where the termination of one event is followed by the initial boundary of the subsequent event.

A DURATIVE aspectual viewpoint, on the other hand, views the situation as unbounded in time. That is, beginning and ending points are not specified relative to other situations in the discourse. Situations with DURATIVE aspectual viewpoints are viewed as occurring over a period of time or as occupying a segment on the timeline which overlaps or occurs simultaneously with other situations in the context.

The INCOMPLETIVE aspectual viewpoint also has temporal implications relative to other situations in the discourse. The INCOMPLETIVE aspectual viewpoint can be used to indicate an as yet unrealized situation, interrupted sequences of actions, as well as situations which overlap other situations in the discourse.

Figure 2 Aspectual Viewpoints of Iau Tone Morphemes

	PUNCTUAL	DURATIVE	INCOMPLETIVE
TOTALITY OF ACTION	9	3	7
RESULTATIVE	6	8	--
TELIC	5	2	4

Figure 2 in Section 2.2 showed the 8 aspectual tone morphemes as they are defined by six aspectual viewpoint parameters. Figure 2 is reproduced again for the reader's convenience.

The TOTALITY OF ACTION, RESULTATIVE, and TELIC aspectual viewpoints

each have a PUNCTUAL, and a DURATIVE variant. These groupings of variants reflect common substitution patterns of verb stem tone morphemes within the discourse context. These verb stem tone substitutions reflect varying temporal relationships with other situations in the discourse context.

The following two segments of text illustrate the contrastive temporal characteristics of PUNCTUAL vs DURATIVE aspectual viewpoints and how they are used in Iau discourse. The first text segment (27) below illustrates a DURATIVE aspectual viewpoint used in a conversational text and gives an explanation of why the plane did not arrive as expected. The second text segment (28) below illustrates a PUNCTUAL aspectual viewpoint and is a sample from a narrative text of sequentially ordered events.

27. Fv^{7} a^{7}se^{9} bi^{8} du^{7}be^{7} dy^{9}
canoe Seq Mkr arrive-RES.DUR MVCl Mkr but then

a^{7}se^{9} ui$^{7-8}$ be$^{7-8}$ ba^{3}
Seq Mkr rise up-PUN.INC-RES.CHS SCl Mkr come-TOT.DUR

dy^{4}da^{8}dv^{9} a^{7}se^{9} fe^{6} toe^{4} da^{8}dv^{9}
Ind Cl Con Seq Mkr eye throw-TEL.INC MVCl Con

da^{8}bi^{7} be^{5}.
cloud is-TEL.PUN

Be^{6} te^{8}be^{7} ba^{7} ae^{7} da^{8}dv^{9} e^{8}ta^{8}fau^{7}
path where come-TOT.INC Neg-HYP MVCl Con again

tv^{9} y^{9}.
go away-TOT.PUN Info-SC.ADT

'The plane was already approaching, but then as he was flying coming here, then looking around he saw that there were clouds. There wasn't a path to come on anywhere so he had to go back again.'

28. Fv^{7} a^{7}se^{9} ba^{9}. A^{7}se^{9} ba^{7} da^{8}dv^{9}
canoe Seq Mkr come-TOT.PUN Seq Mkr come-TOT.PUN MVCl Con

a^{7}se^{9} a^{5} tai^{6}. A^{7}se^{9} a^{5} tai^{6}
Seq Mkr land land on-RES.PUN Seq Mkr land land-RES.PUN

da^{8}dv^{9} ty^{i} bo^{4} a^{7}se^{9} fvy^{5} sui^{5}.
MVCl Con person two Seq Mkr canoe-into enter-TEL.PUN

A^{7}se^{9} fvy^{5} sui^{4} da^{8}dv^{9}.....
Seq Mkr canoe-into enter-TEL.INC MVCl Con

'The plane came. When it came, it landed. When it landed, two people got in. When the two people got in, ...'

In 27) above, ba^{3} the verb 'to come' is marked with one of the DURATIVE aspectual viewpoint tone morphemes because it is overlapping and simultaneous with other events in the context. As the plane was coming (process: situation occurring over a period of time), two other situations occurred or held during that same period of time. First the pilot looked around, and secondly, he saw that there were clouds.

In 28) the verb 'to come' is marked with one of the PUNCTUAL aspectual viewpoint tone morphemes because it is viewed as a discrete bounded occurrence relative to the other situations in the discourse context. This text segment is comprised of a set of sequentially ordered situations viewed as discrete events occurring one after another. In addition to the verb ba^{9},

'to come', the other two situations in the text a^{5} tai^{6} and sui^{5} also have PUNCTUAL aspectual viewpoints. In 27) and 28) the verbs ba^{9} and ba^{3} both share the same TOTALITY OF ACTION viewpoint but they contrast in temporal viewpoint relative to other events in the context.

The following sentences illustrate the contrast between PUNCTUAL and DURATIVE viewpoints of two TELIC verbs ai^{5} and ai^{2} both meaning 'to destroy' and the TELIC verb bui^{5}.

29. Au^{7} a^{7}se^{9} si^{6}tai^{9}si^{3} o^{7} da^{8}dv^{9} ty^{7}
he Seq Mkr widow take-TOT.INC MVCL Cn person

a^{7}se^{9} di^{9} av^{7}bv^{9} fa^{3}fu^{7} ai^{5}.
Seq Mkr food his all destroy-TEL.PUN

'When he took a widow (as wife) people (ie the dead man's relatives) destroyed all his crops.'

30. "Di^{9} av^{7}bv^{9} y^{8} ai^{2} ba^{5}!" Ty^{7}
food his we destroy-TEL.INC let's-NRS.SA person

a^{7}se^{9} dy^{4}dau^{4} bi^{8}fa^{7} da^{8}dv^{9} di^{9} av^{7}bv^{9}
Seq Mkr like that say-TOT.INC MVCl Con food his

a^{7} se^{9} fa^{3}fu^{7} bui^{5}.
Seq Mkr all cut down-TEL.PUN

'"Let's destroy all his crops!" People said like that and then they cut down all his crops.'

In 29) the TELIC verb 'to destroy' is viewed as one of a causative sequence of events and is marked by the PUNCTUAL tone morpheme (5). In 30) the TELIC verb 'to cut down' is likewise viewed as one of a sequence of events and is also marked by the PUNCTUAL tone (5) morpheme. In contrast, the TELIC verb ai^{2} 'to destroy' in 30) takes a DURATIVE VIEWPOINT OF THE SITUATION. It presents the process viewpoint of the TELIC verb, ie the occurrence of the situation in or over time. In Iau, irrealis situations such as those in hortatory, imperative and negative sentences take DURATIVE or INCOMPLETIVE viewpoints.

The final set of sentences below illustrate the contrastive use of PUNCTUAL and DURATIVE viewpoints on RESULTATIVE verbs in Iau.

31. Bi^{7}si^{9} be^{9} se^{9} bv^{6} sv^{4} bi^{7}si^{9} be^{7}
one is-TOT.PUN SCl Mkr 1s only one N Mkr

da^{8} bi^{6} y^{3}.
carry-RES.DUR arrive-RES.PUN Info-SNC.ADT

'Since I only have one, I have only brought one to you.'

32. Ty^{7} te^{7}bv^{9} bi^{8} a^{3}? Ba$^{6-3}$ y^{8} A^{8}da^{7}
person why arrive-RES.DUR DUBd-RLZ well 1p God

ba^{9} o^{7} se^{5} dy^{4}da^{8}dv^{9} ty^{7} bi^{8}
word take Int-NPFACT IndCl Con person arrive-RES.DUR

to^{9}.
Info-SC.ADT

'"Why have these people come here?"
"We are going to get God's word (ie have a church service) so

they have come here."'

In 31) the RESULTATIVE arrival of the squash is viewed as a PUNCTUAL event relative to the speech context and other situations in the discourse context. Whereas in 32) the RESULTATIVE verb 'to arrive' has a DURATIVE aspectual viewpoint. The people have not only arrived but their presence continues on and is relevant to the current speech situation and in the discourse context.

The INCOMPLETIVE aspectual variants of TOTALITY OF ACTION and TELIC verbs (See Figure 2) are used in conversational discourse to indicate that the situation is either unrealized as of speech time, or it is hypothetical. In narrative discourse INCOMPLETIVE verbs are used to indicate interrupted courses of action or action that continues over a period of time and are either not completed before some subsequent action occurs or that occur simultaneously with other situations in the immediate discourse context.

The INCOMPLETIVE aspectual viewpoint can present a situation as UNREALIZED as of speech time or in relationship to some other situation as is illustrated by the following sentence.

33. Fv^{7} da^{8}su^{6} ba^{7} se^{5}.
canoe tomorrow come-TOT.INC Int-NPFACT

'The plane will come tomorrow.'

The situation ba^{7}, in 33) marked with an INCOMPLETIVE aspectual viewpoint is unrealized but will be realized at some future time.

INCOMPLETIVE aspect is also used in Iau for hypothetical situations that could have occurred but haven't as of speech time. The following sentence is an example.

34. Y^{8} bi^{7}si^{9} di^{9} di^{8} ai^{7} di^{7} y^{9}
1p one 2s kill-RES.DUR Neg-HYP PBd-HYP Nom Cl

by^{7}by^{9} du^{7}be^{7} a^{9} di^{9} o^{7} di^{7} y^{9}.
true that is 2s take-TOT.INC PBd-HYP Info-SC.ADT

'If you hadn't killed one of us, it's true that you could have taken me (as wife).'

In 34) above, the verb o^{7} 'to take' carries the INCOMPLETIVE aspect tone morpheme (7) indicating that as of speech time it had not been realized even though under other conditions it could have been a reality.

The TOTALITY OF ACTION INCOMPLETIVE aspectual tone morpheme (7) contrasts with TOTALITY OF ACTION PUNCTUAL and DURATIVE tone morphemes in conversational discourse as is illustrated by the following examples.

35. TOTALITY OF ACTION DURATIVE

Di^{9} te^{7}bv^{9} ba^{3}?
1s why come-TOT.DUR

'Why have you come?'

36. TOTALITY OF ACTION PUNCTUAL

A^{4} o^{4}ba^{8} sa^{7} se^{4} dy^{4}da^{8}dv^{9}
1s medicine eat-TOT.INC Int-urlz IndCl Con

ba^{9} a^{9} Y^{4}.
come-TOT.PUN DUBd-FACT Info-SNC.NANDT

'I want to take some medicine, so I came.'

37. TOTALITY OF ACTION INCOMPLETIVE

Be^{6} te^{8}be^{7} ba^{7} ae^{7} da^{8}dv^{9} e^{8}ta^{8}fau^{7}
path where come-TOT.PUN Neg-HYP MVC1 Con again

tv^{9} y^{3}.
go away-TOT.PUN Ingfo-SNC.ADT

'Because (he didn't see) a path to come on anywhere, he went back again.'

38. TOTALITY OF ACTION INCOMPLETIVE

Fv^{7} ba^{7} be^{3}?
canoe come-TOT.INC Uncer-RS.SA

'Is the plane coming?'

Both 35) and 36) assert that someone actually came. In contrast, in 37) and 38) someone intends to come but his coming is either prevented or frustrated.

TELIC verbs in conversational discourse which occur with the intention particle se must carry the TOTALITY OF ACTION INCOMPLETIVE tone morpheme (7) in addition to the TELIC INCOMPLETIVE tone morpheme (4) as is illustrated in the following sentences.

39. A^{9} a^{7}se^{9} ty^{7} foi^{5}.
1s Seq Mkr person tell-TEL.PUN

'I have told them.'

40. Ty^{7} bv^{6} foi$^{4-7}$ se^{5}.
person 1s tell-TEL.INC-TOT.INC Inten-NP FACT

'I will tell them.'

Sentence 39) illustrates the TELIC verb foi^{5} with a TELIC PUNCTUAL aspectual viewpoint. Verbs with TELIC PUNCTUAL aspect are by implication also completive. Sentence 40) contains the same TELIC verb foi but it is marked as TELIC INCOMPLETIVE to indicate that the realization of the TELIC action is pending, ie it will be realized in time. The addition of the TOTALITY OF ACTION INCOMPLETIVE tone morpheme (7) indicates that as of speech time the situation is unrealized.

The INCOMPLETIVE aspectual viewpoint can be used to indicate that a situation occurs simultaneously with other situations or that it occurs for a prolonged period of time. The following segment from a narrative text illustrates the contrast between the INCOMPLETIVE aspectual viewpoint and the PUNCTUAL viewpoint of the TELIC verb bi^{5} 'to climb'.

41. ... dy^{4}da^{8}dv^{9} be^{8}sy^{9} Kaui^{8}be^{4}sa^{8} te^{4}di^{7} u^{8} bi^{5}.
IndC1 Con Oblig Kauibesa again tree climb-TEL.PUN

U^{8} bi^{4} da^{8}dv^{9} a^{9} be^{7} a^{5} bay^{2} A^{8}da^{7}
tree climb-TEL.INC MVCl Con 1s N Mkr land down God

bv^{8} bi^{3}. Ai^{6}a^{9}v^{6}! so^{6} o^{8}sy^{9} ba^{7}bv^{9} u^{8}
to pray-TOT.DUR Exclam child my this tree

bi^{4} to^{4}. Di^{9} dai^{7}si^{9} de^{8}
climb-TEL.INC Info Un NASS 2s hold Sta-CRLZ

dy^{3}. dy^{4}da^{8}dv^{9} u^{8} bi^{4}.
Imp-RS.SA IndC1 Con tree climb-TEL.INC

'So Kauibesa climbed the tree again. While he climbed the tree, I was down on the ground praying. "My child is climbing that tree. You hold him." So he kept on climbing.'

In the segment of text in 41) above, the TELIC verb bi^{5} 'climbed' in the first clause is marked with PUNCTUAL aspect. In relation to other preceeding and subsequent events it is viewed as one discrete, unique event. The next mention of the same, the TELIC INCOMPLETIVE verb bi^{4} 'to climb', occurs as a medial verb. Medial verbs in Iau narrative discourse either have a linking function or they function to introduce new but backgrounded information. See Section 2.3.4. In example 41) above, the medial verb bi^{4} has a linking function of the tone morphemes on medial verbs. The next mention of the verb bi^{4} is also TELIC INCOMPLETIVE and occurs in a direct quote. This occurrence of bi^{4} is continuative or progressive and overlaps with the TOTALITY OF ACTION DURATIVE verb 'to pray'. The final mention of the situation bi^{4} in the text above is also continuative. It refers to the same event as the TELIC PUNCTUAL verb bi^{5} in the first clause. However, the aspectual viewpoint of the verb has been changed from PUNCTUAL TO INCOMPLETIVE because this final mention of the verb bi^{4} views the situation as a temporal setting during which other subsequent foregrounded events of the narrative occur.

2.3.3. Grammaticalized Aspect in Iau and RESULTATIVE and TELIC Viewpoints. We have seen in Section 2.3.2 how the choice of aspectual viewpoint in any given context reflects the temporal relationships between that situation and other situations in the context. The choice of aspectual viewpoint on an Iau verb in any given context also reflects the relationship of that situation to some other situation or participant in terms of its effects, results, or role in relation to some other situation. Most TOTALITY OF ACTION verbs also have RESULTATIVE variants that are used to indicate that the speaker is viewing the situation in terms of its results or effects on other situations or on the participants. Figure 6 below lists some Iau TOTALITY OF ACTION DURATIVE verbs along with their RESULTATIVE DURATIVE variants.

Figure 6 RESULTATIVE variants of Process Verbs in Iau

	TOTALITY OF ACTION		RESULTATIVE
ba^{3}	'come (process) shoot, throw at'	ba^{8}	'has come shoot and kill'
baui^{3}	'reach a destination'	baui^{8}	'have reached a destination'
sa^{3}	'eat (process)'	sa^{8}	'eat (affected patient)'
do^{3}	'hit'	di^{8}	'have hit killed'

In any given discourse context, the choice of a RESULTATIVE vs a non-RESULTATIVE verb stem tone is not determined by lexical considerations alone as is illustrated by the following sentences.

42. TOTALITY OF ACTION PUNCTUAL

Dai^{3}	y^{8}	di^{9}	ai^{4}	y^{3}.
cassowary	1p	kill-TOT.PUN	Neg-URLZ	Info-SNC.ADT

'We were not able to kill the cassowary.' (ie the action was pending but never realized.)

43. RESULTATIVE DURATIVE

Dai^{3}	da^{9}	di^{8}	ae^{7}	y^{4}?
cassowary	2p	kill-RES.DUR	Neg HYP	Info-SNC.NANDT

'So you didn't kill the cassowary?'

44. TOTALITY OF ACTION DURATIVE

Fi^{4}au^{7}	ba^{8}day^{8}	ae^{5}.	Sa^{4}	au^{7}	a^{7}se^{9}
Intens	flee-RES.DUR	Neg-NPFACT	Just	he	Seq Mkr

aui^{8}	da^{8}dv^{9}	a^{7}se^{9}	bei^{9}	dy^{4}da^{8}dv^{9}
grunt-RES.DUR	MVCl Con	Seq Mkr	stay-TOT.PUN	IndCl Con

a^{7}se^{9}	di^{3}.
Seq Mkr	kill-TOT.DUR

'He (ie wild pig) doesn't flee at all. He just grunts and stays (where he is), so then he is killed.'

The verb di in the sentences above means 'to hit, to kill'. When used in context of a hunt it means 'to shoot and hit'. Sentences 42) and 44) above have TOTALITY OF ACTION and not RESULTATIVE viewpoints. In 42) above, the negated TOTALITY OF ACTION PUNCTUAL viewpoint means that the situation itself never actually occurred. In 44) above, taken from a procedural text, the TOTALITY OF ACTION DURATIVE viewpoint views the situation of 'to hit, to kill' primarily as a process rather than in terms of its results. In 43) the RESULTATIVE aspect when negated indicates that the situation had no resultant effects, ie the pig is definitely not dead.

In narrative discourse, RESULTATIVE tone morphemes can be used to indicate that the situation has major consequences for one of the participants. The following sentence is an example.

45.

A^{7}se^{9}	i^{7}	da^{8}dv^{9}	a^{7}se^{9}	o^{7}	fai^{9}ta^{7}
Seq Mkr	go TOT PUN	MVCl Con	Seq Mkr	sandbar	edge

be^{7}	baui^{8}.
N Mkr	reach RES DUR

'We went (on) and then we reached/got to the edge of the sandbar.'

The sentence above is taken from a short summary text of a journey taken down river to get a pig. There are four versions of the same text. In the course of telling travel tales, the usual aspect tone morpheme for the verb baui is tone 3, TOTALITY OF ACTION DURATIVE aspect. However, in one of the four versions of the text above the author chose to use a RESULTATIVE tone morpheme on the verb 'to reach'. Their arrival at the

sandbar was a critical juncture in the trip since it forced the participants to come to a decision regarding the pig. The river was low and due to difficulties in transporting the pig across the sandbar, they decided to kill the pig to make it easier to carry. In other versions of the same story, the speakers chose to view the situations in the story from a different viewpoint relative to one another and the participants.

