

APPENDICES

(N.B. Tables and figures are numbered from 1 in each appendix.)

APPENDIX A

INVESTIGATION INTO TONES

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A.1 A sample list of minimal diads and triads was drawn up, and a survey organized and conducted among men and women in 22 locations within Huliland. 35 participants contributed speech samples, including some non-contrasting polysyllabic items. The result was more than 200 items that could be examined with the use of a mingograph.

A.1.1 Each meaning-item was first, A, produced in an environment in which it had been observed to occur naturally, then, B, uttered in triplicate, and finally, C, produced in a frame that was held constant, regardless of the item being recorded. This frame was:

bi ogoni 'x' lagane
talk/word this 'x' is customarily said
this word is usually pronounced 'x'

A.1.2 The second sample of B, the triple utterance, was expected to show the item buffered from the influence of initial-rising and final-falling intonation contours; the item produced in A was intended to assist in an exploration of tone perturbation; and the item obtained in C was designed to furnish data that would allow its tone features to be compared more easily with those of other items. It was anticipated that each production, A, B and C, would feed data into the other two.

A.2 The recordings were processed by setting the mingograph to print out in linear scale : (1) the sound intensity;

(2) an intensity integration pulse every 20 m/sec; (3) a duplex oscillogram of air turbulence at the recording head; and (4) the pitch curve of the utterance, calibrated from 70 to 500 cycles. Medium or low filters were used in processing recordings of male participants, while high filters were used for female voices. The oscillator tracer indicated the presence and quality of fricative and aspirated segments, but the trace critical for my purposes was (4), which indicated the pitch contour or curve.

A.2.1 The read-out of tone contrasts yielded by this survey is set out in table 1, which gives the tone contours of 24 minimal diads or triads as recorded in 21 locations spread across the Huli area. The key to the table is as follows:

Tone contours

F	=	falling
R	=	rising
L	=	level
RF	=	rising-falling

AREA			Place	
MAG	=	Magarima	Po	- Porandaga
			Ho	- Homaria
WAB	-	Wabia	Pr	- Para Te
			Na	- Narali
GUB	-	Gubari	Gu	- Gubari
			Ha	- Hangabo
GAM	-	Gambe	Be	- Bebego
			Br	- Berali
BAR	-	Bari	Gr	- Guruanda
			Di	- Diniga
MOGOR	-	Mogorapuga	Db	- Dibara
			Go	- Godabi
BUR	-	Burani	Ta	= Taguano Te
			Pb	= Pabaluma
HAR	-	Haro	Bi	= Bibalo
			Hr	- Haro
			He	- Hedamali
GUMU	-	Gumu	Pl	= Pala Pala

No.	item	glosses	MAG		WAB		GUB		GAM		BAR		MOGOR			BUR		HAR		GUMU			
			Po	Ho	Pr	Na	Gu	Ha	Be	Br	Gr	Di	Db	Go	Ta	Pb	Bi	Hr	He	Pl	Wa	Am	Ea
1	i	1S 2S	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F
2	ti	2P 3P excreta	F F L	L L L	F L R	F L R	F L L	F L L	F L L	F L L	F L L	F L L	F L L	F L L	F L L	F L L	F L L	F L L	F L L	F L L	F L L	F L L	F L L
3	pu	go vine urine	RF R L	R L F	R F F	RF L F	RF L F	R F F	R F F	R F F	R F F	R F F	R F F	R F F	R F F	R F F	R F F	R F F	R F F	R F F	R F F	R F F	R F F
4	ma	neck taro let's go	R F R	R L F	R L F	R L F	R L F	R L F	R L F	R L F	R L F	R L F	R L F	R L F	R L F	R L F	R L F	R L F	R L F	R L F	R L F	R L F	R L F
5	be	bamboo ash	L F	R L	R F	L F	R L	R F	L F	R L	R F	L F	R L	R F	L F	L F	R L	R F	L F	R L	R F	L F	R L
6	tu	boundary raincape	L F	L F	F L	L F	L F	L F	L F	L F	L F	L F	L F	L F	L F	L F	L F	L F	L F	L F	L F	L F	L F
7	to	raincape swollen emitted	F R F	L L F	R F F	L F F	R F F	R F F	R F F	R F F	R F F	R F F	R F F	R F F	R F F	R F F	R F F	R F F	R F F	R F F	R F F	R F F	R F F
8	gi	hand fear	F L	L F	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L
9	wa	reject light	R R	L RF	R F	L F	R F	R F	L F	R F	R F	R F	R F	R F	R F	L F	R F	R F	L F	R F	R F	L F	R F
10	te	story tuft	R RF	RF L	R L	R F	R L	R F	R L	R F	R L	R F	R L	R F	R L	R F	R L	R F	R L	R F	R L	R F	R L
11	ibu	come 3S	L R	F L	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	RF L	F L	F L	F L	F L	F L	F L	F L
12	libu	2D 3D	RF L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L
13	jari	decoration cassowary	F R	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F
14	aju	now axe	RF R	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L
15	dalu	country rain	F R	F R	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F
16	hale	ear torch sp. tree	RF R L	F R L	F L R	F L R	F L R	F L R	F L R	F L R	F L R	F L R	F L R	F L R	F L R	F L R	F L R	F L R	F L R	F L R	F L R	F L R	F L R
17	hai	banana wall search	RF F F	RF L F	RF F F	RF F F	RF F F	RF F F	RF F F	RF F F	RF F F	RF F F	RF F F	RF F F	RF F F	RF F F	RF F F	RF F F	RF F F	RF F F	RF F F	RF F F	RF F F
18	hali	wallaby needle	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F
19	keba	wooden spade anger	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L	F L
20	togo	bridge crack decay	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F
21	doma	erase cross over	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F	F F
22	manda	wig thought	R RF	F F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F	R F
23	dugu	swamp pine weep	L L	R R	R R	R R	R R	R R	R R	R R	R R	R R	R R	R R	R R	R R	R R	R R	R R	R R	R R	R R	R R
24	hambu	lips sorcery	L L	R R	R R	R R	R R	R R	R R	R R	R R	R R	R R	R R	R R	R R	R R	R R	R R	R R	R R	R R	R R

Table 1: Tone survey data

Wa - Waru
Am - Ambogwa
Ea - Eanda

A.2.2 Most recordings were made in the bush on portable audio-cassette recorders, and the quality produced was uneven. In some instances, when unwanted sounds intruded and overlay the tone contour too densely to allow it to print out clearly in envelope pattern, the filters and tracer were adjusted to obtain a simple line print-out. Such print-outs, because of the restriction in their pitch range, are generally less informative than print-outs in envelope form.

A.2.3 Some examples of the mingograms produced are given below by way of illustrating the data base for table 1.

A.2.3.1 Item 1, from Berali (Br) in the Gambe (GAM) area - 1, Br:GAM - figures 1-4. The 1S and 2S pronouns provide examples of a frequently occurring minimal pair contrasted by rising (R) and falling (F) tone contours. Figure 1 is an example of a triple utterance, B - see 4.2.1 above -, in which the second, buffered, utterance is interpreted as the one most probably recording the true tone contour.