TELIC variants of TOTALITY OF ACTION verbs also occur in discourse without subsequent changes in lexical meaning. TELIC aspectual viewpoints on verbs are substituted for other aspectual viewpoints in discourse when the situation represents the achievement of some goal or endpoint in the narrative sequence of events or when the situation acts as a primary stimulus for subsequent situations in the discourse. The following is an example of a TELIC viewpoint added to the RESULTATIVE verb baui[8] to indicate the achievement of a goal in the narrative sequence of events.

46. A^{7}se^{9} dy^{4}dau^{4} be^{7} foi^{5}. Dy^{4} a^{7}se^{9}
Seq Mkr like that Result tell-TEL.PUN then Seq Mkr

y^{8} bv^{8}ke^{7} i^{9}. I^{7} da^{8}dv^{9} a^{7}se^{9}
1p Accom go-TOT.PUN go-TOT-INC MVCl Con Seq Mkr

Fo^{8}di^{7}ta^{3} be^{7} baui$^{8-4}$.
Folita N Mkr reach-RES.DUR-TEL.CHS

'We told them like that. Then, as a result, they went with us. We went until we reached Folita.'

The segment of text in 46) above is taken from a travel log about a trip to take a census for the government in the area adjoining the Iau territory. In the context immediately preceeding this segment, the Iau have encountered the people from the next village on their census list. These people are away from their village at one of their jungle houses. The Iau ask them to accompany them to the village of Folita so that they can get a complete census of the village residents. Their arrival at the village is TELIC in that it marks their arrival at an endpoint location which is the location of the next episode in the travel log. Their arrival at Folita also represents the reaching of an intermediate goal in terms of the narrative as a whole and as such is marked with TELIC INCOMPLETIVE aspect (4).

The following sentences also illustrate the use of TELIC aspect to mark the achievement of a goal.

47. Y^{8} a^{7}se^{9} Ba^{6}kv^{6}si^{3} be^{7} baui^{8} da^{8}dv^{9}
1p Seq Mkr Bakusi N Mkr reach-RES.DUR MVCl Mkr

y^{8} a^{7}se^{9} ta^{3}.
1p Seq Mkr stay-TOT.DUR

'We came to Bakusi and then we spent the night.'

48. A^{9} a^{7}se^{9} i^{7} da^{8}dv^{9} a^{7}se^{9} Ba^{6}kv^{6}si^{3}
1s Seq Mkr go-TOT.INC MVCl Con Seq Mkr Bakusi

be^{7} ta^{5}.
N Mkr stay-TEL.PUN

'When I went, I spent the night at Bakusi.'

In sentence 47) above the verb ta^{3} is one of a series of events. It views the TOTALITY OF THE ACTION as it occurs over time. In contrast, in 48) above the verb ta is marked with a TELIC aspect. In the context, the

speaker is using the places where he spends the night as boundary markers to indicate the extent of a day's travel on his trip.

TELIC aspectual viewpoints are also used to mark arrival at points in the narrative where the verb so marked is the direct stimulus for some highly foregrounded event to follow. These verbs are marked as response or goal oriented in that they directly stimulate or result in a foregrounded subsequent event. The sentence below marks an event that leads directly to the main events of the episode.

49. Fy^{3} a^{7}se^{9} y^{7} da^{8}dv^{9} bv^{6} a^{7}se^{9}
frog Seq Mkr croak-TOT.INC MVCl Con 1s Seq Mkr

so^{8}ty^{8}dy^{7} boe^{8} be^{8}du^{7} fy^{3} bv^{6}
flashlight shine on-RES.DUR MVCl Con frog 1s

a^{7}se^{9} doe^{5}.
Seq Mkr see-TEL.PUN

'When the frog croaked, I turned my flashlight on him, and I spotted him.'

In 49) above, the speaker is telling about something that happened to him one night when he was out hunting frogs. The sighting of this particular frog was the precipitating event. As he was going over to get the frog he encountered a snake and the remainder of the short episode is about that encounter. The verb doe normally carries a TOTALITY OF ACTION PUNCTUAL viewpoint. The TELIC aspect in this context does not mean that the speaker looked the frog over or examined him. The TELIC aspect on the verb doe indicates that the subsequent events in the discourse are a direct result of or a direct response to seeing the frog.

2.3.4 Grammaticalized Aspect Substitution Patterns on Medial Verbs. We have seen how both the temporal relationships between events and the role of situations relative to other situations in the discourse control the choice of aspect on verb stems in Iau. Each of the three lexical types of verbs TOTALITY OF ACTION, RESULTATIVE, and TELIC all have PUNCTUAL, DURATIVE and INCOMPLETIVE variants. In addition, TOTALITY OF ACTION verbs can have RESULTATIVE or TELIC variants which are substituted on the verb in certain contexts and yet maintain the same lexical meaning. Likewise, TELIC and RESULTATIVE verbs can have TOTALITY OF ACTION variants which are substituted on the verb in certain contexts and maintain the same lexical meaning.

Medial verbs[2] in Iau are characterized by different stress patterns than independent verbs and by the fact that they do not carry all possible aspectual viewpoints. Tone (9) TOTALITY OF ACTION PUNCTUAL, (5) TELIC PUNCTUAL, and (3) TOTALITY OF ACTION DURATIVE do not occur on medial verbs. When verbs normally taking one of these three tones occur in medial verb clauses, there are common substitution patterns for each of these tones. Tone 9 verbs usually take tone 7 in medial verb clauses as illustrated in the sentences below.

50. Au^{7} a^{7}se^{9} i^{9}. I^{7} da^{8}dv^{9} a^{7}se^{9}
he Seq Mkr go-TOT.PUN go-TOT.PUN MVCl Con Seq Mkr

Fa^{3}ui^{9} be^{7} baui^{3}.
Faui N Mkr Reach-TOT.DUR

'He went. He went and then came to/reached Faui.'

51. I^{7} da^{8}dv^{9} a^{9} foi^{5} dy^{3}.
go-TOT.INC MVCl Con I tell-TEL.PUN Imp-RS.SA

'When he goes, tell me.'

52. A^{7}se^{9} i^{7} du^{7}e^{9} sv^{9}di^{9} bi^{7}si^{9} a^{7}se^{9}
Seq Mkr go-TOT.INC MVCl Con possum one Seq Mkr

doe^{9}.
see-TOT.PUN

'As (he) was going along, he saw a possum.'

The segment of text in 50) illustrates a very common use of medial verb clauses in Iau. In narrative text, medial verb clauses are used as linking devices between sentences in a paragraph or between paragraphs. The information in the medial verb clause is a repetition of the content of the independent verb clause in the preceeding sentence. When tone (9) verbs (TOTALITY OF ACTION PUNCTUAL) are repeated in medial verb linking clauses they usually occur with a tone (7) (TOTALITY OF ACTION INCOMPLETIVE) indicating that the situation is only one of an incompleted series of events, ie there are more events to come.

Sentence 51) above shows another function of medial verb clauses in Iau. Medial verb clauses can be used to express various types of conditionals. The verb i^{9} 'to go' usually occurs with a tone (9) TOTALITY OF ACTION PUNCTUAL viewpoint. In sentence 51), the INCOMPLETIVE viewpoint tone morpheme tone (7), indicates that the situation has not actually occurred.

Sentence 52) shows the use of the tone (7) morpheme on the verb 'to go' in a medial clause that functions as a time margin. In the time margin, 'As he was going along', the situation 'to go' is INCOMPLETE (tone 7) when the verb in the main clause occurs.

Tone 3 verbs (TOTALITY OF ACTION DURATIVE viewpoint) usually take a tone 8 (RESULTATIVE DURATIVE viewpoint) in medial verb clauses as is illustrated in the sentences below.

53. Au^{7} a^{7}se^{9} du^{9} di^{3}. Di^{8} da^{8}dv^{9}
he Seq Mkr wild pig kill-TOT.DUR kill-RES.DUR MVCl Con

da^{8} ui^{8} bv^{8} i^{9}.
carry-RES.DUR house to go-TOT.PUN

'He killed the pig. When he had killed the pig, he brought it home.'

54. Di^{8} da^{8}dv^{9} to^{8} ta^{9} ko^{4}du^{8} bi^{7}si^{9} a^{9}
kill-RES.DUR MVCl Con pig meat small one 1s

ti^{2} dy^{3}.
give-TEL.DUR Imp-RS.SA

'When/If he kills it, then give me a small piece of the meat.'

55. Au^{7} a^{7}se^{9} to^{8} o^{8}sy^{9} di^{8} da^{8}dv^{9} a^{9}
he Seq Mkr pig my kill-RES.DUR MVCl Con 1s

au^{8}du^{8}.
angry-RES.DUR

'He killed my pig so I am angry.'

Sentences 53), 54) and 55) above all illustrate the use of the RESULTATIVE DURATIVE tone morpheme (8) on the verb di 'to hit, kill' in medial verb clauses. When the pig was dead (RESULTATIVE viewpoint), then the following situation occurred. Sentence 53) shows di^8 in a linking medial verb clause in narrative text. Sentence 54) illustrates the use of di^8 in a conditional medial verb clause. In 54) it is only when the result of the situation di 'to hit, to kill' is realized that the situation in the following clause can be realized. Finally, sentence 55) illustrates the use of di^8 in causal medial verb clause.

Tone 5 TELIC PUNCTUAL verbs usually take tone 4 TELIC INCOMPLETIVE viewpoint in medial verb clauses as is illustrated in the sentences below.

56. Au^7 a^7se^9 ty^7 foi^5. Foi^4 da^8dv^9
he SeqMkr person tell-TEL.PUN TELL.TEL.INC MVCl Con
$e^8ta^8fau^7$ i^9.
again go-TOT.PUN

'He told the people. When he had told them, he went on again.'

57. Di^9 au^7 foi^4 da^8dv^9 au^7 au^8du^3.
2s 3s tell-TEL.INC MVCl Con 3s angry-TOT.DUR

'If you tell him, he will be angry.'

58. A^7se^9 ai^7 foi^4 be^8du^7 ty^7 bo^4 a^7se^9
Seq Mkr 3s tell-TEL.INC MVCl Con person two Seq Mkr
fe^3.
appear-TOT.DUR

'He was telling him when two people appeared/came into view.'

In 56) above, the TELIC verb foi^5 is only one of a series of narrative events. In the following linking verb clause, the TELIC INCOMPLETIVE aspect, tone 4, is used to indicate that the event is incomplete and there is still more to follow. In 57) the TELIC INCOMPLETIVE aspect is used on the medial verb to mark a conditional clause. In 58) the TELIC INCOMPLETIVE aspect marks a situation that was not yet completed when the independent clause verb occurred.

Verbs with tones 6, 8, 2, and 4 usually have the same tones on medial verb clauses as they do on independent clauses.

The remainder of this section discusses in more detail the use of the INCOMPLETIVE aspectual viewpoint tone morphemes to substitute in medial verb linking clauses for tones 9, 5, and 3. It is beyond the scope of this paper to present a complete discussion of all the functions and factors involved in the choice of aspect on medial verbs in Iau.

Linking medial verb clauses occur for the most part in sentences that present events occurring in chronological sequence. The function of the linking medial verb clauses is to increase discourse cohesion by overtly linking chronological sequences of events and by indicating the temporal and logical relationships between the events in these sequences. The following is a segment of a simple Iau narrative consisting of a chronological sequence of actions. The text is listed clause by clause below.

59a. Ty^7 bi^7si^9 a^7se^9 du^9 bv^8 i^7
person one Seq Mkr wild pig for go-TOT.

se^{5} dy^{4}da^{8}dv^{9}
INC Int-NPFACT Ind Cl Con

'A man was going to go hunting wild pigs, therefore,

da^{7} da^{8} i^{9}.
dog carry-RES.DUR go-TOT.PUN

he took along his dog.'

b. A^{7}se^{9} da^{7} da^{8} i^{7}
Seq Mkr dog carry-RES.DUR go-TOT.INC
da^{8}dv^{9}
MVCl Con

'He took his dog along and then,

du^{9} a^{7}se^{9} dae^{7} aui^{3}.
wild pig Seq Mkr dog-by bark-TOT.DUR

the dog barked at a wild pig.'

c. A^{7}se^{9} dae^{7} aui^{8} da^{3}dv^{9}
Seq Mkr dog-By bark-RES.DUR MVCl Con

'The dog barked at the pig and then,

a^{7}se^{9} di^{3}.
Seq Mkr kill-TOT.DUR

he (the man) killed the pig.'

d. A^{7}se^{9} di^{8} da^{8}dv^{9}
Seq Mkr kill-RES.DUR MVCl Mkr

'When he killed it,

a^{7}se^{9} sui^{5}.
Seq Mkr die-TEL.PUN

it died.'

e. A^{7}se^{9} sui^{4} da^{8}dv^{9}
Seq Mkr die-TEL.INC MVCl Con

'When it had died,

a^{7}se^{9} da^{8} ui^{8} bv^{8} i^{9}.
Seq Mkr carry-RES.DUR house to to-TOT.PUN

he brought it to the house.'

f. A^{7}se^{9} da^{8} ui^{8} bv^{8}
Seq Mkr carry-RES.DUR house to
i^{7} da^{8}dv^{9}
go-TOT.INC MVCl Con

'When he had brought it to the house,

a^{7}se^{9} sa^{3}.
Seq Mkr eat-TOT.DUR

he ate it.'

g. Be^{7} ae^{6}.
is-TOT.INC Neg-CFACT

'That's all.'

In the narrative text above, the underlined medial verbs all have a linking function. In each case a DURATIVE or an INCOMPLETIVE aspectual viewpoint is substituted in the linking medial verb clause for the aspectual viewpoint in the preceeding independent verb clause. DURATIVE and INCOMPLETIVE aspectual viewpoints are viewpoints of the action relative to time. INCOMPLETIVE tone morphemes are used to view the action as not completed over a period of time or as not completed at a certain point in time. DURATIVE tone morphemes are used to view the action as it occurs over time or to present the effects of the action over time. By implication, in a narrative discourse, DURATIVE and INCOMPLETIVE tone morphemes generate the expectation of some other event to follow. Tone (7) morphemes in linking medial verb clauses seem to indicate that the relationship between the verbs in the linked sentences is one of chronological sequence. It implies by its INCOMPLETIVE viewpoint that the first verb is INCOMPLETE in the sense that it is only one of a sequence of actions. Tone (7) creates an expectation of some other event to follow. See sentences a) and b) and e) and f) in 59) above.

The tone (8) morpheme in linking medial verb clauses also generates the expectation of some other situation to follow in that it predicates a situation that has results that hold or are effective over time. Tone (8) verbs like aui^{8} in 59) enable and facilitate the subsequent event in the narrative sequence. The relationship between the verbs in 59a) and 59b) as marked by tone (7) is one of chronological sequence only. First, a) happened and then b) happened. The relationship between the events in 59b) and 59c), however, is more than simple chronological sequence. Verbs marked with tone 8 indicate that the action affects the participants in such a way that they bring about or result in the subsequent event.

The tone (4) morpheme, TELIC INCOMPLETIVE, like the tone (8) morpheme, signals something more than a simple chronological relationship between events. TELIC morphemes in Iau narrative discourse indicate that the action so marked is either a direct stimulus for the subsequent action or a prerequisite for the subsequent action. That is, the doing of the action brings the participants or the situation to the point where the subsequent action can take place. For example, in Iau narrative discourse, commands that bring about a subsequent response are always expressed in quote margins on verbs of speaking using the TELIC PUNCTUAL tone morpheme (5) or with the TELIC INCOMPLETIVE tone morpheme (4) on medial verbs. Sentences 59d) and 59e) are examples of TELIC INCOMPLETIVE aspect marking the first event 'to die' as a prerequisite to the second. Only after the pig died, did the man carry it home.

2.3.5 Foregrounding and Backgrounding Functions of Grammaticalized Aspect in Iau Narrative Discourse. The foregrounding and backgrounding functions of aspect in discourse have been described for various languages. In many languages there are only two aspectual distinctions, perfective vs imperfective. In these languages, perfective aspect is associated with foregrounded events and imperfective aspect is associated with backgrounded situations in the discourse (Hopper 1979). In addition, another aspect relevant to discourse, the perfect, has been discussed in the literature (Li, Thompson and Thompson, 1982, Anderson, 1982). The perfect functions in discourse to give information that is of current

relevance (Li, Thompson, and Thompson, 1982).

In Iau, with its rich system of aspectual distinctions, the question is: Which aspect tone morphemes have perfective discourse functions, ie mark foregrounded events and which tone morphemes have imperfective discourse functions, ie mark backgrounded situations? One of the criteria given by Jones and Jones (1979:8) for foregrounded or backbone material in discourse is that

> "all such clauses (or sentences) taken together generally give a very plausible abstract or summary of the text of which they are a part."
> (See also van Dijk 1977)

Verbs with PUNCTUAL viewpoints are also much more likely to be foregrounded.(Hopper 1979)

The PUNCTUAL viewpoint tone morphemes in Iau are (9) TOTALITY OF ACTION PUNCTUAL, (6) RESULTATIVE PUNCTUAL, and (5) (TELIC PUNCTUAL). A listing of all the independent clauses of a narrative containing tone (9), (6), and (5) verbs results in a plausible summary of that narrative. The following short narrative text is an example. All independent verbs are underlined.

Text: Getting Volunteers to Go Get a Pig

60a. Be^{8}a^{8}bi^{8} a^{7}se^{9} ai^{6} av^{7}bv^{9} foi^{5}
Benjamin SEQ cousin his told-TEL.PUN

'Benjamin's cousin told him,

b. "Ai^{6}y^{5} di^{9} ty^{7} foi^{4} dy^{3}.
cousin-VOC you people tell-TEL.INC Imp-RS.SA

"Cousin! You tell people,

c. ty^{7} sy^{9} to^{8} bv^{8} i^{7} bv^{3}" dy^{4}da^{8}dv^{9}
people should pig for go-TOT.PUN Rq-RS.SA Ind cl con

someone should go to get the pig (for me), if they will do so."

d. Be^{8}a^{8}bi^{8} a^{7}se^{9} bi^{8} be^{8} ba^{9}
Benjamin Seq Mkr news NOUN-MKR came-TOT.PUN

Benjamin came with the message.

e. bi^{8} be^{8} ba^{7} da^{8}dv^{9}
news NOUN-MKR came-TOT.INC MVCl Con

When Benjamin came with the news

f. ty^{7} ba^{7}bv^{9} a^{7}se^{9} foi^{5}
people this Seq Mkr told-TEL.PUN

he told these people

g. "ty^{7}da^{7}y^{3} da^{9} to^{8} bv^{8} i^{7} dy^{3}"
people 2pl pig for go-TOT.INC Imp-RS.SA

di^{4}du^{7}be^{7}
IndCl Con Advers.

"People! You go get the pig" but

h. ty^{7} a^{7}se^{9} av^{3}.
people Seq Mkr refuse-TOT.DUR

they refused.

i. av^{8} da^{8}dv^{9}
refuse-RES.DUR MVCl Con

When they refused,

j. U^{8}du^{8}ba^{8}dus^{7} a^{7}se^{9} "a^{9} i^{7} se^{4}
Udumadus Seq Mkr I go-TOT.INC intend-F RLZ

dy^{5}" di^{4}du^{7}be^{7}
do it-TEL.PUN IndCl Con Advrs

Udumadus (said), "I will surely go" but,

k. "ty^{7} bo^{4} be^{7} i^{7} dy^{3}" di^{4}du^{7}be^{7}
people two N Mkr go-TOT.INC Imp InClCnAdvrs

"Two people should go" (Benjamin speaking again), but

l. fi^{4}au^{7} av^{3}.
Intens refuse-TOT.DUR

they still refused.

m. Av^{8} da^{8}dv^{9}
refuse-RES.DUR MVCl Con

When they refused,

n. be^{7}si^{9} dy^{4}da^{8}dv^{9}
left behind-TOT.PUN IndCl Con

he left them and (as a result)

o. y^{8} be^{7} bv^{8} ba^{9}
we Res Act to came-TOT.PUN

came to us.

p. bv^{8} i^{7} da^{8}dv^{9}
to go-TOT.INC MVCl Con

When he went to us,

q. a^{7}se^{9} y^{8} foi^{5}
Seq Mkr we tell-TEL.PUN

he told us,

r. "ty^{7}da^{7}y^{3} y^{8} ai^{6} o^{8}sy^{9} to^{8} bv^{8} i^{7}
People we cousin my pig for go-TOT.INC

dy^{3} di^{4}du^{7}be
Imp-RS.SA InCl Con Advrs

"People, my cousin told us to go get the pig, but

s. ty^{7} ui^{8} a^{9} ai^{7}bv^{9} foi^{4} du^{7}be^{7}
people house another that told-TEL.INC MVCl Con Advrs

when I told the people in that other house over there

t. av^{8} to^{4}
refuse-RES.DUR Info.RHr-SNC.NANDT

they refused.

u. da^{9} to^{6} i^{7} ae^{9} be^{3}"
2s Contrd go-TOT.PUN Neg-FACT Uncer-RS.SA

You wouldn't consider going, would you?" and so

v. "Ba$^{6-3}$ y^{8} i^{7} say^{5}" dy^{4}da^{8}dv^{9}
No we go-TOT.INC Int-NPFACT IndClCon

"Yes we <u>will</u> go" and so

w. y^{8} be^{7} <u>i</u>^{9}.
we Res Act go-TOT.PUN

therefore we <u>went</u>.'

The following is a list of all the independent clauses with tone (9), (6) and (5) verbs. This list of events forms a plausible summary of the narrative above. Only tone 9) and tone 5) occur in this particular narrative.

a. Benjamin's cousin told him. (5) (Quote Content: "Cousin, you tell people. People should go get the pig, if they will do so.")
d. So, Benjamin came with the message. (9)
f. He told these people. (5) (Quote content: "People you should go get the pig.")
n. He left them. (9)
q. He told us (5) (Quote content: "My cousin told us to go get the pig, but when I told the people in that house over there they refused. You wouldn't consider going, would you?")
w. So we went. (9)

The DURATIVE tone morphemes 3) TOTALITY OF ACTION DURATIVE, (8) RESULTATIVE DURATIVE, and (2) TELIC DURATIVE provide additional detail which fleshes out the backbone summary of events marked by the PUNCTUAL tone morphemes. The following is a list of all the independent narrative clauses in the text above that have either PUNCTUAL or DURATIVE verbs. The clauses with DURATIVE verbs are underlined.

a. Benjamin's cousin told him,
d. Benjamin came with the news.
f. He told these people,
h. <u>They refused</u>. (3)
l. <u>They still refused</u>. (3)
n. He left them.
o. He came to us.
q. He told us,
w. We went.

The DURATIVE verbs in the text above are all tone (3) verbs. They provide additional detail for the narrative, ie what the people's response was and why Benjamin left them and came to the speaker. The TOTALITY OF ACTION DURATIVE aspect, tone (3) is by far the most commonly occurring DURATIVE tone morpheme. Tone (8) and (2) morphemes have more specialized discourse functions and are less frequent. The following segment of text also illustrates the additional background information provided by DURATIVE viewpoint tone morphemes. The DURATIVE viewpoint independent verbs are underlined.

61a. Y^{8} a^{7}se^{9} Be^{8}a^{8}bi^{8} be^{8} foi^{5}.
we Seq Mkr Benjamin N Mkr tell-TEL.PUN

'Benjamin told us.

b. "Da^{9} di^{7}ba^{3} be^{4} to^{8} bv^{8} i^{7} dy^{3}
2p five N Mkr pig for go-TOT.INC Imp-RS.SA

dy^{4}da^{8}dv^{9}
IndCl Con

"You five go to get the pig."

c. Y^{8} a^{7}se^{9} i^{9}.
we Seq Mkr go-TOT.PUN

We went.

d. I^{7} da^{8}dv^{9}
go-TOT.INC MVCl Con

When we went,

e. a^{7}se^{9} o^{7} fai^{9}ta^{9} be^{7} <u>baui</u>^{3}.
Seq Mkr sandbar edge N Mkr reach-TOT.DUR

we <u>came</u> <u>to</u> the edge of the sandbar.

f. Baui^{8} da^{8}dv^{9}
reach-RES.DUR MVCl Con

When we got to the sandbar,

g. a^{7}se^{9} i^{9}.
Seq Mkr to-TOT.PUN

we went.

h. I^{7} $da^{8}dv^{9}$
go-TOT.INC MVCl Con

When we went,

i. $a^{7}se^{9}$ ty^{7} $ka^{6}di^{8}$ be^{7} $a^{7}se^{9}$ foi^{5}.
Seq Mkr person many N Mkr Seq Mkr tell-TEL-PUN

We told many people (that Benjamin's Father-in-law had died).

j. Foi^{4} $da^{8}dv^{9}$
tell-TEL.INC MVCl Mkr

When we had told them,

k. $be^{7}si^{9}$.
leave-TOT.PUN

We left them.

l. $Be^{7}si^{9}$ $da^{8}dv^{9}$
leave-TOT.PUN MVCl Con

When we had left them,

m. $a^{7}se^{9}$ ui^{8} to^{8} be^{4} iy^{9} $a^{7}se^{9}$ be^{7}
Seq Mkr house pig is-TEL.INC nomin. Seq Mkr N Mkr
$baui^{3}$.
reach-TOT.DUR

We came to the house where the pig was.

n. $Baui^{8}$ $da^{8}dv^{9}$
reach-RES.DUR MVCl Con

When we reached it,

o. $a^{7}se^{9}$ $da^{8}su^{6}$ $dy^{4}da^{8}dv^{9}$
Seq Mkr dawn-RES.PUN IndCl Con

It got light/the day dawned and then,

p. fvy^{5} sui^{5} $dy^{4}da^{8}dv^{9}$
canoe-into enter-TEL.PUN IndCl Con

we got into the canoe, and then,

q. $a^{7}se^{9}$ to^{8} $a^{7}se^{9}$ o^{9}.
Seq Mkr pig Seq Mkr take-TOT.PUN

We caught the pig.'

In the text segment above, the tone 3 TOTALITY OF ACTION DURATIVE

morphemes in e) and m) mark backgrounded new setting clauses.

The following segment of text illustrates the use of the less frequent tone 8 morphemes in narrative text. The tone 8 morpheme on the independent verb is underlined in the text below.

62a. Y^{8} a^{7}se^{9} u^{6} fe^{6}kae^{9}.
we Seq Mkr before sleep-TOT.PUN

'We were asleep before (all this began).

b. Fe^{6}kae^{7} da^{8}dv^{9}
sleep-TOT.INC MVCl Con

When we slept,

c. Ye^{7}bi^{9} a^{7}se^{9} fvy^{6} se^{5} dy^{4}da^{8}dv^{9}
Jimmy Seq Mkr bathe-RES.PUN Int-NPFACT IndCl Con

Jimmy was going to bathe, so

d. a^{7}se^{9} i^{9}.
Seq Mkr go-TOT.PUN

So he went.

e. A^{7}se^{9} i^{7} da^{8}dv^{9}
Seq Mkr go-TOT.INC MVCl Con

When he went.

f. Be^{8}a^{8}bi^{8} bv^{8}ke^{7} av^{8} <u>day</u>^{8}.
Benjamin with Recip talk-RES.DUR

He had a talk with Benjamin.

g. U^{8}du^{8}ba^{7}dvs^{8} a^{7}se^{9} u^{6} to^{8} bv^{8} i^{7}
Udumadus Seq Mkr before pig for go-TOT.INC

se^{5} dy^{4}da^{8}dv^{9}
Int-NPFACT IndCl Con

Udumadus had decided before that he would go to get the pig, therefore

h. Be^{8}a^{8}bi^{8} a^{7}se^{9} ba^{9} bi^{8}fa^{9}
Benjamin Seq Mkr word say-TOT.PUN

Benjamin said,

i. Ye^{7}bi^{9} foi^{5}.
Jimmy tell-TEL.PUN

He told Jimmy,

j. "Ye^{7}bi^{9} y^{3} ai^{6} o^{8}sy^{9} y^{8} to^{8} bv^{8} i^{7}
Jimmy Voc cousin my we pig for go-TOT.PUN

dy^{3}." dy^{4}du^{7}be^{7}
Imp-RS.SA IndCl Con Advrs

"Jimmy, my cousin said we should go to get the pig, but

k. A^{9} ty^{7} ae^{6} to^{9}." dy^{4}da^{8}dv^{9}
1s person Neg-RES.PUN RHr-SC.ADT IndCl Con

I don't have anyone (to go)." therefore,

l. Ye^{7}bi^{9} a^{7}se^{9} e^{8}ta^{8}fau^{7} fvy^{6} ae^{2}
Jimmy Seq Mkr again bathe-RES.PUN Neg-NPRLZ

Jimmy, instead of bathing,/not bathing

m. ui^{8} bv^{8} i^{9}.
house to go-TOT.PUN

went to the house.'

In clause 62f) above the tone 8 RESULTATIVE DURATIVE aspect marks the clause as background. The clause serves to introduce a minor participant, and also marks a point of temporary digression in the text. The following clause about Udumadus is out of temporal sequence.

The INCOMPLETIVE tone morphemes (7) TOTALITY OF ACTION INCOMPLETIVE and (4) TELIC INCOMPLETIVE are the least frequently occurring tone morphemes on verbs in independent clauses in narrative text. They only occur at points of change in the narrative such as at 'inciting moments' and 'peak' (Longacre 1971). The following segment of text illustrates one of the INCOMPLETIVE tone morphemes (7) used at a point of change in the narrative.

63a. Dy^{4}be^{7} y^{8} be^{7} fv^{7} da^{8} i^{7}
S Con we Res Act canoe carry-RES.DUR go-TOT.INC

be^{8}
SCl Mkr

'Then, as a result, as we were paddling along in the canoe,

b. "Ba^{7}bv^{9} fu^{9} dav^{8} be^{4} be^{7}de^{8} y^{7}.
this must be lake is-TEL.INC Infer Info-SNC.NADT

"This (tree), it must be that there is a lake (visible from the top of it). (The participants are looking for a hidden lake by climbing up tall trees to get a view over the dense jungle growth)

c. Ba^{9} bv^{6} a^{7}se^{9} bv^{8} bi$^{4-7}$ se^{4}."
this 1s Seq Mkr for climb-TEL.INC-TOT.INC Int-URLZ

da^{8} be^{4}
RpSp-CRLZ SLl Mkr

I am going to climb this (tree)" saying that

d. A^{9} be^{7} a^{7}se^{9} bi^{7}.
1s Res Act Seq Mkr climb-TOT.INC

I began to climb.

e. A^{9} bi^{4} $be^{8}du^{7}$
1s climb-TEL.INC MVCl Con Simult

I was climbing when,

f. u^{8} te^{8} bv^{6} tai^{7-8} be^{7}
tree vine 1s pull-TOT.INC-RES.CHS SCl Mkr

By pulling on the vine on the tree,

g. A^{9} bi^{4} $be^{8}du^{7}$
1s climb-TEL.INC MVCl Con Simul

I was climbing when,

h. U^{8} te^{8} $a^{7}se^{9}$ si^{6}.
tree vine Seq Mkr slip-RES.PUN

The tree vine slipped.'

The TOTALITY OF ACTION INCOMPLETIVE tone morpheme (7) in clause d) above is an action that is interrupted. The action of climbing the tree is the setting within which the major event of the episode occurs. The speaker slips and almost falls. He never does finish climbing the tree. For a more detailed discussion of the discourse roles of the aspect tone morphemes in Iau, see Bateman (ms), "Pragmatic Discourse Functions of the Iau Tone Morphemes."

3.0 ASPECTUAL VIEWPOINTS OF TONE CLUSTERS ON IAU MONOSYLLABIC VERB STEMS

Iau monosyllabic verb stems can have more than one aspect tone morpheme at a time. There are 11 different combinations that have been observed to date. Examples of each are listed below.

9-3	sui^{9-3}	'die'
9-8	sui^{9-8}	'has died'
6-3	boi^{6-3}	'disappear down into'
6-8	boi^{6-8}	'has disappeared down into'
6-4	boi^{6-4}	'disappear down into (incomplete)'
7-3	be^{7-3}	'fill up (a tank with gas)'
7-8	be^{7-8}	'have filled up'
7-8	$davy^{7-4}$	'partially built'

8-5	baui^{8-5}	'have finally reached a destination'
8-4	baui^{8-4}	'finally come to a destination/ a temporary or intermediate destination'
4-7	foi^{4-7}	'will ask/tell (An intended TELIC action that is not yet reality but will be)'

All of the tone clusters on monosyllabic verb stems view the situation as a CHANGE OF STATE, ie the dynamic process of entry into a state. For example, the verb sui^{5} TELIC PUNCTUAL 'died' contrasts in aspect with sui$^{9-3}$ CHANGE OF STATE 'die/pass into the world of the dead' as is illustrated by the uses of the verb sui in the following texts below.

Text 1

64a. Ai^{6} o^{8}sy^{9} a^{7}se^{9} u^{6} sui^{5}.
cousin my Seq Mkr before died-TEL.PUN

'My cousin had already died before (me).

b. A^{9} ba^{7}bv^{9} a^{7}se^{9} du^{9} ka^{6}di^{8} be^{7} di^{3}.
1s this Seq Mkr wild pig many N Mkr kill-TOT DUR

I killed many pigs (during my lifetime)

c. A^{9} a^{7}se^{9} sui^{4} be$^{7-8}$
1s Seq Mkr died-TEL.INC SCl Mkr

Then when I die,

d. a^{9} a^{7}se^{9} i^{7} da^{8}dv^{9}
1s Seq Mkr go-TOT.PUN MVCl Con

and when I go (to the world of the dead).

Text 2

65a. A^{6}ty^{7} av^{7}bv^{9} a^{7}se^{9} u^{6} bi^{7}si^{9} sui$^{9-3}$.
mother 3s Poss Seq Mkr before one die-TOT.PUN-TOT.CHS

'One of his mothers ('mother' can be aunt or Mo 's co wife) died/passed away into the world of the dead.

b. Sui$^{9-8}$ dad^{8}v^{9}
dei-TOT.PUN-RES.CHS MVCl Con

When she died, entered the world of the dead,

c. So^{6} av^{7}bv^{9} a^{7}se^{9} be^{3}di^{9}e^{9} su^{4} a^{3}.
child 3s Seq Mkr later die-TEL.INC DUBd-RLZ

Her child later died.'

Text 3

66a. A^{7}se^{9} ui^{8} bv^{8} bai^{6} a^{9}.
Seq Mkr house to enter-RES.PUN DUB-FACT

'I went into the house (of the dead).

b. ui^{8} bv^{8} bai^{6} da^{8}dv^{9}
house to enter-RES.PUN MVCl Con

When I went into the house,

c. ty^{7} u^{6} sui$^{9-8}$ e^{9} a^{7}se^{9}
person before die-TOT.PUN-RES.CHS Nom. Seq Mkr

fa^{3}fu^{7} a^{9} be^{7} doe^{9}.
all 1s N Mkr see-TOT.PUN

The people who died before, all of them, saw me.'

In 64), the text tells how the cousin goes away first and leaves his relative for the world of the dead. Later, when his relative dies and goes to the same place, his cousin comes to meet him and helps him across the river to the house of the dead. The remainder of the story is about what happens when he gets there. In 64), the verbs sui^{5} is marked as one of a sequence of events in the narrative and is therefore marked with a PUNCTUAL viewpoint.

In 65), the mother passes out of the world of the living and into the world of the dead first. When her child dies, he goes also to the world of the dead to find his mother. The story goes on to tell how she is annoyed by his following her and so she throws a hornet's nest at him. Back in the real world, when that happens his corpse swells and everyone watching the body knows what his mother has just done. The verb sui$^{9-3}$ in 65) has a CHANGE OF STATE tone cluster which focuses on death as a transition between two worlds. The narrative text in 65) relates events in two worlds, the world$_{9-3}$ of the dead and the world of the living, to one another. The verb sui$^{9-3}$ in 65) establishes a situational setting within which the events of the narrative take place. The aspectual viewpoints of sui^{5} vs sui$^{9-3}$ reflect the roles of these verbs in relation to other verbs in their respective narratives.

In 66), as in 65), the situation as a CHANGE OF STATE is in view. The people in 66) are viewed as having CHANGED STATE, ie passed out of the world of the dead into the world of the living, before the speaker did.

The following examples also illustrate the CHANGE OF STATE viewpoint of another tone cluster 6-3 vs the single aspectual viewpoint (6) RESULTATIVE PUNCTUAL.

67a. Y^{8} fv^{7} fv^{6} be$^{7-8}$
we canoe tie-RES.PUN SCl Mkr

'While we were tying up the canoe,

b. y^{8} a^{7}se^{9} ba$^{6-3}$.
we Seq Mkr come-TOT.DUR-TOT.CHS

they came over to us.

c. Dy^{4}be$^{7-8}$ ty^{7} Do^{2} y^{8} a^{7}se^{9} o^{4} tai^{9}.
S Conn person Do we Seq Mkr arm pull-TOT.PUN

Then we shook hands with the Do people.'

68a. To^{8} ty^{7} a^{7}se^{9} bv^{8} ba^{6}.
pig person Seq Mkr to come-RES.PUN

'They came for the pig./came to get the pig.'

Ba^{6} in 68), is a RESULTATIVE PUNCTUAL event. In 67), ba$^{6-3}$ is marked as CHANGE OF STATE, ie a changed location of one set of participants relative to the other.

The change of state tone clusters fall into five lexical sets based on the aspectual viewpoints of the first tone in the cluster. There are two TOTALITY OF ACTION sets shown below those beginning with tone 9) and those beginning with tone 7).

sui9-3 'die'
sui9-8 'has died'

be7-3 'to fill up'
be7-8 'has filled up'

tai7-3 'pull on, pull back and forth'
tai7-8 'have pulled on'

Tone clusters beginning with tone (7) TOTALITY OF ACTION INCOMPLETIVE view the change of state as either temporary or as resulting in a partially affected participant. The filling up of a gas tank (be7-3) and the pulling of the rope to start the motor, or the pulling motion in shaking hands (tai7-3) are viewed as partial or temporary CHANGES OF STATE in Iau.