The upper trace, (1), shows the intensity of the utterance, while (2) records that it endured across 440 m/secs. The oscillogram trace, (3), records little turbulence, showing that the speaker was a little way away from the recording head. However, the trace that is important for this study, the tone contour, (4), was not affected by this, and registers clearly in envelope form, showing a rising contour.

A.2.3.2 Contrastingly, figure 2 shows a mingogram of 2S pronoun in which the tone contour, (4), is interpreted as falling.

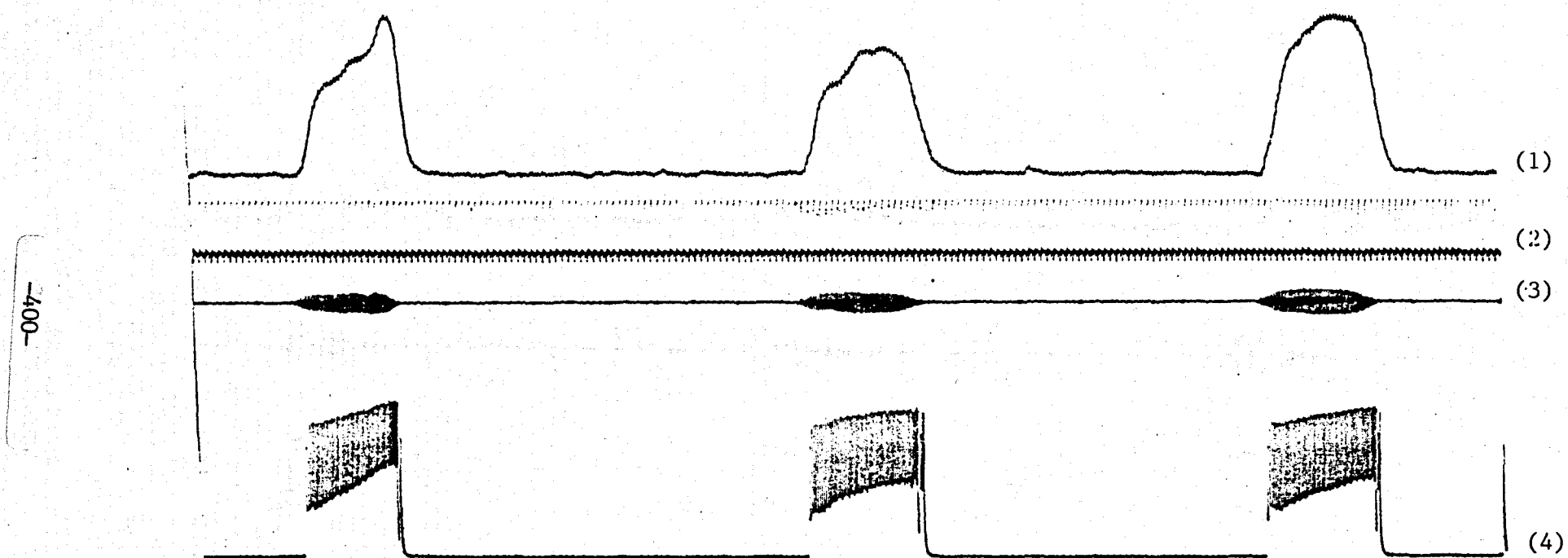


Figure 1 : IS frame A

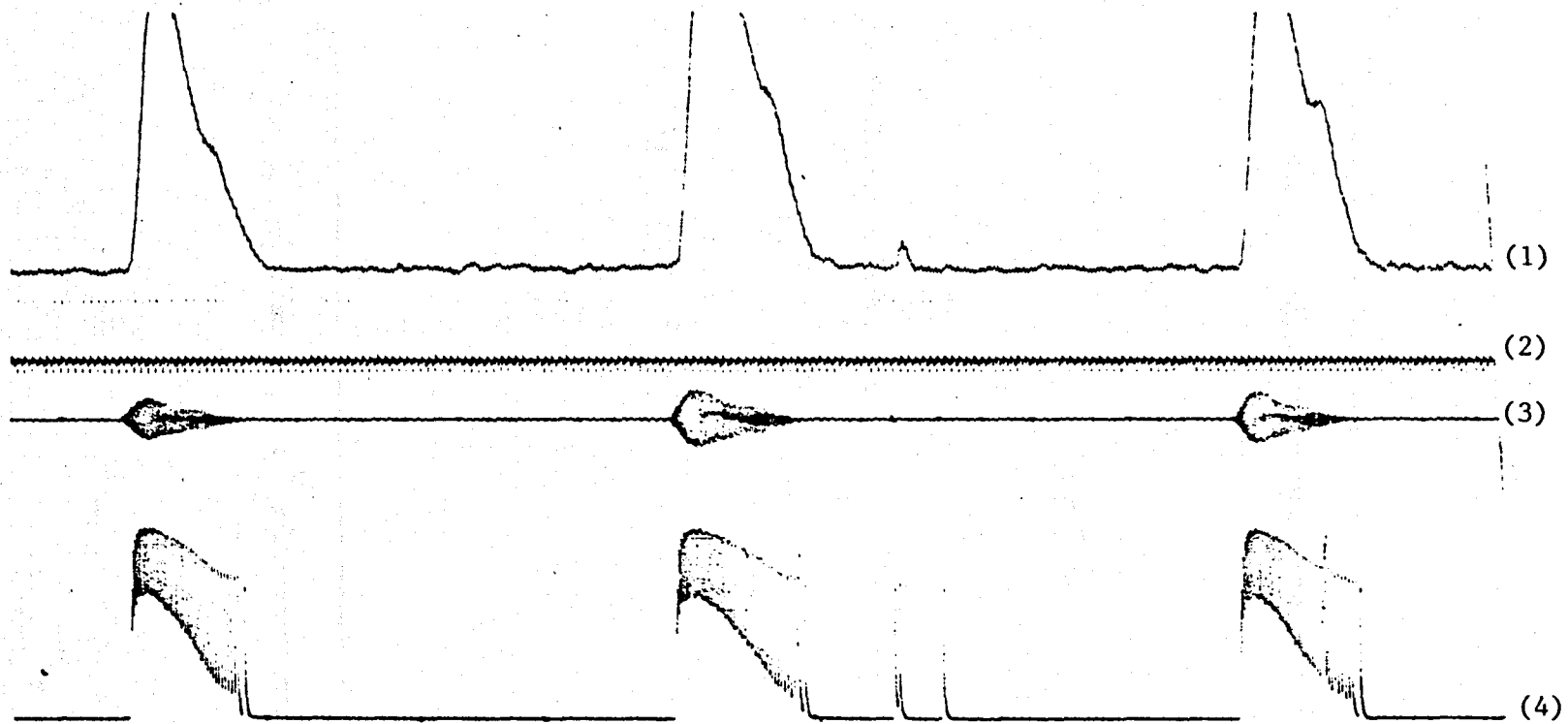


Figure 2: 2S, Frame A

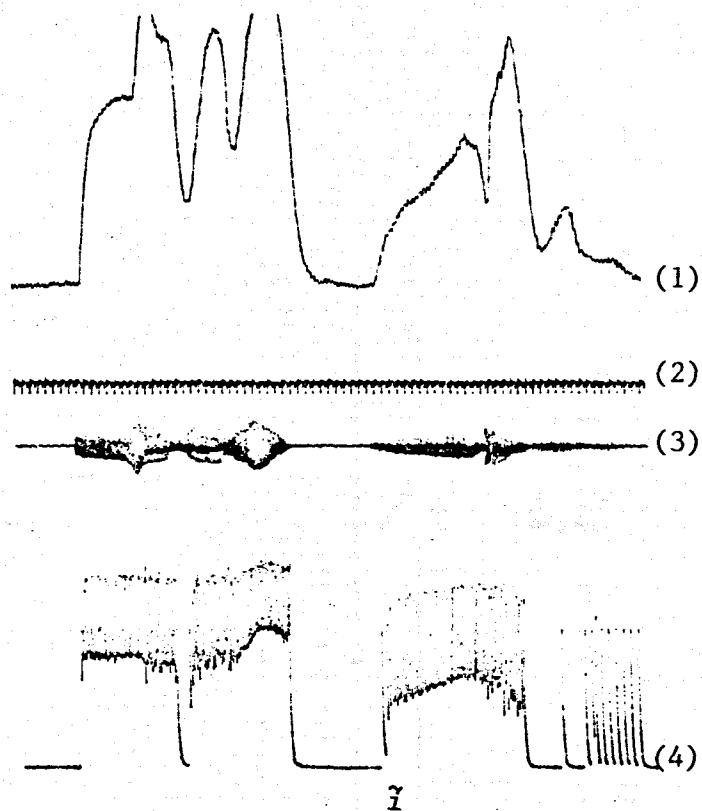


Figure 3 : 1S, frame C

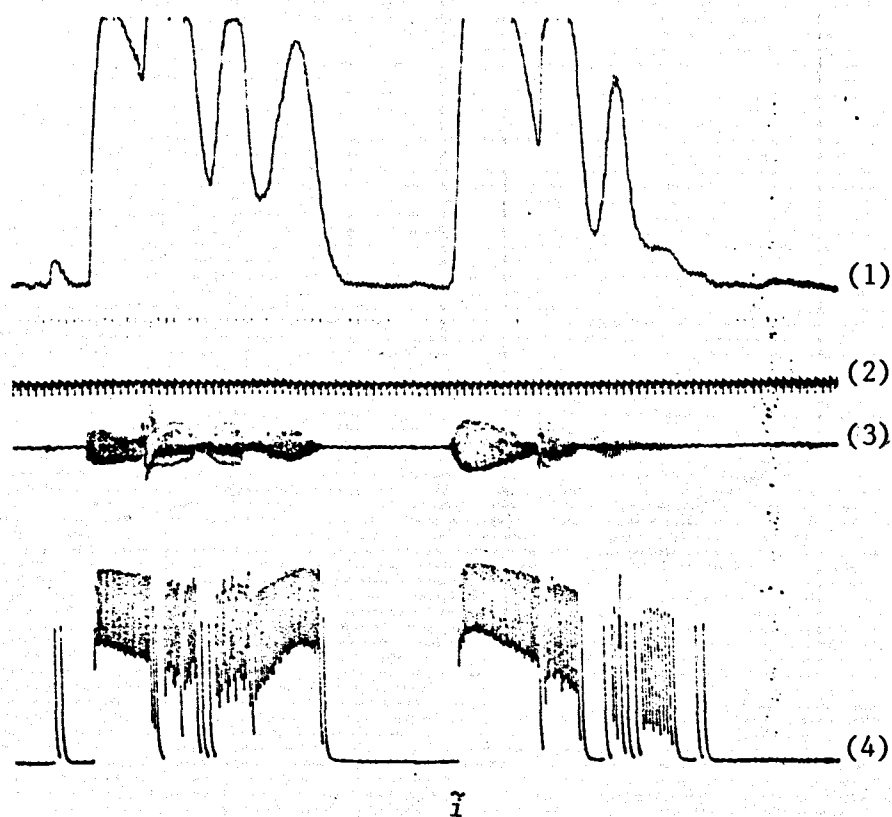


Figure 4 : 2S, frame C