There are two RESULTATIVE lexical sets of CHANGE OF STATE tone clusters as shown below, those beginning with tone 6) and those beginning with tone 8).

boi6-3 'disappear down into'
boi6-8 'have disappeared down into'
boi6-4 'have finally arrived (incomplete/temporary)'

baui8-5 'have finally arrived'
baui8-4 'have finally arrived (incomplete/temporary)'

CHANGE OF STATE tone clusters beginning with tone (8) focus on the CHANGE OF STATE as achievement of the endpoint of the action while CHANGE OF STATE tone clusters beginning with tone (6) indicate that the entity changing state is affected by the action.

The remaining tone cluster 4-7 is CHANGE OF STATE TELIC INCOMPLETIVE, ie it views the completion of the action as pending but as yet incompleted. Tone 4-7 clusters occur on TELIC verbs preceeding the intention particle se as illustrated in the following set of sentences.

69a. Ty^{7} bv^{6} a^{7}se^{9} foi^{5}.
person 1s Seq Mkr tell-TEL.PUN

'I have already told them/the people.'

70. Ty^{7} bv^{6} foi$^{4-7}$ se^{5}.
person I tell-TEL.INC-CHS Int-NPFACT

'I will tell them.'

Tone 4-7 clusters occur only on TELIC verbs and indicate that the action is intended or planned but has not been realized as yet.

The second tone of the CHANGE OF STATE tone clusters indicates the contrastive temporal aspectual viewpoint of the situation relative to other situations in the discourse context. The following are some contrastive sets of tone clusters.

boi6-3	'disappear down into'	sui9-3	'die'	be7-3	'fill up'
boi6-8	'have disappeared down into'	sui9-8	'have died'	be7-8	'have filled up'
boi6-4	'disappear down into (Incomplete)'	--		davy7-4	'partially built'

The tone clusters in the first row above all end with the process aspectual viewpoint (3) TOTALITY OF ACTION DURATIVE. The tone clusters in the second row all end with the RESULTATIVE DURATIVE aspectual viewpoint (8). The tone clusters in the third row all end with the TELIC INCOMPLETIVE tone morpheme (4). The following set of sentences illustrates the contrastive temporal viewpoints of tone clusters ending in tone (3) vs tone (8) vs tone (4).

71a. Sv^{9}di^{9} bi^{7}si^{9} u^{8} av^{5} ta^{9} bi^{9} be^{4} du^{7}
possum one tree stump on up is-TEL.INC SCl Mkr

'A possum was sitting up on a tree stump when,

b. u^{8} tai^{5}ta^{9} bay^{2} boi$^{6-3}$.
tree inside Dir down disappear into-RES.PUN

he disappeared down inside the tree stump.

c. Bay^{2} boi$^{6-8}$ da^{8}dv^{9}
Dir down disappear-RES.PUN-CHS MVCl Con

When he disappeared,

d. y^{8} bo^{4} a^{7}se^{9} Ye^{7}bi^{9} bv^{3} bi^{3}.
we two Seq Mkr Jimmy to call-TOT.DUR

We called to Jimmy,

e. "Ye^{7}bi^{9} v^{6} ba^{7} dy^{8}.
Jimmy Voc come-TOT.INC Imp-RS SA.CR

Jimmy! Come here!

f. Sv^{9}di^{9} bi^{7}si^{9} y^{8} av^{5} ta^{9} bay^{2}
possum one we stump on Dir down

boi$^{6-4}$ y^{8}.
disappear RES.PUN-TEL.CHS Info IMM REL

A possum is just disappearing/has just now disappeared down inside a tree stump.

g. Ta^{8} da^{8} ba^{7} dy^{3}.
knife carry-RES.DUR come-TOT.INC Imp

Bring a bush knife!'

The 6-3 tone cluster in 72b) indicates that the CHANGE OF STATE occurred and the resultant effect on the participant, the possum, overlaps subsequent events in the discourse. That is, while subsequent events occurred, the possum was down inside the tree stump (Tone 3: TOTALITY OF ACTION DURATIVE). The 6-8 tone cluster in 71c) indicates that the situation ba$^{6-3}$ is RESULTANT DURATIVE (Tone 8) relative to other events in the narrative. That is, it causes or directly results in the next action, the two men call to Jimmy. The 6-4 tone cluster in 71f) visualizes the action as INCOMPLETE when the action of the two men calling out to Jimmy takes place. That is, as the two men see the possum disappearing down into the stump they immediately and simultaneously (Tone 4: TELIC INCOMPLETIVE) call out to Jimmy.

4.0 THE STATIC ASPECTUAL VIEWPOINT IN IAU

We have said in Section 1 that a static aspectual viewpoint views the situation as homogeneous and unchanging over a period of time. The stative verb particle de in Iau has a static aspectual viewpoint. De marks the situation in the verb stem as a continuous unchanging situation over an extended period of time. In the following example, tai^{5} 'has fallen' contrasts with tai^{5} de^{8} 'lying on the ground'.

72. U^{8} a^{7}se^{9} tai^{5}.
tree Seq Mkr fall-TEL.PUN

'The tree has fallen.'

73. U^{8} a^{7}se^{9} tai^{5} de^{8}.
tree Seq Mkr fall-TEL.PUN Sta-CRLZ

'The tree is lying on the ground.'

Tai^{5} presents the stem tai as a telic situation in which an entity has undergone a change of state. In contrast, tai^{5} de^{8} marked by a stative particle, is a continuous unchanging situation attributed to the tree.

The following sentences contrast bo^{5} 'the act of sitting down' with bau^{4} de^{8} which has a static viewpoint. Bau^{4} de^{8} attributes the continuous unchanging situation of sitting down to an entity, ie the entity is seated.

74. Au^{7} a^{7}se^{9} ui^{7} bo^{5}.
3s Seq Mkr house-the sit-TEL.PUN

'He sat down in the house.'

75. Au^{7} da^{6} ui^{7} bau^{4} de^{8}.
3s now house-the sit down in-TEL.INC Stat CRLZ

'He is now sitting down/seated in the house.'

The static aspect of the particle de can also be illustrated by the verbs of perception in Iau. The verbs bi^{9} bay^{9} 'to hear' and doe^{9} 'to see' both have stative counterparts that can mean 'to know' or 'to understand'. Bi^{9} bay^{4} de means 'to have seen' or 'to know'. Doe^{4} de^{8} means 'to have seen' or 'to know'.

Certain verbs in Iau only occur as statives. Some examples are: bv^{8} bai^{7} de^{8} 'to wait for', bau^{4} de^{8} 'to be seated, to be sitting down', and tai^{5} de^{8} 'to be lying down'.

The aspectual viewpoint on the verb stem preceeding the stative particle characterizes the dynamic situation which brought about the state. The following examples illustrate some of the different stative verbs formed with the same verb stem tai.

76.	Sai$^{6-8}$	o^{8}sy^{9}	bay^{5}	tai^{7}	de^{9}.
	clothes	my	thorn-by	pull-TOT.INC	Stat-FACT

'My clothes got pulled/torn by a thorn.'

In the example above, tai^{7} is partitive, ie some of the threads were pulled out by the thorn. The de^{9} stative particle indicates that the clothes are in a state of having been pulled by the thorn.

77.	Sai$^{6-8}$	a^{7}se^{9}	tai^{9}	de^{9}.
	clothes	Seq Mkr	pull-TOT.PUN	Stat-FACT.

'The clothes have been/are sewn.'

In the example above the verb tai^{9} meaning 'to pull' is also the verb used for 'to sew'. The stative particle de^{9} indicates that the clothes are in a state of having been sewn.

78.	Fv^{7}	e^{8}ta^{8}fau^{7}	be^{8}sy^{9}	Bu^{3}di^{3}a^{3}	a^{5}	tai^{3}
	canoe	again	Oblig	Mulia	land	come-TOT.DUR
	de^{8}	y^{4}.				
	Stat-FACT	Info-NASS				

'The plane had to land (and is still there) again at Mulia.'

The stative particle de indicates that the plane in 78) above is continuing on in a state of having landed at Mulia. The verb stem tai^{3} is TOTALITY OF ACTION DURATIVE indicating that the process of doing the action is in view.

Tones on the stative particle de indicate the reality status of the proposition. See Bateman (ms) "The Reality Status Meanings of the Iau Tone Morphemes", for a full discussion of meanings.

Stative particles also have a specialized function in Iau discourse marking subordinate clauses that are sentence purpose or reason margins.

79.	Di^{9}	di^{6}	de^{9}	au^{8}du^{8}	ba^{3}?
	2s	startle-RES.PUN	Sta-FACT	angry	Uncer-RS.SA

'Are you angry because I startled you?'

80. Ty^{7} bi^{7}si^{9} fvy^{6} de^{7} tv^{9}
person one bathe-RES.PUN Stat-HYPO go away-TOT.PUN

y^{9}.
Info-SC.ADT

'One person went to bathe.'

In the examples above, the underlined stative particle marks the dependent purpose clause or reason clause.

In summary, dynamic aspect in Iau is indicated by 8 tone morphemes which occur on the verb. The following are the defining parameters of the Iau dynamic aspect system: TOTALITY OF ACTION, RESULTATIVE, TELIC, PUNCTUAL, DURATIVE, and INCOMPLETIVE. Stative aspect in Iau is indicated by the stative particle de which occurs immediately following the verb.

NOTES

1. A brief overview of Iau is presented in Appendix 1. Appendix 2 gives a complete listing of the Iau post verbal particles, the tone morphemes and the meaning of each along with a listing of the abbreviations used in the examples. The analysis of Iau presented here is based on a data base of 150 pages of conversational text, 200 pages of narrative discourse, and a few descriptive procedural discourses. The narrative discourse includes narrative of several different lengths types and styles--some of them traditions, folktales and legends, and others narratives of personal experiences and travel sagas. The data is taken from at least 6 different speakers ranging in age from 18 to approximately 55. Some of the narrative texts are native-authored written literature. The conversations and the rest of the narrative texts were given orally on tape then transcribed by native speakers (including tone data). Four of the Iau speakers (the author's language helpers) can write and transcribe the tones fluently as well as edit tone errors in written data. Another 30-40 young men and women have had initial literacy training and have successfully learned to read and write the tone. However, they have not had sufficient practice and exposure to be fluent as yet. Without the tone data of the transcribed texts provided by Das, Sakedia, Beabi and Tibotius, the author's four language helpers, this analysis would not have been possible.

Research for this paper has been done under the auspices of a cooperative project of the Universitas Cenderawasih in Irian Jaya, Indonesia and the Summer Institute of Linguistics. The author has had 30 months of village time in Faui as part of a 4-year period of intensive work on Iau language data. Since the author's goal in Iau study is to be able to produce well-formed coherent texts of translated material into Iau, the analysis has been directed towards acquiring native speaker ability to produce well-formed text or at least to be able to determine whether or not a text is well-formed and makes use of normal discourse coherence features of Iau.

I would like to thank Dr Ivan Lowe and Dr Bernard Comrie who read and commented on earlier drafts of this paper at workshops in Irian Jaya and in Papua New Guinea respectively. I would also like to thank my partner, Dr Helen Miehle, for her comments on successive drafts of this paper.

2. Medial verbs in Iau differ from independent verbs in stress pattern and are always marked by clitic conjunctions. Tones 9,5, and 3 do not occur on medial verbs.

APPENDIX 1: OVERVIEW OF IAU 1

Language Classification. Iau is a Papuan language classified by Voorhoeve (1975) as in the Trans-New Guinea Phylum and the Tor-Lakes Plains Stock. Iau is a member of the Turu language family as diagrammed below. (Bateman 1981, McAllister 1979.)

Turu Language Family

Dou	Turu		
	Turu	Iau	Poi
villages:	villages:	villages:	villages:
Korodesi	Turumo	Faui	Taiyai
Doufou	Eifo	Bakusi	Barere
Hobaresi	Yededi		
Tauda/Tora			
Iratoi			
Foitau/Faitau			

Iau is spoken in the Western Lakes Plains area of Irian Jaya, Indonesia by approximately 400 speakers. The two major villages and their associated hamlets are located along the Van Daalen River (a tributary feeding into the Rouffaer and from there into the Mamberamo River). Iau territory also extends up a small connecting river between the Van Daalen & Rouffaer. Iau is the central dialect and socially dominant over its two cognate dialects: Poi and Turu. Iau is also geographically central. There are kinship ties between these three groups.

Phonology. The following is a summary of pertinent Iau phonological data: Iau has 14 segmental phonemes: 6 consonants and 8 vowels and 8 level and contour phonemic tones as displaved below:

Consonants

	labial	alveolar	velar
Stops voiced	/b/ [b´] ~ [m]	/d/ [d´] ~ [l] ~ [n]	
Stops voiceless	--	/t/ [ɾ]	/k/ [k]
Fricatives	/f/ [ɸ] ~ [h] ~ [p]	/s/	

Vowels

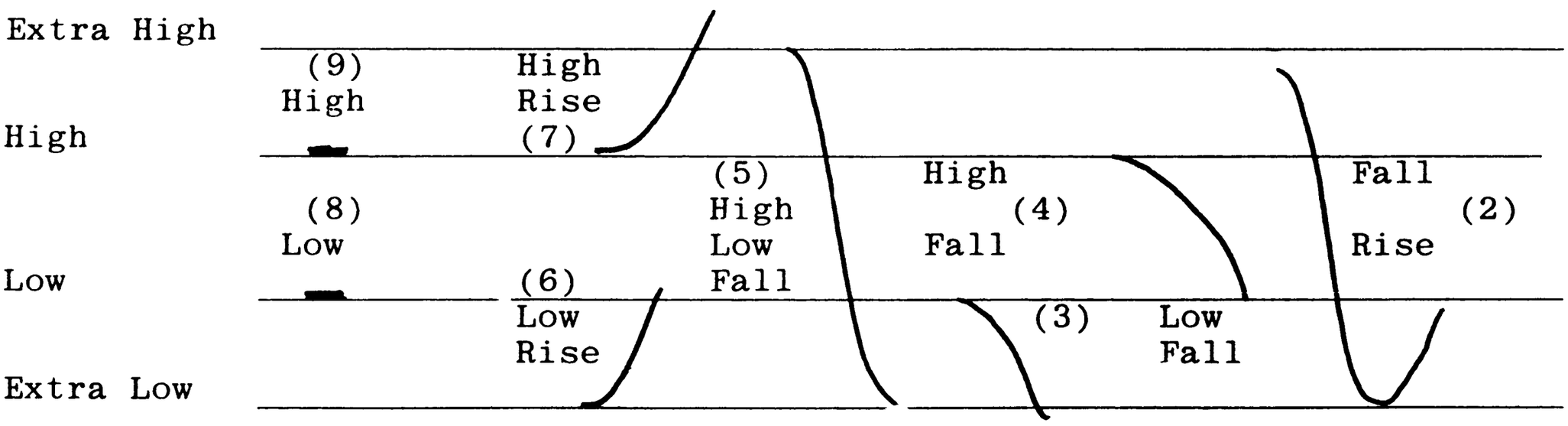
	Front	Central	Bank
High close	i	ɨ*	u
Mid close	e^ /ɻ˅		o^ /ʊ˅
Mid open	ɛ		ɔ
Low open		a	

* a flat alveo-palatal fricative vocoid with limited distribution

In the orthography, the vocoid e^ is written as the letter 'y' and

the vocoid ʊ^ is written as the letter 'v' following the Dani orthography.

Tones



Tone clusters. Clusters of two tones on one syllable also occur and are contrastive with single tone units.

Syllables. Iau has no consonant clusters. Iau syllable patterns allow sequences of VV and VVV. Iau has a limited number of closed syllables. These are limited to a few monosyllabic nouns only. The only allowable syllable final C is /f/ [p].

Stress. Stress is manifested by length or timing differences. Stress is not phonologically predictable. It marks the Head word of each word, each phrase, each clause and each sentence. There are, therefore, corresponding degrees of stress beginning with a lower degree on word-level and progressing to the highest degree at the sentence-level.

Intonation patterns in Iau are characterized by changes in speed of speech--from fast to slow and also by a wider versus a narrower pitch range depending on the speech context.

The Word Level. Iau is a basically monosyllabic language. Over half of the lexicon consists of a basic core of monosyllabic tone sets of V, CV, CVV, CVVV, and CVC (nouns only) syllable patterns (almost all permissible combinations are present) which can function as either nouns, verbs or particles, depending on their stress and placement in the sentence relative to other words in the sentence. The remainder of the lexicon consists of compounds of these core monosyllabic words--(most of them two syllables). A majority of the two syllable words can be easily demonstrated to be morphologically complex.

Verb Morphology. Iau is a Verb final language. Post verbal particles occur in the following order: Stative Markers, Negatives, Reality Status Markers, Evidential Markers, and Mood Markers. Tone morphemes on verb stems distinguish 8 different aspectual viewpoints. Tone morphemes on mood particles indicate the illocutionary force of the utterance. Tone morphemes on other postverbal particles indicate another type of reality status. Iau verb morphology is discussed in three additional papers: "Tone Morphemes and Illocutionary Force in Iau", "Tone Morphemes and Reality Status in Iau", and "Postverbal Segmental Particles in Iau" (Bateman, ms). See Appendix 2 for a listing of all post verbal particles and tone morphemes and their abbreviations as used in this paper. Iau verbs have no inflection for person or number. Verbs in certain types of clauses, designated medial verbs, do not take the full range of aspect tone morphemes.

Appendix 2: Postverbal Particles and Tone Morphemes

The postverbal particles in Iau are listed below in order of occurrence with the abbreviations used in this paper. (See "Postverbal Segmental Particles in Iau" (Bateman ms) for a full discussion of the meanings of each particle) Each word of an abbreviation for the segmental particles begins with a capital letter.

Stative Marker

de Stative (Sta)

Negative

ai /ae Negative (Neg)

Modality

se Intention, Commitment to (Inten)
sa Intention /Obligation Being Realized (IntRlz)
fe Future Certain Contradesiderative (Ctrds)
fo Desiderative (Ds)
fefu Desiderative Inabilitative (Inab)

Reality Status

di Realis: Punctiliar Bounded Realization (PBd: A single unit occurrence realized at some specific temporally bounded time
be Realis: Durative Bounded Realized (DBd): Multiple or extended occurrence over some specific temporally bounded period of time
a Realis: Durative Unbounded Realized (DUBd): Multiple
or
extended occurrence over some undefined temporally unbounded period of time
ay Realis: Durative Initially Bounded Realized (DIBd): Multiple or extended occurrence over some terminally unbounded time period beginning from some temporally specific starting point.
dy Irrealis: Pending Realization (Pnd)
dybe Irrealis: Pending Realization Frustrated (FPnd)

Evidential

da Reported speech /hearsay (RpSp)
bede Inferential (Inf)

da^{7}by^{9} Obvious Truth (Obv)

di^{7}dv^{3} Emphatic Obvious truth (EObv)
fi Repeated Information (Irritation) (RInf)

Mood

y Give information (Info)
iy Information Unknown to the Hearer (InfoU)
by Give Information: Subjunctive (Subj)
/Directive: Advice /Recommendation (Recom)
be /ba Information Probable /Uncertain (Uncer)
to /ta Information Contrary to Hearer Beliefs, Customs Expectations, etc Refute Hearer (RHr)
e Give information: Explain, Justify (Exp)
asy Direct Hearer's Attention to Something (Attn)
bv Request Permission /Instruction /Action (Rq)
dy Imperative (Imp)
dyda Emphatic (Imperative (EImp)
day Prohibition (Proh)
da Negative Subjunctive 'never should have been' (NSubj)

Tone Morphemes

On Verb Stems: Aspect

9 TOTALITY OF ACTION PUNCTUAL (TOT PUN)
3 TOTALITY OF ACTION DURATIVE (TOT DUR)
7 TOTALITY OF ACTION INCOMPLETIVE (TOT INC)
6 RESULTATIVE PUNCTUAL (RES PUN)
8 RESULTATIVE DURATIVE (RES DUR)
5 TELIC PUNCTUAL (TEL PUN)
2 TELIC DURATIVE (TEL DUR)

4 TELIC INCOMPLETIVE (TEL INC)
Tone clusters: various kinds of CHANGE OF STATE (CHS)

On Mood Particles: Illocutionary Force
On Directives /Yes-No Questions

9 Speaker does not need /demand /expect Hearer compliance (NRS)
Speaker Authoritative /Information Asserted (SA)
3 Speaker needs /demands /expects a response from Hearer (RS)
Speaker Authoritative /Information Asserted (SA)
8 Speaker needs /demands /expects a response from Hearer (RS)
Speaker Authoritative /Information Asserted (SA)
Situation is being brought about in the immediate context or is of current /immediate relevance (CR)
5 Speaker does not need /demand /expect Hearer compliance (NRS)
Speaker is authoritative /assertive (SA)
Both Speaker and Hearer participate in /bring about the situation. (SHR)
4 Speaker needs /demands /expects response from the Hearer (RS)
Speaker is not authoritative /not assertive (SNA)

On Statements

9 Speaker controlling discourse topic and or information about discourse topic (SC)
Speaker assertive (A)
Information is discourse topic or is about discourse topic (DT)
3 Speaker is noncontrolling (SNC)
Speaker is assertive (A)
Information is discourse topic or is about discourse topic (DT)
7 Speaker is noncontrolling (SNC)
Speaker is nonassertive (NA)
Information is discourse topic or is about discourse topic (DT)
8 Speaker is noncontrolling (SNC)
Speaker is assertive (A)
Information is of immediate /current relevance (CR)
4 Speaker is noncontrolling (SNC)
Speaker is nonassertive (NA)
Information is not directly about discourse topic (NDT)

Reality Status Tone Morphemes
(On all other particles)

9 Is, was, used to be reality; did happen (FACT)
3 Have been, have done, do; accomplished reality or viewed as reality (RLZ)
7 Would have, could have, might have; or about to be; Hypothetical (HYP)
6 there is /is; a current fact (CFACT)
8 Currently being realized; accomplished reality with immediate relevance (CRLZ)
5 Did happen, was true but no longer in effect /true; nonpresent fact (NPFACT)
2 Highly expected /usually realized but not realized at present time (NPRLZ)
4 Is or was probable, planned, being brought about but not yet realized (URLZ)

BIBLIOGRAPHY

Anderson, Lloyd
1983 "The Perfect as a Universal and as a Language Particular Category" in Paul J. Hopper, ed. Tense Aspect: between Semantics and Pragmatics, 227-264.

Bateman, Janet.
1982 The Topic Comment Construction in Iau. Indonesian Working Papers,

ms. "Towards an Analysis of Iau Tone."

ms. "Tone Morphemes and Illocutionary Force in Iau."

ms. "Tone Morphemes and Reality Status in Iau."

ms. "Postverbal Particles in Iau."

ms. "Pragmatic Discourse Functions of Iau Tone Morphemes."

Comrie, Bernard
1976 Aspect. Cambridge: University Press.

DeLancey, Scott
1983 "Aspect, Transitivity and Viewpoint" in Paul J. Hopper, ed. Tense Aspect: between Semantics and Pragmatics, 167-184

Foley, William A. and Robert D. Van Valin
1984 Functional Syntax and Universal Grammar. Cambridge: Cambridge University Press.

Friedrich, Paul
1974 "On Aspect Theory and Homeric Aspect". IJAL 40 4, Pt.2.

Givón, Talmy
1984 Syntax: a Functional-Typological Introduction. Vol. 1. Amsterdam: John Benjamins.

Hopper, Paul
1979 "Aspect and Foregrounding in Discourse" in T. Givón, ed Syntax and Semantics, Vol. 12: Discourse and Syntax. NYC: Academic Press.

Hopper, Paul ed.
1982 Tense Aspect: between Semantics and Pragmatics. Amsterdam: Benjamins. (TSL Vol. 1)

Jones, Larry B. and Linda Kay
1979 "Multiple Levels of Information in Discourse". In Discourse Studies in Meso-American Languages, Vol. 1: Discussion, ed. by Linda Kay Jones. Dallas: Summer Institute of Linguistics and University of Texas at Arlington.

Jones, Linda K.
1979 Discourse Studies in Meso-American Languages, Vol. 1: Discussion. Dallas: Summer Institute of Linguistics and University of Texas at Arlington.

Li, Charles N., Sandra A. Thompson, and R. McMillan Thompson
1982 "The Discourse Motivation for the Perfect Aspect: the Mandarin Particle LE" in Paul J. Hopper, ed. Tense Aspect: between Semantics and Pragmatics, 19-44.

Longacre, Robert E.
1976 An Anatomy of Speech Notions. Lisse, Belgium: Peter de Ridder Press. 198 .

Lyons, John
1968 Introduction to Theoretical Linguistics. Cambridge: University Press.

1977 Semantics, Vol. II. Cambridge: University Press.

Rafferty, Ellen
1982 "Aspect in Conversational Indonesian" in Paul J. Hopper, ed. Tense Aspect: between Semantics and Pragmatics, 65-87.

Smith, Carlotta
1983 "A Theory of Aspectual Choice." Lg 59:479-501.

Timberlake, Alan
1982 "Invariance and the Syntax of Russian Aspect" in Paul J. Hopper, ed. Tense Aspect: between Semantics and Pragmatics, 305-334.

van Dijk, Teun A.
1977 Text and Context: Exploration in the Semantics and Pragmatics of Discourse. London: Longmans.

Wallace, Stephen
1983 "Figure and Ground: the Interrelationship of Linguistic Categories" in Paul J. Hopper, ed. Tense Aspect: between Semantics and Pragmatics, 201-226.

THE TONE MORPHEMES AND STATUS IN IAU

Status is concerned with the actuality of the event. Iau has two separate mechanisms for marking status. A set of segmental particles indicates the temporal definitions of the event. A set of 8 tone morphemes indicates the degree of factivity and specifies the temporal condition under which the event is a reality.

1.0 INTRODUCTION:

Foley and Van Valin (1984:213) borrowed the term status from Whorf (1956). They define status as:

> "the variable of the actuality of the event, whether it has been realized or not ... Status is often viewed as a binary distinction realis-irrealis and some languages use just such a binary distinction. However, within the irrealis dimension, many languages recognize further distinctions, whether the action is necessary, likely, or merely possible." (Foley and Van Valin, 1984:213)

There are two different sets of status markers in Iau. One is a set of segmental postverbal particles that mark the realis-irrealis distinction in terms of the temporal occurrence characteristics and the temporal definiteness of the proposition.[2] Some of these particles are best translated as habituals, progressives, or generic truth statements. These are often marked in other languages with aspect markers. In Iau, however, status is marked separately from the aspect system.

The other set of status markers in Iau consists of the eight Iau tone morphemes. The eight Iau status tone morphemes define several degrees of factivity and three different temporal conditions by which the proposition can be marked as fact or as reality. This set of tone morphemes occurs on the postverbal stative, negative, modality, status and evidential particles. The same set of tone morphemes have aspect meanings when they occur on verbs and pragmatic functions when they occur on sentence final illocutionary force particles. See Bateman, this volume. Figure 1 below shows the Iau verb and the segmental postverbal particles with the 3 different sets of tone morphemes that occur superimposed on them.

TONE MORPHEMES:	ASPECT TONES	STATUS TONES				PRAGMATIC FUNCTION TONES
Segmental Particles:	Verb	Stat.	Neg.	Modal.	Eviden.	Illoc. Force

Figure 1 Tone Morphemes Occuring on Iau Verbs and Various Postverbal Particles

The meanings of the aspect tone morphemes and the pragmatic functions of the tone morphemes on illocutionary force particles are discussed in Bateman, this volume. Section 2.0 of this paper will briefly discuss the

meanings of the status segmental particles. Section 3.0 will discuss the meanings of the status tone morphemes. A discussion of the meaning of the interaction of the status tone morphemes and segmental status particles is beyond the scope of this paper. This will be discussed as part of a later paper on Iau Postverbal Particles.

2.0 SEGMENTAL STATUS PARTICLES

The segmental status particles in Iau mark the actuality of the event in terms of the temporal occurrence characteristics and the temporal definiteness of the proposition. The status particles are divided into two sets: realis status particles and irrealis status particles. The realis status particles distinguish Punctual Status ie single occurrences of the event vs Durative Status, ie multiple or extended occurrences of the event. The realis status particles also distinguish Temporally Bounded Status, ie occurrences at a specific defined point or period of time vs Temporally Unbounded Status, ie indefinite occurrences of the situation over an undefined period of time.

Figure 2 below shows the temporal occurrence characteristics and temporal definiteness[3] of the 4 Iau realis status particles.

	TEMPORAL OCCURRENCE CHARACTERISTICS	
	Punctual: Single Occurrence	Durative: Multiple Occurrence
TEMPORAL DEFINITENESS		
Bounded: Definite	di	be
Partially Bounded: Initially Definite	--	ay
Unbounded: Indefinite	--	a

Figure 2 Temporal Occurrence Characteristics and Temporal Definiteness of the Iau Realis Status Particles

The status particles shown in Figure 2 above can be graded on a sliding scale[4] as to degree of realis. The di particle views the situation as a single unit occurrence occurring at some definite time. Situations marked by di have the greatest degree of realis because they refer to a single temporally definite occurrence of the situation.

The be particle views the situation as multiple or extended occurrences of the situation over a temporally definite period of time. Situations marked by the be particle are not as highly realis as situations marked by the di particle because they are characterized by multiple or extended occurrences of the situation rather than a single occurrence. Past habituals are examples of some of the kinds of situations marked by the be particle.

The ay particle views the situation as multiple or extended occurrences of the situation which begin at some definite point of time and

continue on for an indefinite time period. Events marked by the ay particles are less realis than those marked by the di and be particles because they continue on for an indefinite period of time.

The a particle has the lowest degree of realis of all the realis status particles. The a particle views the situation as multiple or extended occurrences of the situation which occur over some indefinite period of time. The situations marked by the a particle are less realis than those marked by the be and ay particles because the times of occurrence are indefinite whereas the times of occurrence for the be and ay particles are contextually definite.

The irrealis status particles mark situations which have not been realized but are pending realization as of speech time or were pending realization at some contextually defined time. The following is a list of the realis and irrealis status segmental particles in Iau and their meanings.

REALIS STATUS PARTICLES

Temporal Occurrence Characteristics and Temporal Definiteness of the Realis Status Particles

di — Punctual Bounded (PBd): Views the situation as a single unit occurrence at some temporally definite point in time.

be — Durative Bounded (DBd): Views the situation as having multiple or extended occurrence over some temporally definite period of time.

ay — Durative Initially Bounded (DIBd): Views the situation as having multiple or extended occurrence beginning at some temporally definite point in time and continuing on over an indefinite period of time.

a — Durative Unbounded (DUBd): Views the situation as having multiple or extended occurrence over some temporally indefinite period of time.

IRREALIS STATUS PARTICLES

dy — Unrealized but intended, planned or to be implemented

dy4be3 /dy4be8 — Intended, planned or to be implemented at one time but never realized.

The following Section 2.1 will discuss the difference between punctual and durative status and punctual and durative aspect in Iau. Section 2.2 will illustrate and discuss in detail the four realis status particles in Iau. Section 2.3 will illustrate and discuss the irrealis status particles.

2.1 Contrast between Punctual and Durative Status and Punctual and Durative Aspect.

In Iau the punctual and durative and the bounded and unbounded status particles contrast in meaning and usage with the punctual and durative aspect tone morphemes which occur on verbs (See Bateman, this volume). The aspect tone morphemes indicate the temporal span of situations relative to one another. Situations marked with punctual aspect are non-overlapping relative to other situations in the discourse context. Situations marked by durative aspect either overlap with other situations in the discourse, or take place over a span of time before they are brought to completion or terminated. The following sentences illustrate the use of the punctual vs the durative tone morphemes to indicate situations which temporally span other situations vs situations that do not.

Punctual Aspect:

1. Au^{7} a^{7}se^{9} da^{6} ay$^{7-8}$be^{8} i^{9}
   3s SeqMkr now recent go-TOT.PUN

   'He just now went.'

   Dy^{8} Das$^{7-8}$ ba^{7}bv^{9} a^{7}se^{9} u^{6} tv^{9}
   and Das this SeqMkr before go away-TOT.PUN

   'But Das left before he did.'

Durative Aspect:

2. Du^{3}si^{9} bv^{6} bi^{7}si^{9} bae^{8} du^{8}
   bird 1s one shot-RES.DUR SC1Con

   a^{9} fi^{4}au^{7} v^{4} bv^{8} dui^{8} be^{8}
   1s Intens heart Cau shake-RES.DUR SC1Con

   fvy^{2} by^{6} se^{9} du^{8} du^{7}e^{8}
   canoe-in dance Manner do-RES.DUR SC1Con

   bai^{3} i^{3} to^{9}.
   sun go down-TOT.DUR RHr-SC.A.DT

   'When I killed a bird, then I was so happy that I danced in the canoe until the sun went down (process).'

In example 1 above, the punctual tone 9 morpheme indicates that the situation i 'go' is not viewed as temporally co-occurring with the other situations in the context. The events i and tv 'go away' are ordered sequentially with respect to one another. The sentence in example 2 was given in response to the question, 'Tell me something that once made you very happy when you were small.' In example 2, the durative tone 3 morpheme on the final independent verb i views the action 'to go' as a process occurring over a time span that overlaps with the preceding situations.

The following short excerpt from a narrative text is an example of the use of punctual vs durative aspect in narrative text.

3. Y^{8} a^{7}se^{9} i^{9} I^{7} da^{8}dv^{9}
   1p SeqMkr go-TOT.PUN go-TOT.INC MVC1Mkr

   a^{7}se^{9} Sa^{3}ta^{9} be^{7} baui^{3}.
   SeqMkr Saita NMkr reach-TOT.DUR

   A^{7}se^{9} baui^{8} da^{8}dv^{9} a^{7}se^{9} u^{8}
   SeqMkr reach-RES.DUR MVC1Con SeqMkr tree

   bui^{5}. A^{7}se^{9} bui^{4} da^{8}dv^{9}
   fell-TEL.PUN SeqMkr fell-TEL.INC MVC1Con

   y^{8} a^{7}se^{9} e^{8}ta^{8}fau^{7} ba^{9}.
   2s SeqMkr again come-TOT.PUN

   'We went. We went and we reached Saita.
   When we reached Saita, we cut down trees.
   When we had cut down the trees, we came back.'

The underlined punctual aspect main verbs list the main sequentially ordered events of the text. These events are non-overlapping relative to one another. One is completed before the next event begins. The durative tone 3 verb in the second sentence marks a change in locational setting and overlaps with the subsequent event of cutting down trees.

In contrast to the temporal sequencing function of the aspect tone morphemes, punctual vs durative status is concerned with distinguishing single unique situations from multiple nonunique situations. Bounded vs unbounded status is concerned with distinguishing temporally definite situations from temporally indefinite situations. The following sentences illustrate punctual vs durative status.

4A. Fv^{7} di^{9} a^{7}se^{9} davy^{7} di^{3} ba^{3}?
canoe 2s SeqMkr make-TOT.PUN PBd-RLZ Uncer

'Have you already made the canoe?'

B. Di^{9}to^{3}, a^{7}se^{9} davy^{7} di^{3}.
Yes SeqMkr make-TOT.ING PBd-MLZ

'Yes, I have already made it.'

5A. Di^{9} te^{8} tv^{9} di^{9}di^{3}?
2s where go away-TOT.PUN PBd-Past Fact

'What did you go away to do?'

B. A^{9} fv^{7} a^{5} doe^{8} be^{8} y^{3}.
Is airstrip see-RES.DUR DBd-CRLZ Info-SNC.A.DT

'I was looking at the airstrip.'

6A. FI^{4}su^{9} o^{7}su^{9} ty^{7} te^{8}be^{8}de^{7} be^{4} davy^{9}
pandanus leaf people which NMkr make-TOT.PUN

a^{3}?
DUBd-RLZ

'Who (ie which people) make pandanus leaf sleeping mats?'

B. Ty^{7} Da^{8}di^{7} be^{4} davy^{9} a^{3}.
people Dani NMkr make-TOT.PUN DUBd-RLZ

'The Danis make them.'

Examples 4-6 above are not concerned with relating situations to other situations in the discourse. They are concerned with predicating the realis properties of the situation. Example 4 predicates that a canoe (previously given) in the discourse context was actually made. The di particle in 4) above predicates a unique single occurrence of the situation. Example 4 illustrates punctual status. Examples 5 and 6 illustrate durative status. Both 5 and 6 predicate multiple nonunique occurrences of the situation. Example 5 does not predicate that the speaker saw anything in particular about the airstrip, just that he was looking at it in general. Example 6 does not predicate that the Danis made any particular sleeping mat, just that they have and frequently do make sleeping mats.

Bounded status views the situation as occurring at some definite time while unbounded status views the situation as occurring at some indefinite time. Examples 5 and 6 above illustrate this contrast. The be particle in

example 5 has bounded status. The situation 'I was looking at the air-strip' occurred at a temporally definite time, ie while the speaker was away from the village. The temporally definite time is defined by the first speaker's question. The a particle in example 6 is unbounded. The making of sleeping mats occurs over an indefinite unspecified period of time.

The following two excerpts from a narrative text illustrate the contrasts in the use of the status particles in narrative text as compared with the use of the aspect tone morphemes in narrative text as illustrated back in example 3.

7. Dy^{8} tv^{9} a^{9} be^{7} bui^{5} dy^{4}da^{8}dv^{9}
then sago other NMkr fell-TEL.PUN IC1Con

a^{7}se^{9} tv^{9} be^{7} bai^{6} a^{9}.
SeqMkr sago NMkr pound-RES.PUN DUBd-FACT

Dy^{4} tav^{3} ay^{9} a^{4}.
then trap set-TOT.PUN DUBd-URLZ

Dy^{4} du^{9} a^{7}se^{9} tav^{3} tai^{2} a^{9}.
then wild pig SeqMkr trap catch-TEL.DUR DUBd-FACT

a^{7}se^{9} fi^{4}au^{7} dy^{4}dau^{7} se^{9} du^{3}.
SeqMkr Intens like that Manner do-TOT.DUR

'And, he cut down other sago trees and pounded the sago. He set pig traps. And, wild pigs got caught in them. He kept on doing like that.'