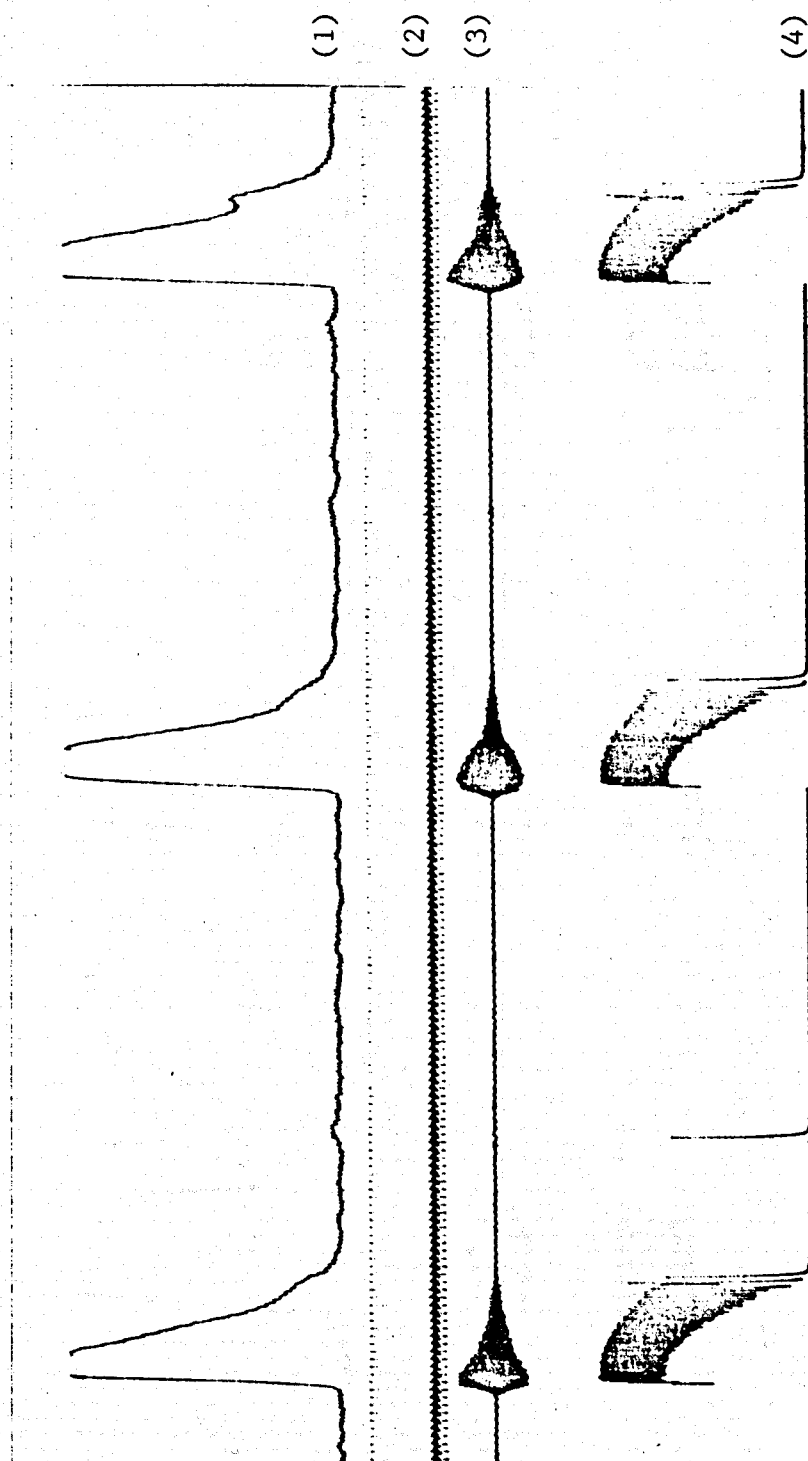


Figure 5 : gi 'hand ', frame A

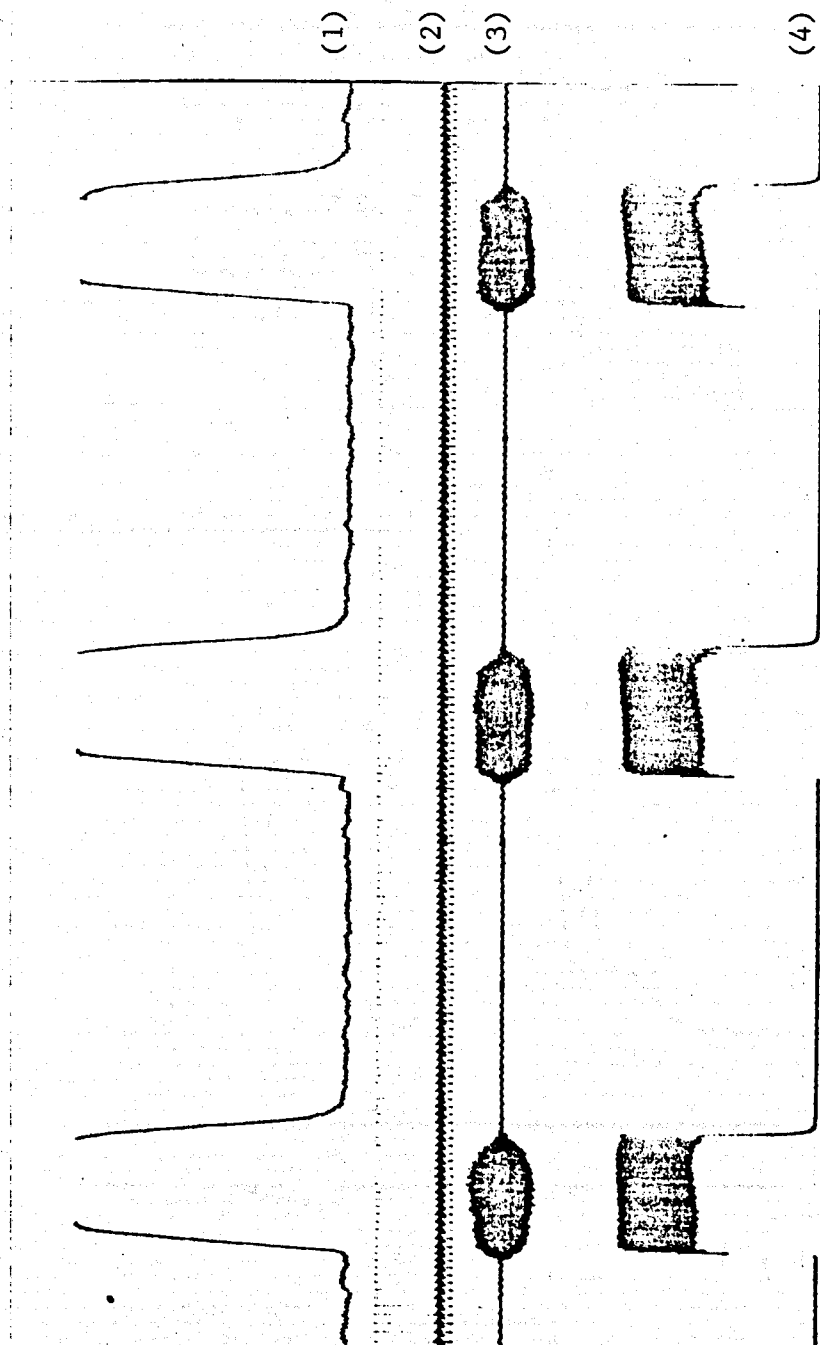


Figure 6 : gi 'fear' frame A

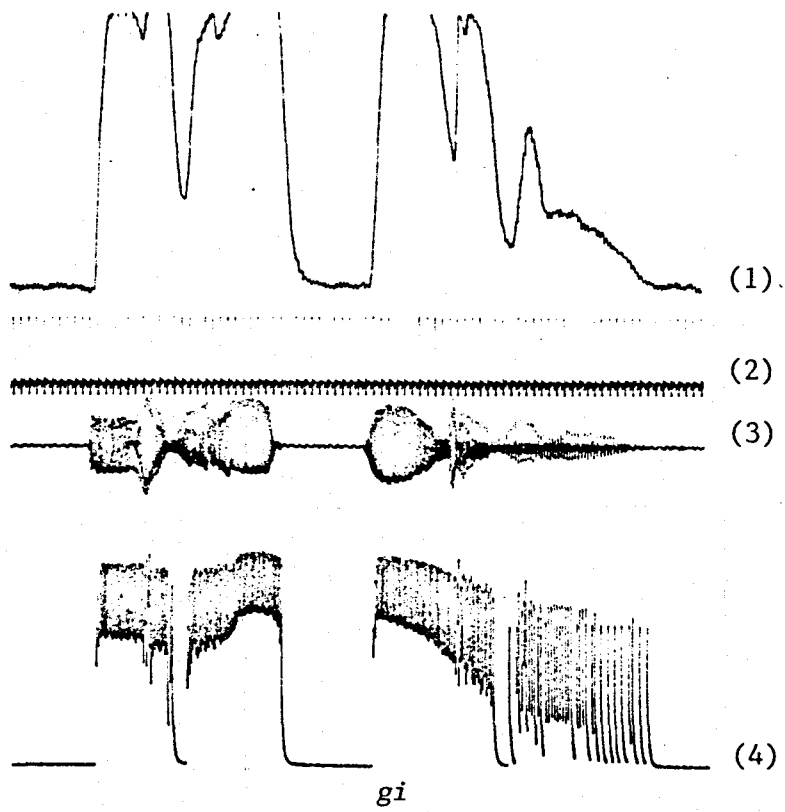


Figure 7 : 'hand' frame C

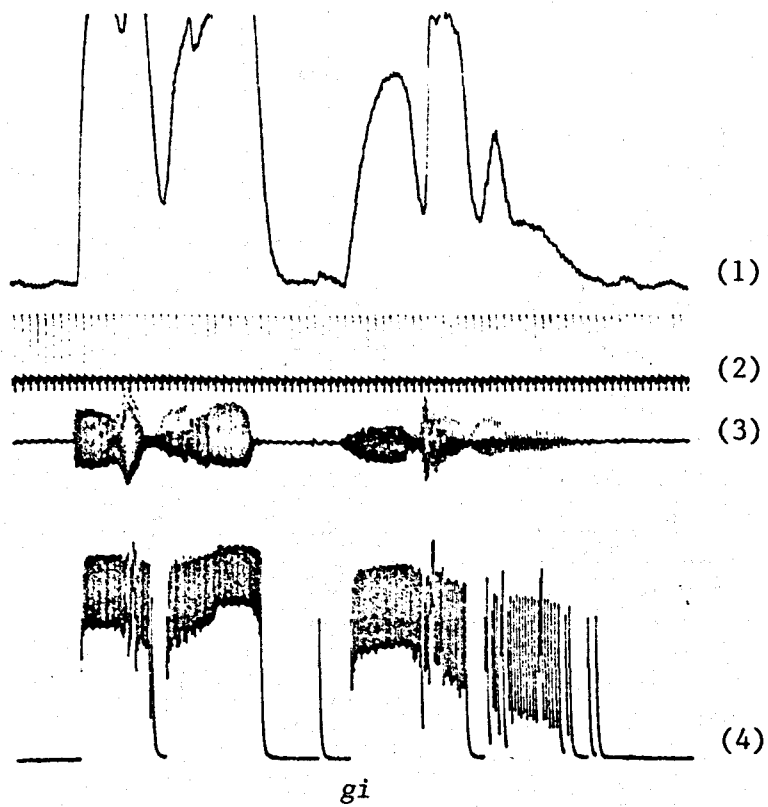