8. A^{7}se^{9} i^{8}ba^{8} da^{8}dv^{9} au^{7} a^{7}se^{9} kaf^{7} o^{9}
SeqMkr afraid-RES.DUR MVC1Mkr 3s SeqMkr bow take-TOT.PUN

a^{4} si^{7} av^{7}bv^{9} be^{7} o^{9} be^{8}fu^{9}
DUBd-URLZ bag 3sPoss NMkr take-TOT.PUN lighter

o^{9} a^{4}. faf^{3} o^{9} a^{4}
take-TOT.PUN DUBd-URLZ exe take-TOT.PUN DUBd-URLZ

dy^{4}da^{8}dv^{9} a^{7}se^{9} ba^{8}day^{8}.
IVC1Con SeqMkr flee-RES.DUR

'He was afraid so he got his bow, and he got his string bag, and he got his fire starter, and he got his axe, and he fled.'

The text given previously in example 3 illustrated the use of punctual and durative tone morphemes to indicate nonoverlapping vs overlapping situations respectively. The durative unbounded status particle a as illustrated in examples 7 and 8 above, is used in narrative text to mark situations which are unordered relative to one another. The situations marked in both 7) and 8) above are lists of situations that occurred over an indefinite time period and an indefinite number of times within the time period.

2.2 The Realis Status Particles

On a sliding scale, the di status particle has the greatest degree of realis of the 4 realis status particles. The di particle is defined as

marking punctual bounded status. That is, the di particle predicates a unique specific occurrence of the situation at some definite time. The following examples illustrate the use of the di particle.

9. A^{9} a^{7}se^{9} taui^{7} di^{3}.
   1s SeqMkr make-TOT.INC PBd.RLZ

   'I have already made it.'

10. Fi^{4}su^{9} o^{7}su^{9} y^{8} taui^{7} di^{9} to^{4}.
    fisu leaf 1p make TOT INC PBd FACT RHr SNC NANDT

    'We did make the sleeping mat (lit. fisu leaf)!'

11. Ty^{7} bo^{4} a^{7}se^{9} fv^{7}ui^{8} y^{8} bv^{8} bai^{7} de^{8}
    person two SeqMkr hangar 1p for wait-TOT.INC Sta-CRLZ

    di^{9} y^{3}.
    PBd-FACT Info-SNC.A.DT

    'Those two were waiting for us at the hangar (when we arrived).'

Example 9 predicates a unique specific occurrence of the situation at some definite time which is not explicitly stated. Example 10 also predicates a unique specific occurrence of the situation. Examples 9 and 10 represent common uses of the di particle in conversational discourse.

Example 11 above illustrates another use of the di particle. The bounded status marked by the di particle is often used to pinpoint the temporal location of one event in terms of another. Sentence 11 answers the question, 'Where were those two? (at the time you arrived at Danau Bira)'. The punctual bounded particle di asserts that at the time under discussion, ie when they arrived at Danau Bira, their friends were at the hangar waiting for them. The verb 'to wait' has a stative aspect, ie it indicates a situation that continues on unchanging over a period of time. The status particle di is used in 11) to pinpoint the location of that state of waiting to a definite time.

The meaning of the a particle is exactly opposite to that of the di particle. The a particle is defined as marking durative unbounded status. That is, it marks the proposition as a multiple or extended occurrence over some temporally unbounded period of time. The following sentences illustrate the use of the a particle.

12. Da^{9} oi$^{7-8}$ ba^{7}bv^{9} du^{9} su^{8} fi^{8}
    2P hand this w pig smell come out-RES.DUR

    a^{9} be^{4} y^{3}
    DBd.CRLZ is-TEL.INC Info-SNC.A.DT

    'Your hands have the smell of wild pork coming out of them.'

13. A^{9} y^{7} bv^{8} i^{9} a^{9} y^{3}
    1P water for go-TOT.PUN DUBd-FACT Info-SNC.A.DT

    'I am going to get water.'

14. Fi^{9} bv^{8} taui^{9} a^{4}.
    fish for make-TOT.PUN DUBd-URLZ

'I am making them to catch fish (with them).'

15. Du^{9} bv^{8} i^{7} da^{8}dv^{9} a^{7}se^{9} kaf^{7} da^{8}
w pig for go-TOT.INC MVC1Mkr SeqMkr bow carry-RES.DUR

i^{9} a^{9}.
go-TOT.PUN DUBd.FACT

'When we go wild pig hunting, then we take along a bow.'

The situations in 12-15 above are all marked as unbounded, ie they all occur over an indefinite period of time. Examples 12, 13, and 14 are examples of present progressive situations. The particle a can frequently be translated as a present progressive. Example 15 is another example from a procedural text of a situation that occurs over an indefinite unspecified period of time. Whenever an Iau goes hunting, he takes his bow.

The a particle in 12-15 above also marks these situations as either multiple or extended occurrences of the situation. Example 12 is a continuative. The smell of pork continues to come from his hands. Example 13 is a present progressive situation. The situation is being brought about over a period of time. In examples 14 and 15, there are an indefinite number of occurrences of the situation.

The ay particle is defined as marking durative initially bounded status. The ay particle marks the proposition as a multiple occurrence situation beginning at some temporally bounded point in time and continuing on over an indefinite period of time. The following sentences illustrate the use of the ay particle.

16. So^{6} av^{7}bv^{9} bv^{6} o^{7} da^{8}dv^{9} si^{6} a^{4} av^{4}
child his 1S take-TOT.INC MVCLMkr wife father Poss

bv^{6} be^{9} ba^{9} ay^{3}.
1S Fa-in-law word DIBd-RLZ

'When I take his child as my wife, then from that time on I call him 'Father-in-law'.'

17. Ba$^{6-3}$ au^{7} da^{6} ba^{9} be^{4} du^{7}be^{7} a^{7}se^{9} ta^{8}
No 3S now here is-TEL.INC MVCLMkr SeqMkr knife

vy^{8} be^{7} da^{6} a^{5} taui^{7} se^{5} dy^{4}da^{8}dv^{9}
take-RES.DUR SC1Mkr now land work-TOT.INC Int-NPFACT IC1Mkr

i^{9} ay^{4}.
go-TOT.PUN DIBd-URLZ

'Well, he was just now here, but taking his knife, he decided to work in his garden so he (just now) went.'

18. Y^{9}! du^{9} ka^{6}di^{8} be^{7} ai^{7}be^{7} y^{9} ay^{9}.
Excl w pig many NMkr there cry-TOT.PUN DIBd-FACT

Ty^{7} by^{7}by^{9} du^{7}be^{7} be^{8} ba^{9} de^{9}
person true that NMkr-Ag come-TOT.PUN Sta-FACT

dy^{4} ay^{3}.
do that-TEL.INC DIBd-RLZ

'Oh! Many wild pigs have begun to grunt.
They have begun to do that because someone has come.'

Sentence 16) above is taken from a conversation about Iau kinship terms and relationships. From a temporally definite point in time, ie when the speaker takes a wife, he begins to call her father 'Father-in-law' and continues on calling him that from that time on. In Sentence 17) above the proposition 'he went' extends over an indefinite time period beginning with the point in time when he decided to work in his garden. At the time of speech the actor is either on his way to the garden or is at the garden. In Sentence 18), the noise of the pigs has just begun initiated by the arrival of the man. The noise continues from that point on over an indefinite period of time.

The be particle is defined as marking durative bounded status. The be particle marks multiple or extended occurrences of the proposition over a temporally definite time period. The meaning of the be particle is illustrated by the following sentences.

19. A^{9} Sai^{9}ta^{9} bi^{2} be^{4} di^{8} y^{9} du^{9} sa^{8}
1S Saita up is-TEL.INC PBd-CRLZ Nomin w pig eat-RES.DUR

be^{8} to^{4}.
DBd-CRLZ RHr-SNC.NA.NDT

'When I am at Saita,. then I eat (habitual) wild pork.'

20. Dy^{4} da^{9} te^{8}du^{7} sa^{3} be^{3}?
then 2p what eat TOT DUR DBd RLZ

'And what did you eat (while there)?'

21. Ta^{9} y^{8} u^{6}di^{9} be^{4} taui^{7} be^{9} iy^{4} bv^{6}
knife 1P before NMkr-Me make-TOT.INC DBd-FACT Nomin 1S

bi^{8}fa^{7} se^{9}
say-TOT.INC Int-FACT

'I am going to tell you about the knives that we used to make.'

In Sentence 19) above, the proposition 'I eat pork' reoccurs multiple times over the bounded time period defined in the first clause 'when I am up at Saita.' Sentence 20) above is from a conversation about a trip to Danau Bira. The act of eating reoccurred multiple times over the time period under discussion. The time period under discussion does not continue on indefinitely but is limited to the time spent at Danau Bira. In sentence 21) above, the proposition marked by be, 'the knives we used to make', reoccurred multiple times over a definite period of time, in time past.

In summary, propositions marked by di and be, both temporally bounded, refer to situations which occur at a unique particular point in time (di), or over a unique specific period in time (be). Propositions marked by ay begin at some unique specifiable point in time and continue on indefinitely from that time on. Propositions marked by a occur over some indefinite period of time with no temporal boundaries.

2.3 The Iau Irrealis Status Particles

The status markers dy and dybe mark the status of situations which are unrealized but which are planned, intended, or about to be implemented. The following are some examples.

22. Bv^{6} bv^{8} bai^{6} de^{7} dy^{4} be^{8}du^{7}
1S for go to-RES.PUN Sta-HYP Pnd-URLZ MVC1Mkr

ui$^{7-8}$ di^{3}.
fly-TOT.INC.CHS PBd-RLZ

'I was going in to get it when it flew away.'

23. Di^{9}y^{3} to^{8} bv^{6} di^{7} se^{4} dy^{5}
yes pig 1s kill TOT INC Int URLZ Pnd NPFACT

'Yes, I am intending to kill the pig.'

In sentence 22) above the situation marked by dy was being implemented but was as yet unrealized when it was terminated by the bird flying away. In sentence 23), the speaker marks the situation as an intention with the modality particle se^{4} and then indicates with the reality status particle dy^{5} that the situation is pending implementation and will indeed be brought about.

The following two examples illustrate the use of the dybe status particles with different tones.

24. Di^{9} ba^{8} de^{9} dy^{4}be^{3} be^{3}?
2s kill RES DUR Sta FACT Pnd RLZ Uncer RS SA

'Were you about to kill the pig?'

25A. Dı^{9}be^{3}? Au^{7} to^{8} di^{9} be^{3} be^{3}?
really 3S pig kill-TOT.PUN DBd-RLZ Uncer-RS.SA

'Is that right? Was he about to kill the pig?'

B. Di^{4}to^{3}. Au^{7} to^{8} di^{7} se^{4} dy^{4}be^{8} to^{3}.
Yes 3S pig kill-TOT.INC Int-URLZ FPnd-RLZ RHr-SNC.A.DT

'Yes, he was about to kill it.'

In sentence 24), a man was about to kill a wild pig when someone stopped him. Later, he is asked if he was about to kill the pig. The particle dy^{4}be^{3} indicates that the situation was pending realization at one time but was frustrated.

In sentence 25) the man was about to kill the pig when he was interrupted. The tone 8 status morpheme on dy^{4}be^{8} indicates that the realization of the proposition is immediately relevant, ie he is still planning on killing the pig. The dybe particles both indicate that the situation was pending but frustrated.

3.0 STATUS TONE MORPHEMES IN IAU

We have seen in Section 2 that the segmental status particles define the reality of the situation in terms of the temporal occurrence characteristics and the temporal definiteness of the situation, ie single definite vs multiple indefinite temporal occurrence. The status tone morphemes which occur on these particles and most of the other post verbal particles are also concerned with the actuality of the situation. They indicate both

the degree of factivity of the proposition and the temporal conditions under which the proposition is a reality. Figure 3 below shows three different degrees of factivity of the proposition: 1. Established as Fact 2. Actually Realized 3. Possibly Realized. Figure 3 also shows three different temporal conditions under which the proposition is a reality: 1. Reality at Some Time 2. Immediate Reality 3. Not an Immediate Reality.

TEMPORAL CONDITIONS FOR REALITY	FACTIVITY: Established as Fact	Actually Realized	Possibly Realized
Reality At Some Time	9 is /was /used to be reality, did happen	3 have been have done do	7 would have /could have /might have been
	FACT	REALIZED	HYPOTHETICAL
Immediate Reality	6 is fact	8 being brought about, accomplished currently relevant reality	--
	CURRENT FACT	CURRENT REALIZATION	
Not an Immediate Reality	5 did happen /was fact but no longer relevant /in effect	(2) realized at other times or under other circumstances	4 is /was probable /planned but not yet a reality
	NONPRESENT FACT	NONPRESENT REALIZED	UNREALIZED

Figure 3 Functions of the Status Tone Morphemes.

The tone morphemes in the chart above include all 8 of the Iau tone morphemes. The Fall-Rise tone morpheme 2 and the Low Rise tone morpheme 6 occur only on negative particles in the data. The other tone morphemes occur on a variety of particles. Section 3.1 below will discuss the three Iau tone morphemes which establish the proposition as fact. Section 3.2 will discuss the 3 Iau tone morphemes which indicate that the proposition is actually realized. Section 3.3 will contrast the status tone morphemes which establish the proposition as fact with the status tone morphemes which indicate that the proposition has been actually realized. Section 3.4 will discuss the 3 Iau tone morphemes which indicate that the proposition is a possible or probable reality. Section 3.5 will discuss the temporal conditions for reality.

3.1 Factivity: Established

The first column of tone morphemes in Figure 3, tone morphemes 9, 6, and 5 are used when the speaker wishes to establish or assert that the proposition is a fact. The tone morphemes in the first column are used either in contexts where the factivity of the proposition has been called into question or in contexts where the speaker is introducing a factitive proposition as a topic. The following examples illustrate the use of tone 9 to establish that a proposition is a fact.

26. Fi^{4}su^{9} o^{7}su^{9} y^{8} taui^{7} di^{9} to^{4}.
pandanus leaf 1p make-TOT.INC PBd-FACT RHr-SNA.NDT

'We did make the sleeping mat.'

27A. To^{8} di^{9} di^{7} se^{9} dy^{4} be^{3}?
pig 2s kill-TOT.INC Int-FACT IrPnd-URLZ Uncer-SA.RSP

'Were you about to kill the pig?'

B. Di^{9}y^{3}, to^{8} bv^{6} di^{7} se^{4} dy^{5}
Yes pig is kill-TOT.INC Int-URLZ IrPnd-NPFACT

'Yes, I was about to kill the pig.'

28. Da^{9} ka^{6}di^{8} be^{7} di^{9} y^{9} da^{9} di^{8}
2p many is-TOT.INC PBd-FACT Nomin 2p kill-RES.DUR

di^{7} y^{9}
PBd-HYP Info-FACT

'If you had been many, you would have killed it.'

29. Ta^{8} y^{8} u^{6}di^{9} be^{4} taui^{7} be^{9} iy^{4} bv^{6}
knife 1p before NMkr make-TOT.INC DBd-FACT Nomin 1s

bi^{8}fa^{7} se^{9}.
say-TOT.INC Int-FACT

'I'm going to tell you about the knives that we make.'

In 26) above, the factivity of the proposition has been called into question. The tone morpheme 9 on the status particle di indicates that the proposition 'we made fishing mats' is a fact. In 27A), the tone morpheme 9 on the intention particle se indicates that the actor's intention is a fact at the time in question. In 28) the di particle with the tone morpheme 9 indicates that a hypothetical situation is a hypothetical fact: 'If you had been many...' In 29) the be particle with the tone morpheme 9 in a topicalized relative clause indicates that the proposition 'knives were made during a specific time period in the past' is a fact. This fact is the topic for the subsequent discourse. Sentence 29) also illustrates the tone morpheme 9 used on a se 'intention' particle to indicate that the intention is a fact. Sentence 29) with two status tone 9 morphemes is the opening line of an essay and both identifies and introduces the discourse topic.

The tone morpheme 6 only occurs on negatives. The following is an example.

30. Au^{7} so^{6} ae^{6} y^{9}.
3s child Neg-C.FACT Info-SC.A.DT

'She has no children.'

In the discourse context of 30 above, the previous speaker assumed that the person did have children. The tone morpheme 6 on the negative particle refutes this assumption and indicates that the negative proposition is fact in the immediate present.

The final tone morpheme in the first column of Figure 3, the tone morpheme 5, is also used to indicate that the proposition is fact. Sentence 27B above is an example. Speaker A has questioned the factivity of the proposition in 27A. The speaker replies with the status tone morpheme 5 on the dy particle to emphatically emphasize that the proposition was in fact a reality at some time other than the present. The following sentence is another example of the status tone morpheme 5 to indicate that the proposition is a fact.

31. A^{9} ui^{8} bv^{8} i^{7} se^{5}.
1s house to go-TOT.INC Int-NPFACT

'I am going to go to the house.'

Sentence 31) above is a statement of commitment on the part of the speaker indicating that his commitment to the course or plan of action is a fact. This is indicated by the status tone morpheme 5 on the intention particle se in contexts where there is some question as to whether the speaker actually will bring about his intention.

3.2 Factivity: Actually Realized

The second column of tone morphemes in Figure 3, tones 3, 8, and 2 are used when the speaker wishes to mark the proposition as actually realized or as already in the process of being actually realized. The following examples illustrate the use of tone 3 to mark the proposition as actually realized.

32A. Tai^{5} de^{8} dy^{3}!
lie-TEL.PUN Sta-CRLZ Imp-RS.SA

'Lie down!'

B. Λ^{9} a^{7}se^{9} tai^{5} de^{8} di^{3}.
1s SeqMkr lie-TEL.PUN Sta-CRLZ PBd-RLZ

'I'm already lying down.'

33. Da^{9} ɪe^{8}du^{7} sa^{3} ba^{3}.
2p what eat-TOT.DUR DBd-RLZ

'What did you eat there?'

34A. 1. Y^{8} boi^{8} bv^{8} i^{7} se^{3}
1p firewood for go-TOT.INC Int-RLZ

2. $Ti^{6}bo^{8}ti^{7}vs^{3}$ foi^{4} dy^{3},
Timotius tell-TEL.INC Imp-RS.SA

'We are going for firewood. Tell Timotius.'

B. 3. Ay^{8} bv^{6} foi^{4-7} $\underline{se}^{3}$.
okay 1s tell-TEL.INC.CHS Int-RLZ

'Okay, I'll tell him.'

In example 32) above, Speaker A commands Speaker B to do something that he has already done. Speaker B uses status tone morpheme 3 on the di particle to assert that the proposition has already been actualized. In example 33), by using the tone 3 on the be particle the speaker indicates that the proposition is actually realized, ie he assumes that the hearer did actually eat some food while there and he wants to know what kind. Example 34 illustrates the status tone morpheme 3 on the intention particle se. The status tone morpheme 3 is used on the intention particle se when the speaker intends to realize the intention in the very near future, ie he is indicating that the intention will be actually realized. The other status tone morphemes are used on intention particles when the speaker wishes to use his statement of intention as a statement of fact, as a promise, or as a statement of his plan of action.

The status tone morpheme 8 indicates that the proposition is being realized in the immediate present or was being realized at the relevant discourse time under discussion. Sentence 32B above is an example. The status tone morpheme 8 on the stative particle de indicates that the state is an ongoing reality in the immediate present. The following sentences give some additional examples.

35A. Ba^{7} ka^{7} dy^{3}.
come-TOT.INC Urge Imp-RS.Sa

'Come!'

B. Y^{8} dy^{8} ba^{7} $\underline{ay}^{8}$.
1p do it come-TOT.INC Info-CRLZ

'We are coming!'

36. A^{9} i^{6} $du^{7}be^{7}$ u^{8} fui^{4}
1s head that wood knock-TEL.INC

$\underline{be}^{8}$ iy^{3}.
DBd-CRLZ Info-SA.ADT

'It was my head that was knocking against the wall.'

In 35B) above, the particle $\underline{ay}^{8}$ with a tone 8 indicates that the situation 'we come' is currently in the process of being realized. Sentence 36) above is taken from a narrative text. In the text a sick man was startled by the knocking noise made by the speaker's head hitting against the wall. In 36), the speaker is confessing that he was the source of the irritating noise. The particle $\underline{be}^{8}$ with a status tone morpheme 8 indicates that the situation of the speaker's head hitting against the wall was being concurrently realized over the period of time that the hearer heard the noise.

The final tone morpheme in column 2 is the status tone morpheme 2. The following sentence is an example of the kind of context in which it

occurs. Tone 2 occurs only on negative particles.

37. Dy^{8} a^{4} av^{4} bv^{8} au^{8} ae^{2} di^{9}
then father Poss to refuse-RES.DUR Neg-NPRLZ 2s

ti^{2} be^{3}?
give-TEL.DUR Uncer-RS.SA

So then, did her father not refusing, give her to you? (as wife)'

The particle ae^{2} with a status tone morpheme 2 marks propositions which the speaker ordinarily would have expected to be realized but weren't in a particular context. In 37) above, the speaker would have expected the girl's father to refuse to give her to him. The status tone morpheme 2 indicates that the proposition, when it is realized, is actually realized at some time other than the present time or the referential time.

3.3 Contrast in Factivity Viewpoints

The first and the second columns of tone morphemes in Figure 3 indicate a contrast in factivity. Both columns indicate that the proposition is factitive or realis but the first column of tone morphemes function either to introduce or establish the proposition in the discourse as fact, or they function to assert that the proposition is indeed factitive when its factivity is in question in the context. The second column of tone morphemes in Figure 3 indicate that the proposition has been or will be actually realized ie these tones predicate an actual occurrence of the situation. The following sentences illustrate the contrasts between the tone morphemes that establish the proposition as fact versus those that predicate an actual occurrence of the situation.

Second Column Status Tone Morphemes
Actually Realized Fact:

38. Da^{7} ba^{7}bv^{9} ty$^{7-8}$ be^{8} di^{8} di^{3}?
dog this who NMkr-Ag kill-RES.DUR PBd-RLZ

'Who killed this dog?'

39. Fi^{4}su^{9} o^{7}su^{9} da^{9} Fa^{3}ui^{7} o^{8}sy^{9} be^{4} taui^{7} di^{8}
pandanus leaf 2p Faui from NMkr make TOT.INC PBd-CRLZ

ba^{3}?
UnCer-RSP.SA

'Do you all at Faui ever make sleeping mats?'

40. Di^{9}to^{3} ui^{8} y^{8} a^{7}se^{9} davy^{7} di^{3}.
yes house 1p SeqMkr make-TOT.INC PBd-RLZ

'Yes, we have already built the house.'

First Column Tone Morphemes
Established as Fact:

41. Da^{7} ba^{7}bv^{9} ty$^{7-8}$ be^{8} di^{9} di^{5}?
dog this who NMkr-Ag kill-TOT.PUN PBd-NPFact

'Who shot at /hit this dog?'

42. Fi^{4}su^{9} o^{7}su^{9} y^{8} taui^{7} di^{9} to^{4}.
pandanus leaf 1p make-TOT.INC PBd-FACT RHr-SNC.NA.NDT

'We did make the sleeping mats!'

The first three examples, 38) through 40) illustrate the marking functions of the second column status tone morphemes which indicate that the situation has been actually realized. The question in 38) above is based on the given information that a dog has been killed. The status tone morpheme 3 predicates that the proposition has been actually realized. The status tone morpheme 8 in 39) above, also predicates an actual occurrence of the proposition. Sentence 39) is a question which asks whether there has ever been an actual realization of the proposition. The status tone morpheme 3 in sentence 40) predicates that the proposition under discussion has been actually realized or not. The speaker is asserting the previous speakers assumption that the proposition has been actually realized is indeed correct.

Sentences 41) and 42) illustrate the contrastive status marking functions of the status tone morphemes in the first column which either introduce or emphatically assert that the proposition is fact. Both 41) and 42) occur in contexts where the realization of the proposition is not given in the speech context. Sentence 41) is used in a speech context in which there is no apparent injury to the dog in question. When this sentence occurs in isolation, native speakers interpret it to mean that the dog is not dead and is not seriously wounded. The status tone morpheme 5 indicates that at some time other than the present it was a fact that someone shot at the dog. Sentence 42) contradicts the previous speaker's statement that the proposition had not been actually realized. The status tone morpheme 9 indicates that the proposition is a fact.

The following set of sentences illustrate the contrast between column one and column two status tone morphemes on the status particle a.

Actually Realized Fact:

43A. Da^{9} o^{4} tai$^{7-8}$ be$^{7-8}$ da^{9} te^{8}be^{7}
2p hand shake-TOT.INC.CHS SC1Mkr 2p where

tv^{9}?
go away-TOT.PUN

'When you had shaken hands, where did you go?'

B. Y^{8} a^{7}se^{9} di^{9} y^{8} fi^{5} vy^{8} be$^{7-8}$
1p SeqMkr thing 1p away from take-RES.DUR SC1Mkr

a^{7}se^{9} ui^{8} bv^{8} i^{9} a^{3}.
SeqMkr house to go-TOT.PUN DUbd-RLZ

'We, when our things had been taken from us, we went to the house.'

Established as Fact:

44. A^{9} y^{7} bv^{8} i^{9} a^{9} y^{3}.
1s water to go-TOT.PUN DUbd-FACT Info-SNC.ADT

'I am going to get water.'

Example 43) is taken from a conversational text about a new place the speaker went to visit. The proposition is one of a series of things that they did or that happened to them while there. In 43) the proposition is marked by tone 3 as one of a number of actually realized situations. Sentence 44) answers the question 'Where are you going?' In the answer the speaker is establishing as fact that he is going to get water using the status tone morpheme 9. The proposition is not yet actually realized but is being introduced as fact.

The final set of examples contrasts the two sets of status tone morphemes on the intention particle se.

Actually Realized Fact:

45A. Y^{8} boi^{8} bv^{8} i^{7} se^{3}.
1p firewood for go-TOT.INC Int-RLZ

'We are going to go get firewood.'

B. Ti^{6}bo^{8}ti^{7}vs^{3} foi^{4} dy^{3}.
Timotius tell-TEL.INC Imp-RS.SA

'Tell Timotius.'

C. Ay^{8} bv^{6} foi$^{4-7}$ se^{3}.
okay 1s tell-TEL.INC.CHS Inp-RS.SA

'Okay, I'll tell Timotius.'

Established as Fact:

46A. Y^{8} boi^{8} bv^{8} i^{7} se^{9}.
1p firewood for go-TOT.INC Int-FACT

'We are going to go get firewood.'

B. Ba^{7} dy^{3} di$^{2-7}$ to^{4}.
come-TOT.INC Imp-RS.SA PBd- (?) RHr-SNC.NA.NDT

'You are supposed to come.'

47A. Sy^{9} ui^{8} o^{8}sy^{9} bv^{8} ba^{7} bv^{3}.
Obl house 1s Pos to come-TOT.INC Perm-RS.SA

'He should come to my house.'

B. Ay^{8} au^{7} ba^{7} da^{8}dv^{9} foi$^{4-7}$ se^{5}.
okay 3s come-TOT.INC MVC1Mkr tell-TEL.INC.CHS Int-NPFACT

'Okay. When he comes, I will tell him.'

48. A^{9} Ia^{8}fu^{8}da^{8} i^{7} da^{8}dv^{9} ai^{8} bv^{6} da^{6}
1s Jayapura go-TOT.INC MVC1Mkr photo is now

fvy^{6} e^{8} di^{9} ti^{2} se^{9}.
take-RES.PUN Nomin 2s give-TEL.DUR Int-FACT

'After I go to Jayapura (and develop it) I will give you the picture that I just took.'

The intention particle se marked by a tone 3 indicates that the speaker's statement of intention is considered to be an actually realized fact. The status tone morpheme 3 on intention particles is usually found in contexts where the intention is about to be implemented. In 45A), speaker A is ready to go get the firewood and in 45B), speaker B is going to go find Timotius immediately.

Example 46) is taken from the same conversation as 40). Speaker B has found Timotius and is giving his message. He uses a tone 9 on the intention particle se to introduce it as an established fact which is the grounds for his command in the following clause.

Example 47 is taken from a conversation in which Speaker A has been asking Speaker B about a third party C that he has been looking for. Speaker A asks Speaker B to pass a message to C if he sees him. In 42B Speaker B uses a tone 5 on the intention particle se to indicate that it is a fact that he intends to pass along A's message if he sees C.

3.4 Possible /Partial Factivity

The final column of tone morphemes in Figure 3, tones 7 and 4, are used to indicate possible or partial factivity. The following are some examples of the tone 7 morpheme marking possible factivity.

49.	Da^{9}	ka^{6}di^{8}	be^{7}	di^{9}	y^{9}	da^{9}	di^{8}
	2p	many	is-TOT.INC	PBd-FACT	Nomin	2p	kill-RES.DUR

di^{7}	y^{9}.
PBd-HYP	Info-FACT

'If you had been many, you would have killed it.'

50.	Sy^{9}	di^{9}	bi^{7}si^{9}	a^{9}	ti^{2}	di^{7}	y^{3}.
	Obl	2s	one	1s	give-TEL.DUR	PBd-HYP	Info-SNC.ADT

'You should give me one if you will.'

In 49) above, a hypothetical situation is established as fact in the first clause. The di^{7} particle in the second clause is marked by a status tone morpheme 7 to indicate that it is possibly factitive under the conditions of the first clause. The di^{7} particle here is translated 'would have'. Sentence 50) above is a request as marked by the obligation particle sy^{9}. The di^{7} particle is marked with a status tone morpheme 7 as possible factitive indicating that the speaker recognizes the possibility that the hearer may not be willing to bring about the request. The di^{7} particle with its possible factitive status tone morpheme 7 can be translated 'if you are willing'.

The status tone morpheme 4 also views the proposition as possibly or partially factitive but indicates that the proposition is not factitive at the present but at some other time. The following sentences are some examples.

51A.	Ty^{7}	ai^{7}bv^{9}	te^{7}bv^{9}	a^{9}fa^{3}		de^{9}?
	person	that	why	gather-TOT.DUR		Sta-FACT

'Why have those people gathered?'

B.	Ty^{7}	ui^{8}	o^{8}sy^{9}	davy^{9}		ay^{4}.
	person	house	1sPos	build-TOT.PUN		DIBd-URLZ

'They are building a house for me.'

52. Di^{9} te^{7}bv^{9} bv^{8}ku^{7} doe^{9} a^{4}?
2s why book see-TOT.PUN DUBd-URLZ

'Why are you still looking at books? /Why are you looking at books again?'

53. A^{9} da^{9} so^{7}dy^{4} di^{4} y^{8}.
1s 2s lie PBd URLZ Info SNC ACR

'I (think) you have been lying to me.'

54. Dy^{8} e^{8}ta^{8}fau^{7} be^{8}sy^{9} Bu^{3}di^{3}a^{3} a^{5} tai^{3} de^{8}
then again Oblig Mulia land land-TOT.DUR Sta-CRLZ

y^{4} dy^{4}da^{8}dv^{9} da^{8}su^{6} da^{8}dv^{9} ba^{7}
Info-SNC.NA.NDT IC1Con tomorrow MVC1Con come-TOT.INC

se^{5} di^{4} y^{3}.
Int-NPFACT PBd-URLZ Info-SNC.A.DT

'So then, he had to land again at Mulia, therefore he is planning on coming tomorrow.'

In 51) above the status tone morpheme 4 indicates that the proposition is either totally or partially unrealized. In the speech context, the proposition is being initiated. In 52) above the status tone morpheme 4 is used to mark a situation that continues to occur, ie has not been concluded. The hearer is either looking at books again or he has been looking and still hasn't stopped doing it.

In the discourse context of 53), the speaker has been deceived by the men from Faui who are returning from a raid in which they killed some people in a village near the speaker. As they passed the speaker's house on their way to make the raid, they lied to him about their intentions. Now on their way back, they continue to lie about what they have been doing. The speaker is suspicious. The status tone morpheme 4 indicates that the speaker cannot assert the proposition as factitive but feels it is probably factitive.

The final example, 54) above, illustrates the use of the status tone morpheme 4 for a future probable event. The di^{4} particle with the possible but nonpresent factitive status tone morpheme 4 indicates that the proposition is possibly factitive but not factitive at the present.

3.5 Temporal Conditions for Reality

Along the left hand side of the chart in Figure 3 in Section 3.0 are listed 3 different temporal conditions under which the proposition is asserted to be a reality. The Iau tone morphemes indicate that the proposition is a reality either: 1. At Some Contextually Defined Time 2. At the Immediate Present or 3. As a Reality At Some Time Other Than the Immediate Present. In this section we will discuss and illustrate the use of the Iau status tone morphemes to indicate the temporal conditions in which the proposition is a reality.

The tones in the first row of Figure 3, tones 9, 3, and 7, all view the proposition as a reality at the contextually established time. The

following are some examples of the temporal viewpoint of the status tone morpheme 9.

55. Da^{9} ka^{6}di^{8} be^{7} di^{9} y^{9} da^{9}
2p many is-TOT.INC PBd-FACT Nomin 2p

di^{8} di^{7} y^{9}.
kill-RES.DUR PBd-HYP Info-FACT

'If you had been many, you would have killed it.'

56. Ta^{8} y^{8} u^{6}di^{9} be^{4} taui^{7} be^{9} iy^{4} bv^{6}
knife 1p before NMkr make-TOT.INC DBd-FACT Nomin 1s

bi^{8}fa^{7} se^{9}.
say-TOT.INC Int-FACT

'I'm going to tell you about the knives that we make.'

57. A^{9} Ia^{8}fu^{8}da^{8} i^{7} da^{8}dv^{9} ai^{8} bv^{6} da^{6}
1s Jayapura go-TOT.INC MVC1Mkr photo 1s now

fvy^{6} e^{8} di^{9} ti^{2} se^{9}.
take-RES.PUN Nomin 2s give-TEL.DUR Int-FACT

'After I go to Jayapura (and develop it) I will give you the picture that I just took.'

58. Fi^{4}su^{9} o^{7}su^{9} y^{8} taui^{7} di^{9} tc^{4}.
pandanus leaf 1p make-TOT.INC PBd-FACT RHr-SNA.NDT

'We did make the sleeping mat.'

In 55) above, the status tone morpheme 9 indicates that the proposition is fact at some hypothetical time. The hypothetical time is the time established by the first clause. In 56), the tone morpheme establishes the proposition as fact at some time in the past. The time is indicated by the temporal particle u^{6}di^{9} 'before'. In 57), the speaker uses the status tone morpheme 9 on an intention particle to indicate that the intention is fact at current discourse time. Sentence 58) comes from a discourse context in which someone doubts whether the proposition is a reality at all. The speaker uses the tone 9 morpheme to indicate that the proposition is a fact at speech time.

The status tone morpheme 3 predicates that the proposition has been actually realized at some contextually established time. The following are some examples.

59A. Tai^{5} de^{8} dy^{3}!
lie-TEL.PUN Sta-CRLZ Imp-RS.SA

'Lie down!'

B. A^{9} a^{7}se^{9} tai^{5} de^{8} di^{3}.
1s SeqMkr lie-TEL.PUN Sta-CRLZ PBd-RLZ

'I'm already lying down.'

60. Da^{9} te^{8}du^{7} sa^{3} be^{3}.
2p what eat-TOT.DUR DBd-RLZ

'What did you eat there?'

61A. 1. Y^{8} boi^{8} bv^{8} i^{7} se^{3}
1p firewood for go-TOT.INC Int-RLZ

2. Ti^{6}bo^{8}ti^{7}vs^{3} foi^{4} dy^{3}.
Timotius tell-TEL.INC Imp-RS.SA

'We are going for firewood. Tell Timotius.'

In 59) above, the status tone morpheme 3 indicates that the proposition is viewed as an actually realized reality at the contextually established time, ie speech time. Sentence 60) is taken from a conversation about a trip to a place called Danau Bira. The status tone morpheme 3 views the proposition as actually realized at the time under discussion, ie while they were at Danau Bira. In 61) the speaker marks his intention with a status tone morpheme 3 to indicate his intention to actually realize the proposition in the near future.

The hypothetical status tone morpheme 7 indicates that the proposition is a reality at some hypothetical time. The following sentences are examples.

62. Da^{9} ka^{6}di^{8} be^{7} di^{9} y^{9} da^{9} di^{8}
2p many is-TOT.INC PBd-FACT Nomin 2p kill-RES.DUR

di^{7} y^{9}.
PBd-HYP Info-FACT

'If you had been many, you would have killed it.'

63. Sy^{9} di^{9} bi^{7}si^{9} a^{9} ti^{2} di^{7} y^{3}.
Obl 2s one 1s give-TEL.DUR PBd-HYP Info-SNC.ADT

'You should give me one if you will.'

In Sentence 62), the status tone morpheme 7 indicates that the proposition 'You would have killed it ' is a probable fact at the hypothetical time established in the first clause. In the request in Sentence 63), the status tone morpheme 7 indicates that the proposition is a probable fact at some time other than the present.

The status tone morphemes in the second row of Figure 3, tones 6 and 8, indicate that the proposition is a reality in the immediate temporal context. The following is an example using tone 6.

64. Au^{7} so^{6} ɛe^{6} y^{9}.
3s child Neg-C.FACT Info-SC.A.DT

'She has no children.'

The negative particle with a tone 6 means 'there is or there are none'. The negative statement in 64) indicates that the proposition 'She has no children' is an immediate fact, ie a fact at speech time.

The following examples illustrate the use of the status tone morpheme 8 to indicate that the proposition is being immediately realized.

65A. Ba^{7} ka^{7} dy^{3}.
come-TOT.INC Urge Imp-RS.Sa

'Come!'

B. Y^{8} dy^{8} ba^{7} ay^{8}.
1p do it come-TOT.INC Info-CRLZ

'We are coming!'

66. A^{9} i^{6} du^{7}be^{7} u^{8} fui^{4} be^{8} iy^{3}.
1s head that wood knock-TEL.INC DBd-CRLZ Info-SA.ADT

'It was my head that was knocking against the wall'.

In example 65) above, the speaker uses a status tone morpheme 8 to indicate that the proposition is being actually realized in the immediate temporal context. Example 66) comes from a discussion about the identity of a noise which irritated the hearer. In example 66) the speaker uses the status tone morpheme 8 to indicate that the proposition was being actually realized at the time under discussion, ie at the time the noise was heard.