Figure 8 : 'fear', frame C

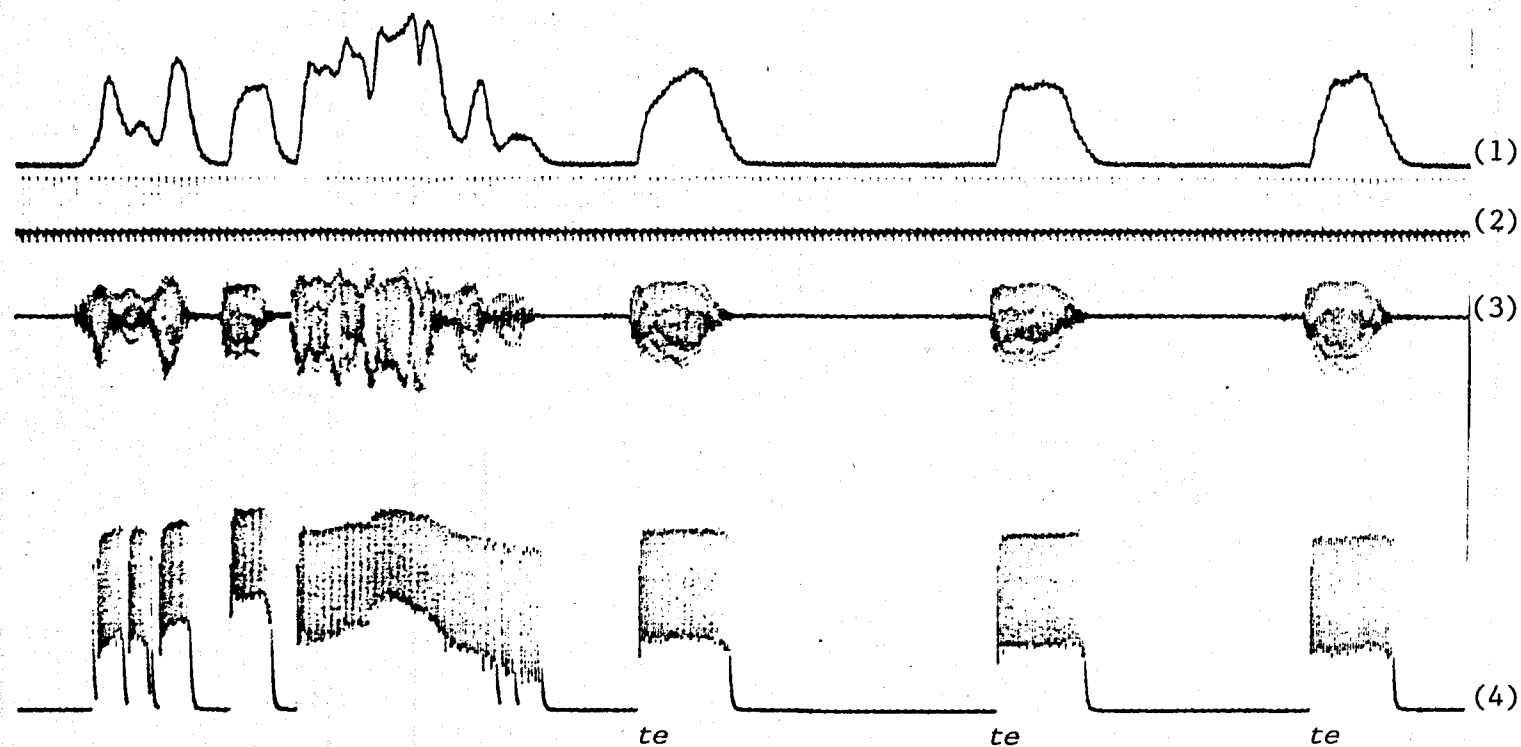


Figure 9 : te 'story', frame A

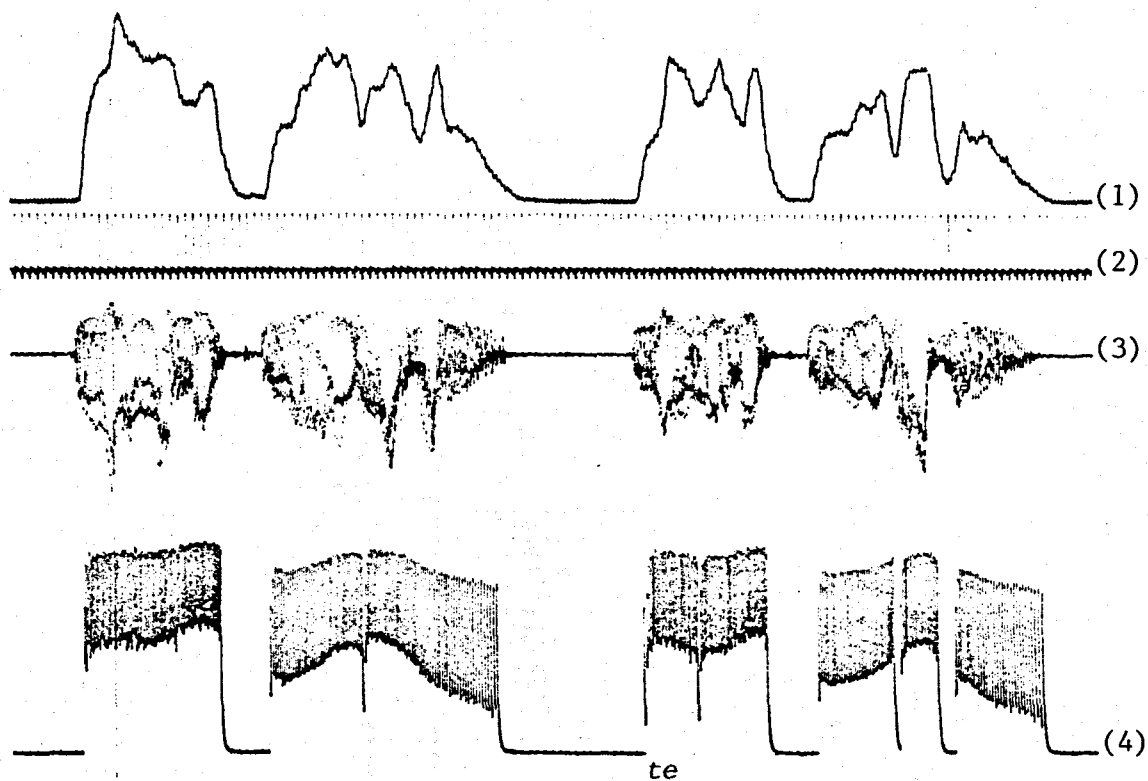


Figure 10 : te 'story', frame C

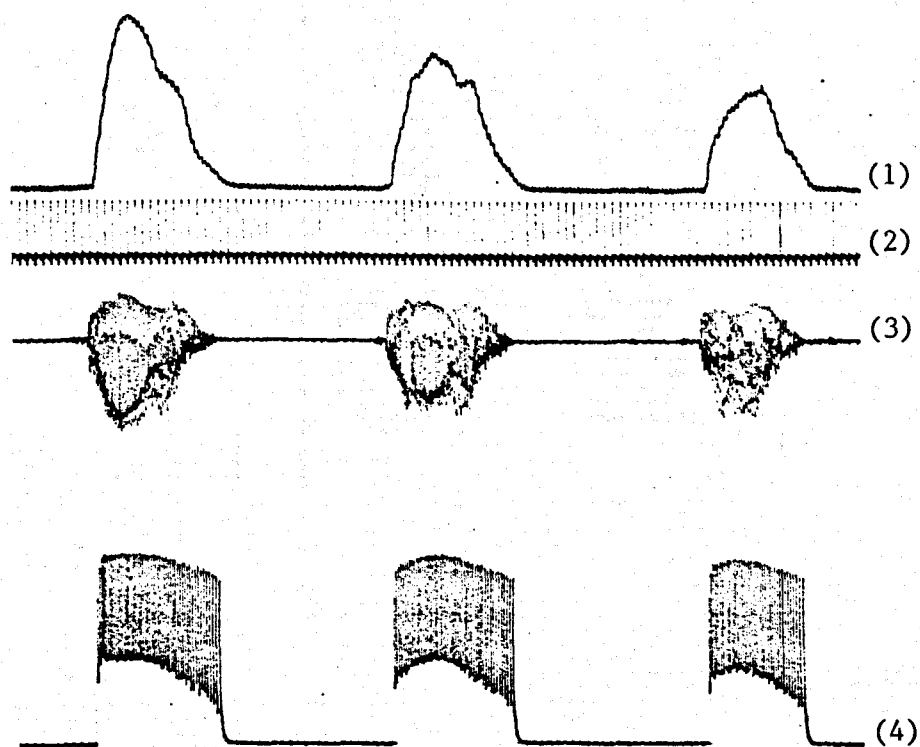
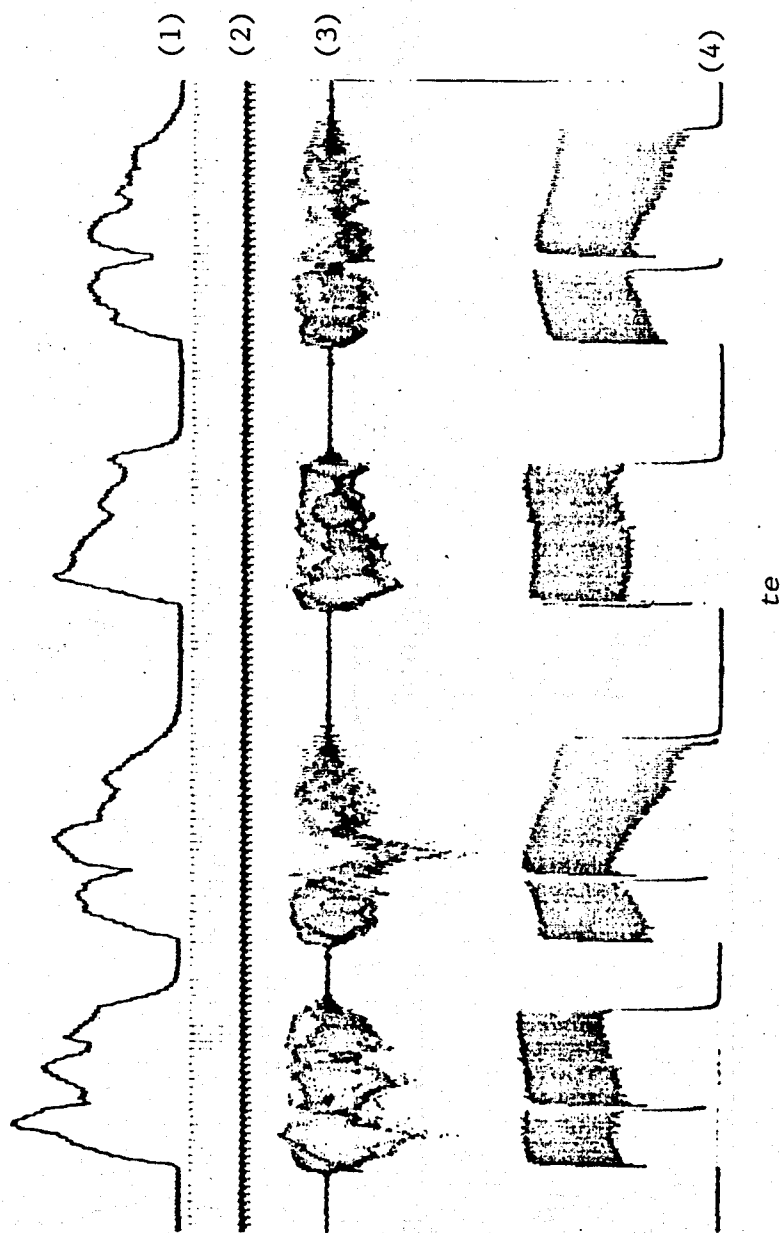


Figure 11 : te 'tuft', frame A



— Figure 12: te 'tuft', frame C

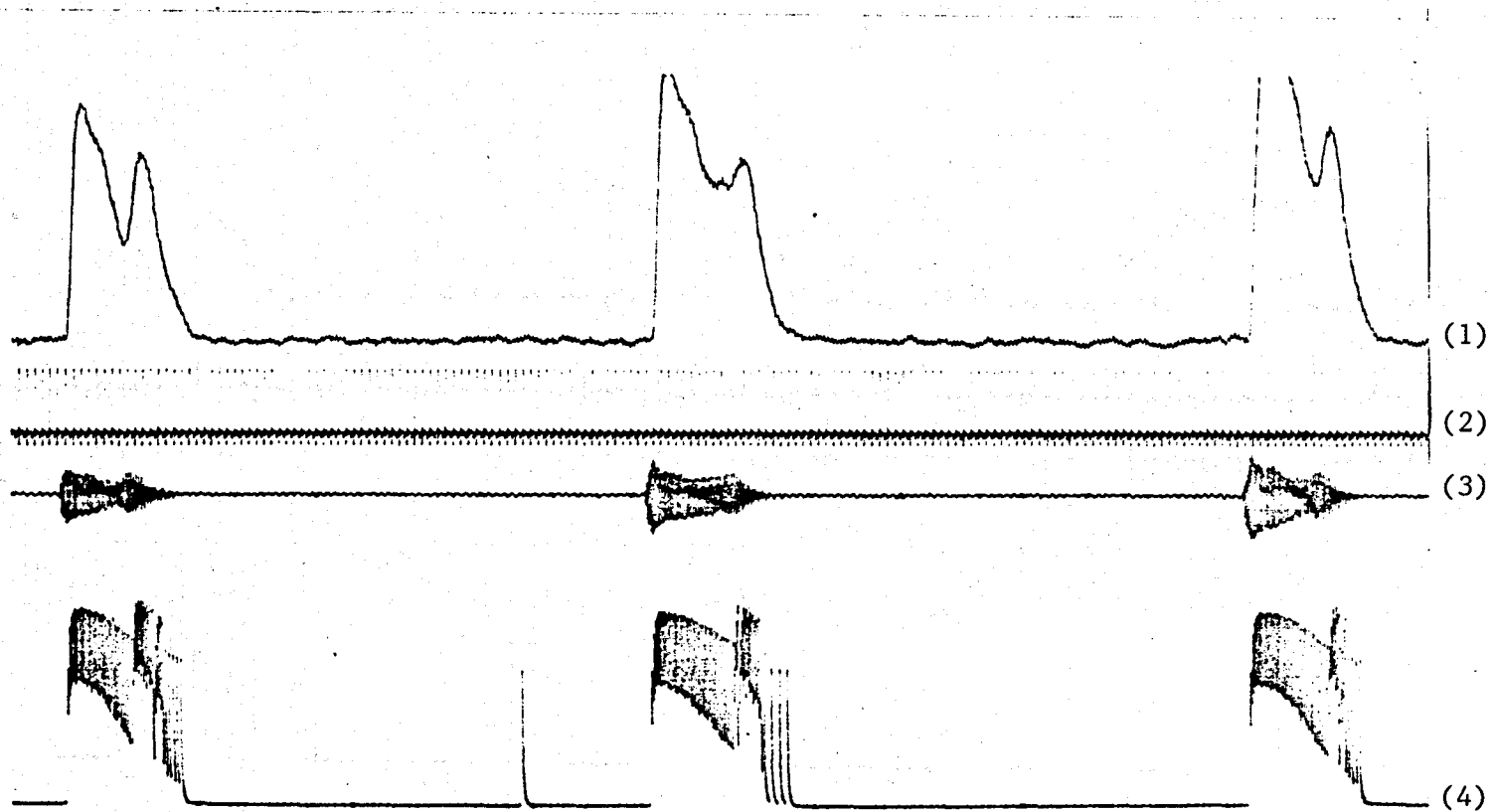


Figure 13: 2P, frame A

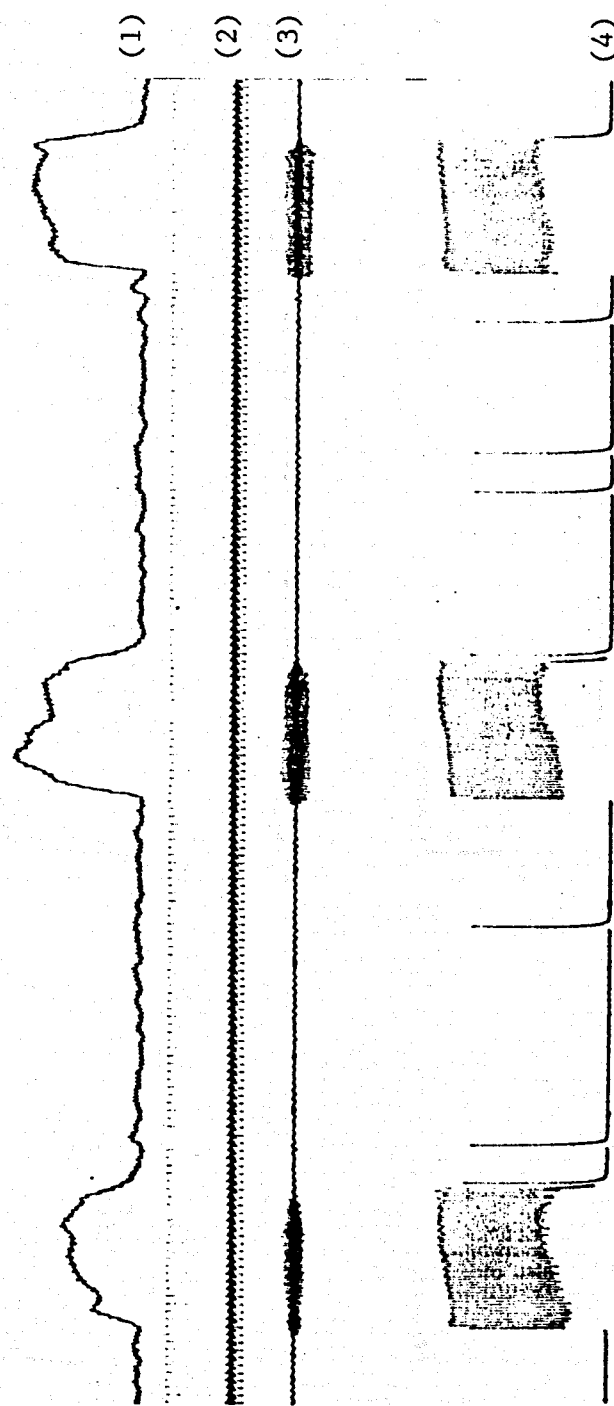


Figure 14:3P, frame A