The final row of status tone morphemes in Figure 3, tones 5, 2, and 4 are used to indicate that the proposition is a fact or probable fact at some time other than the immediate present or that although its factivity is not evident in the discourse context, it is indeed a fact. The following are some examples of the status tone morpheme 5.

67. Da^{7} ba^{7}bv^{9} ty$^{7-8}$ be^{8} di^{9} di^{5}?
dog this who NMkr hit-TOT.PUN PBd-NPFACT

'Who shot at /hit this dog?'

68. A^{9} ui^{8} bv^{8} i^{7} se^{5}.
1s house to go-TOT.INC Int-NPFACT

'I am going to go to the house.'

69A. Sy^{9} ui^{8} o^{8}sy^{9} bv^{8} ba^{7} bv^{3}.
Obl house 1s Pos to come-TOT.INC Perm-RS.SA

'He should come to my house.'

B. Ay^{8} au^{7} ba^{7} da^{8}dv^{9} foi$^{4-7}$ se^{5}.
okay 3s come-TOT.INC MVC1Mkr tell-TELL.INC.CHS Int-NPFACT

'When he comes, tell him.'

70A. To^{8} di^{9} di^{7} se^{9} dy^{4} be^{3}?
pig 2s kill-TOT.INC Int-FACT IrPnd-URLZ Uncer-SA.RSP

'Were you about to kill the pig?'

B. Di^{9}y^{3}, to^{8} bv^{6} di^{7} se^{4} dy^{5}.
yes pig 1s kill-TOT.INC Int-URLZ IrPnd-NPFACT

'Yes, I was about to kill the pig.'

Native speakers interpret 67) to mean that the dog is either not dead or he is not seriously wounded. The status tone morpheme 5 asserts that although the proposition is not an obvious reality at the time of speech it was indeed a reality at some time. Examples 68) and 69) illustrate the use of the status tone morpheme 5 on the intention particle se. The status tone morpheme 5 on the particle se is used in contexts where there is some question as to whether the intention will actually be realized or not. In 68) above, the hearer may object to the speaker's leaving, thus changing the speaker's intention. In 69), the speaker may not see the person to whom he is to pass the message and so may not be able to pass the message. The status tone morpheme 5 asserts that the proposition will be a reality at some time. Example 70), illustrates the use of the status tone morpheme 5 on the pending realization particle dy. The proposition 'I was intending to kill the pig' is asserted to be a fact at one time but it is no longer true.

The following example illustrates the use of the status tone morpheme 2 to indicate that the proposition is a reality at some time but not at present.

71. Dy^{8} a^{4} av^{4} bv^{8} au^{8} ae^{2} di^{9}
then father Poss to refuse-RES.DUR Neg-NPRLZ 2s

ti^{2} be^{3}?
give-TEL.DUR Uncer-RS.SA

'So then, did her father not refusing, give her to you? (as wife)'

In Sentence 71) above, the status tone morpheme 2 indicates that the proposition being negated is actually realized in temporal contexts other than the immediate present. The status tone morpheme 2 marks propositions that are not the usual expected occurrences. In Iau culture, one would expect the girl's father to refuse.

The final examples below illustrate the use of the status tone morpheme 4 to indicate that the proposition is a probable reality at some time but not at present. The status tone morpheme 4 indicates either future possible or partial factivity.

72A. Ty^{7} ai^{7}bv^{9} te^{7}bv^{9} a^{9}fa^{3} de^{9}?
person that why gather-TOT.DUR Sta-FACT

'Why have those people gathered?'

B. Ty^{7} ui^{8} o^{8}sy^{9} davy^{9} ay^{4}.
person house 1sPos build-TOT.PUN DJBd-URLZ

'They are building a house for me.'

73. Di^{9} te^{7}bv^{9} bv^{8}ku^{7} doe^{9} a^{4}?
2s why book see-TOT.PUN DUBd-URLZ

'Why are you still looking at books? /Why are you looking at books again?'

74. A^{9} da^{9} so^{7}dy^{4} di^{4} y^{8}.
1s 2s lie PBd URLZ Info SNC ACR

'I (think) you have been lying to me.'

Example 72) above illustrates the use of the status tone morpheme 4 to indicate that although the proposition is not a present reality it is to be implemented. In example 73), the status tone morpheme 4 marks a proposition that is still continuing to be realized but has not been terminated although the speaker wishes it would be. In example 74), the tone 4 indicates that the speaker feels it is a probable reality that the hearers have been lying to him but he can't prove that it is a reality.

NOTES

1. For a brief overview of Iau see Appendix 1 of Bateman, "The Tone Morphemes and Aspect in Iau," this volume. Appendix 2, of the same article, gives a complete listing of the Iau post-verbal particles, the tone morphemes and meaning of each along with a listing of the abbreviations used in the examples. The analysis of Iau presented here is based on a data base of 150 pages of conversational text, 200 pages of narrative discourse, and a few descriptive procedural discourses. The narrative discourse includes narrative of several different lengths types and styles -- some of them traditions, folktales and legends, and others narratives of personal experiences and travel sagas. The data is taken from at least 6 different speakers ranging in age from 18 to approximately 55. Some of the narrative texts are native-authored written literature. The conversations and the rest of the narrative texts were given orally on tape, then transcribed by native speakers (including tone data). Four of the Iau speakers (the author's language helpers) can write and transcribe the tones fluently as well as edit tone errors in written data. Another 30-40 young men and women have had initial literacy training and have successfully learned to read and write the tone. However, they have not had sufficient practice and exposure to be fluent as yet. Without the tone data of the transcribed texts provided by Das, Sakedia, Beabi and Tibotius, the author's four language helpers, this analysis would not have been possible.

Research for this paper has been done under the auspices of a cooperative project of the Universitas Cenderawasih in Irian Jaya, Indonesia and the Summer Institute of Linguistics. The author has had 45 months of village time in Faui as part of a 6 year period of intensive work on Iau language data. Since the author's goal in Iau study is to be able to produce well-formed coherent texts of translated material into Iau, the analysis has been directed towards acquiring native speaker ability to produce well-formed text or at least to be able to determine whether or not a text is well-formed and makes use of normal discourse coherence features of Iau.

I would like to thank Dr Helen Miehle of SIL, for her comments on successive drafts of this paper and also Mark Bassett for reading and commenting on the paper during a visit to Irian Jaya.

2. I am indebted to Comrie for first pointing out during a workshop at SIL Ukarumpa, Papua New Guinea that these segmental particles seem to be making realis-irrealis distinctions.

3. The term 'definite' is normally used to describe the status of nouns. Foley (1985:284) defines the term definite as follows:

> "A speaker marks a NP as definite when he assumes that the hearer can uniquely identify the referent of the NP."

4. In their article on transitivity, Hopper and Thompson (1980) view transitivity as a semantically complex term consisting of a number of different variables such as realis vs irrealis, punctuality and telicity

of the verb, and referentiality and individuation of the object. They discuss the idea of grading transitivity on a sliding scale according to the number of transitivity components present.

BIBLIOGRAPHY

Bateman, Janet
1982 "The Topic Comment Construction in Iau." Indonesian Working Papers.

1987 "Tone Morphemes and Aspect in Iau." This volume.

ms. "Tone Morphemes and Illocutionary Force in Iau."

ms. "Towards an Analysis of Iau Tone."

ms. "Postverbal Particles in Iau."

ms. "Pragmatic Discourse Functions of Iau Tone Morphemes."

Foley, William A. and Robert D. Van Valin
1984 Functional Syntax and Universal Grammar. Cambridge: Cambridge University Press.

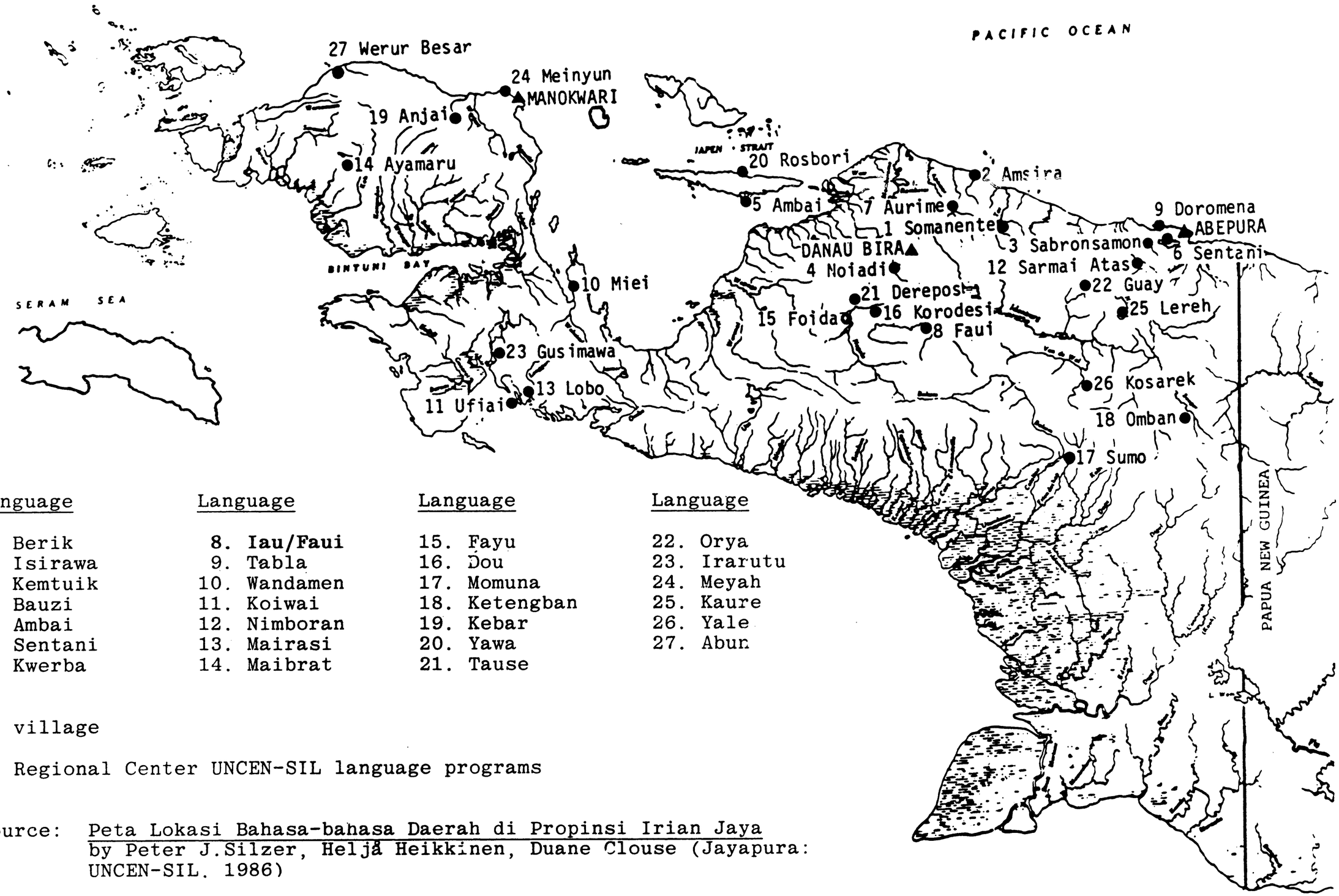
1985 "Information Packaging in the Clause." In: T. Shopen, ed., Syntactic Typology and Linguistic Description, vol. 1, Clause Structure. Cambridge: Cambridge University Press.

Givón, Talmy
1984 Syntax: A Functional-Typological Introduction. Vol. 1. Amsterdam: John Benjamins.

Hopper, Paul and Sandra A. Thompson
1980 "Transitivity in Grammar and Discourse." Language 56:251-99.

Jakobson, Roman
1971 "Shifters, Verbal Categories, and the Russian Verb." In: R Jakobson, Selected Writings. Vol. 2, pp 130-147. The Hague: Mouton.

Whorf, B.L.
1956 "Some Verbal Categories in Hopi." In: J. Carroll, ed., Language, Thought, and Reality, pp 112-124. Cambridge, Mass: MIT Press.



Language	Language	Language	Language
1. Berik	8. **Iau/Faui**	15. Fayu	22. Orya
2. Isirawa	9. Tabla	16. Dou	23. Irarutu
3. Kemtuik	10. Wandamen	17. Momuna	24. Meyah
4. Bauzi	11. Koiwai	18. Ketengban	25. Kaure
5. Ambai	12. Nimboran	19. Kebar	26. Yale
6. Sentani	13. Mairasi	20. Yawa	27. Abun
7. Kwerba	14. Maibrat	21. Tause	

● village

▲ Regional Center UNCEN-SIL language programs

Source: Peta Lokasi Bahasa-bahasa Daerah di Propinsi Irian Jaya by Peter J.Silzer, Heljå Heikkinen, Duane Clouse (Jayapura: UNCEN-SIL. 1986)

AUTHOR INDEX

NUSA VOLUMES 24 - 26, 1986

NUSA
LINGUISTIC STUDIES OF INDONESIA
AND OTHER LANGUAGES IN INDONESIA

NUSA volume 1
John W.M. Verhaar (ed.), *Miscellaneous Studies in Indonesian and Languages in Indonesia,* Part I, Jakarta 1975.
Countents: Anton Moeliono (A Recent History of Spelling Reforms in Indonesia), E.M. Uhlenbeck (Sentence Segment and Word Group: Basic Concepts of Javanese Syntax), Dale F. Walker (A Lexical Study of Lampung Dialects), Marmo Soemarmo (The Illusive Simple Noun Phrases), Kenneth R. Maryott (sangil Elevationals and the Performative Analysis). out of print
photocopy Rp 3.000,00/US$ 5.00

NUSA volume 2
Dale F. Walker, *A Grammar of the Lampung Language,* Jakarta 1976.
out of print
photocopy Rp 3.000,00/US$ 5.00

NUSA volume 3
Amran Halim (ed.), *Miscellaneous Studies in Indonesian and Languages in Indonesia,* Part II, Jakarta 1977.
Contents: A. Teeuw (The Morphological System of the Indonesian Adjective), Marmo Soemarmo (Suntactic and Semantic Well-formedness), Stephen Wallace (Social Correlates of Some Phonological Differences in Jakarta Malay), Gloria Poedjosoedarmo (Thematization and Information Structure in Javanese), Discussions: James H. Rose (Principled Limitations on Productivity in Denominal Verbs), William E. Cooper (On Constraining the Production of Denominal Verbs), James H. Rose (Invention and Innovation in Denominal Verbs), J.N. Sneddon (Tonsea Text). out of print
photocopy Rp 3.000,00/US$ 5.00

NUSA volume 4
Soepomo Poedjosoedarmo (ed.), *Miscellaneous Studies in Indonesian and Languages in Indonesia,* Part III, Jakarta 1977.
Contents: Joan M. Rosen (On Reduplication in Indonesian), Paul J. Hopper (Narrative Structure in 19th Century Malay), Robert Blust (Austronesian Culture History and Linguistic Inferences), H. Steinhauer ('Coming' and 'Going' in the Blagar of Dolap), T.W.J. Mihing and W.A.L. Stokhof (Sound System of Ngaju Dayak). Rp 1.625,00/US$ 5.00

NUSA volume 5
Ignatius Suharno (ed.), *Miscellaneous Studies in Indonesian and Languages in Indonesia,* Part IV, Jakarta 1977.
Contents: Joan M. Rosen (Reduplication in Indonesian, Sequel to Article in Volume 4), Stephanus Djawanai (Phonology of Nga'da), J.S. Sande and W.A.L. Stokhof (Phonology of Toraja Kesu), J.A.J. Verheijen (Affixation in Manggarai), Joan M. Rosen (Riung Text). out of print
photocopy Rp 3.000,00/US$ 5.00

NUSA volume 6
John W.M. Verhaar (ed.), *Miscellaneous Studies in Indonesian and Languages in Indonesia,* Part V, Jakarta 1978.
Contents: J.V. Dreyfuss (*meN, di-, ber-* in Indonesian), Michael R. Thomas (Unmarked Verbs in Indonesian), J.W.M. Verhaar (Passive in Indonesian), Stephanus Djawanai (Nga'da Discourse), L.L. Kamengmai and W.A.L. Stokhof (Woisika Text). Rp 1.600,00/US$ 5.00

NUSA
LINGUISTIC STUDIES OF INDONESIAN AND OTHER LANGUAGES IN INDONESIA

NUSA volume 7
Amran Halim (ed.), *Miscellaneous Studies in Indonesian and Languages in Indonesia,* Part VI, Jakarta 1979.
Contents: J.V. Dreyfuss (Definition of 'Nouniness' in Indonesia), Sofjan Abdurrahman and Colin Yallop (Komering Phonology), R.H. Barnes (An Austronesian Relationship Name), Don A.L. Flassy and W.A.L. Stokhof (A Note on Tehit). Rp 2.250,00/US$ 5.00

NUSA volume 8
Bintaro, *Javanese Transitive Verbs: A Tagmemic Grammar,* Jakarta 1980. Rp 1.500,00/US$ 4.00

NUSA volume 9
Kay Ikranagara, *Melayu Betawi Grammar,* Jakarta 1980. Rp 4.175,00/US$ 7.50

NUSA volume 10
Robert A. Blust (ed.), *Historical Linguistics in Indonesia,* Part I, Jakarta 1981. Rp 2.450,00/US$ 5.50

NUSA volume 11
Muhadjir, *Morphology of Jakarta Dialect, Affixation and Reduplication,* Jakarta 1981. Rp 3.350,00/US$ 6.50

NUSA volume 12
Ellen Rafferty, *Discourse Structures of the Chinese Indonesian of Malang,* Jakarta 1982. Rp 2.100,00/US$ 5.50

NUSA volume 13
Alan T. Walker, *A Grammar of Sawu,* Jakarta 1982. Rp 2.300,00/US$ 5.50

NUSA volume 14
Richard McGinn, *Outline of Rejang Syntax,* Jakarta 1982. Rp 2.750,00/US$ 6.50

NUSA volume 15
Soenjono Dardjowidjojo and John W.M. Verhaar (eds.), *Miscellaneous Studies of Indonesian and Other Languages in Indonesia,* Part VII, Jakarta 1983.
Contents: Edmund A. Anderson (The Meaning of Variation in Indonesian), Soenjono Dardjowidjojo (A Classifier, *itu, -nya,* or None of the Above: The Way the Indonesian Mind Operates), Rachel Flaming (Cohesion in Wandamen Narrative), Joan M. Rosen (Rembong and Wangka: A Brief Comparison), Ellen van Zanten and Vincent J. van Heuven (A Phonetic Analysis of the Indonesian Vowel System: A Preliminary Acoustic Study). Rp 2.750,00/US$ 6.00

NUSA volume 16
James T. Collins (ed.), *Studies in Malay Dialects,* Part I, Jakarta 1983.
Contents: Ellen Rafferty (Contrasts in the Syntax of a Malay and an Indonesian Oral Narrative), C.D. Grijns (Language-Use in Three Neighbourhoods of Tanah Abang: The Speaker's View), Jeff Dreyfuss, (The Backwards Language of Jakarta Youth (JYBL), a Bird of Many Language Feathers), K.A. Adelaar (Malay Consonant-Harmony: An Internal Reconstruction), Author Index NUSA volume 1-14, 1975-1982. Rp 2.100,00/US$ 5.50