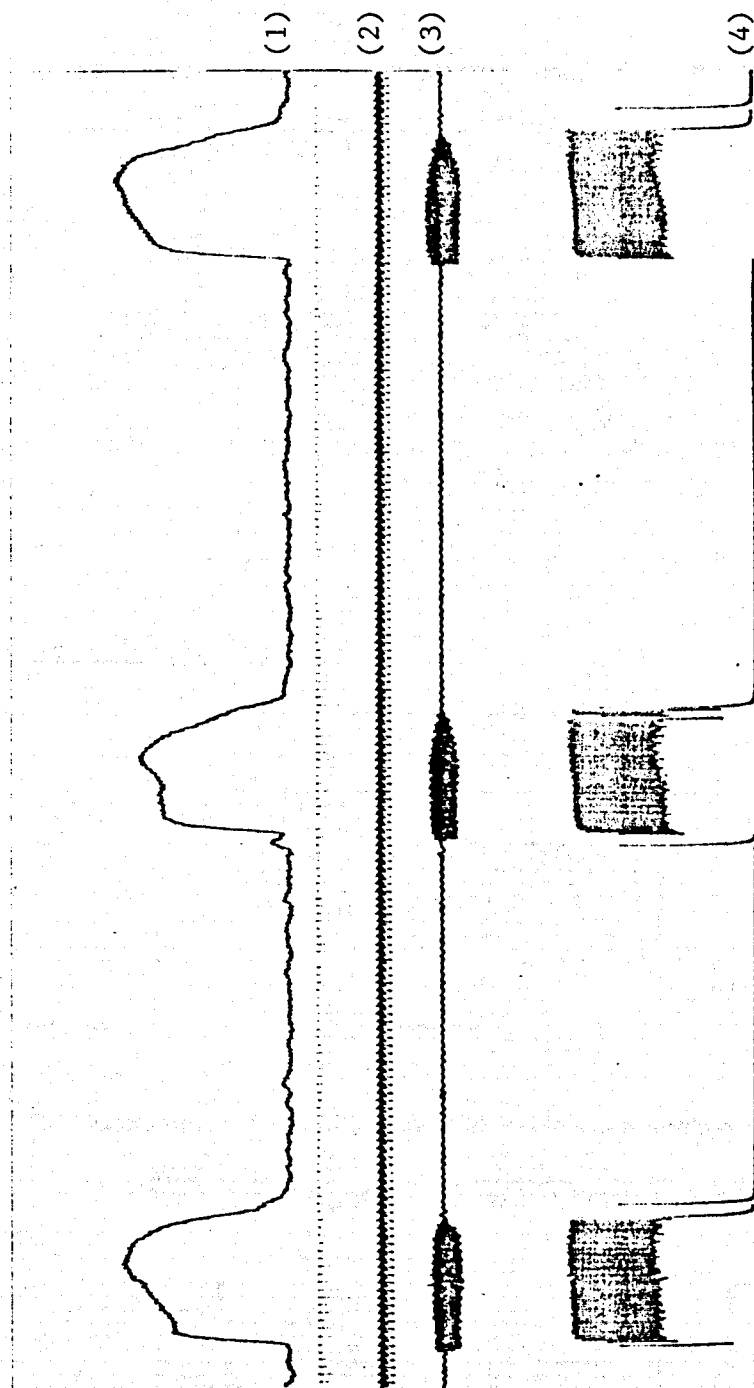


Figure 15: 'excreta', frame A

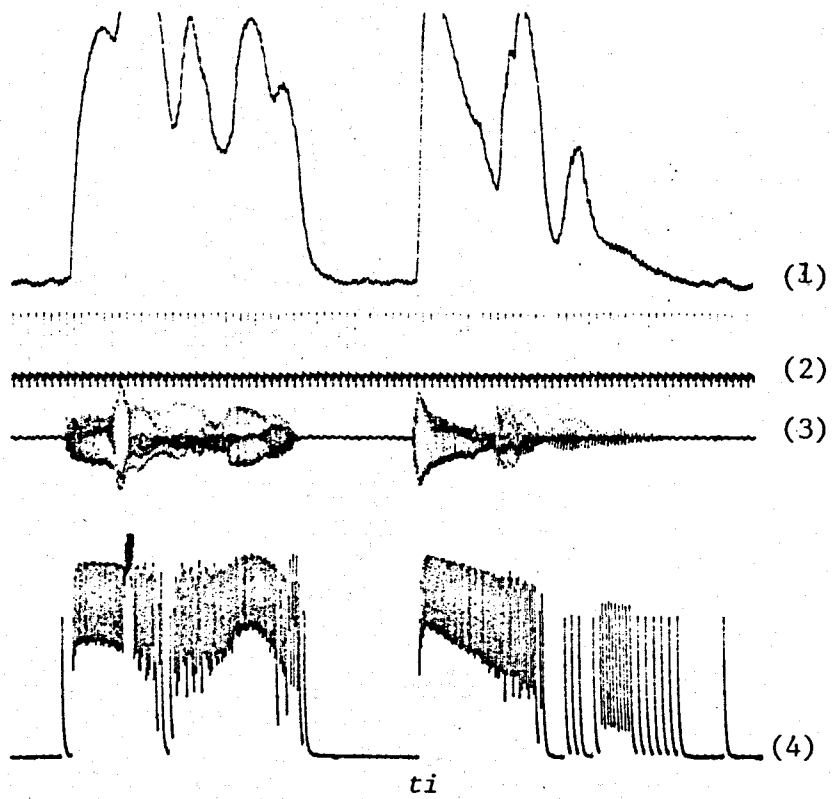


Figure 16: 2P, frame C

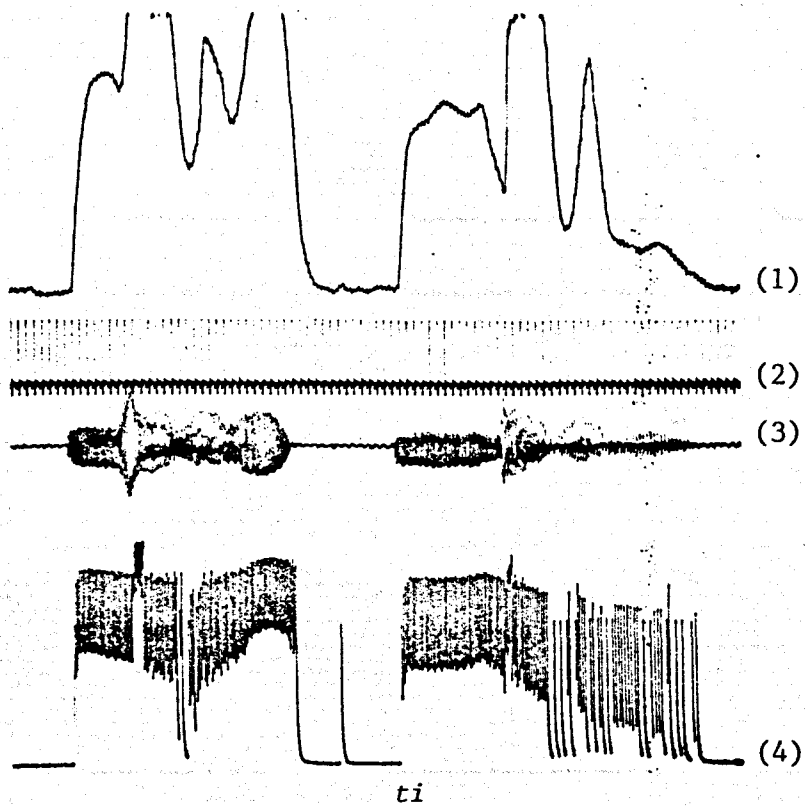


Figure 17: 3P, frame C

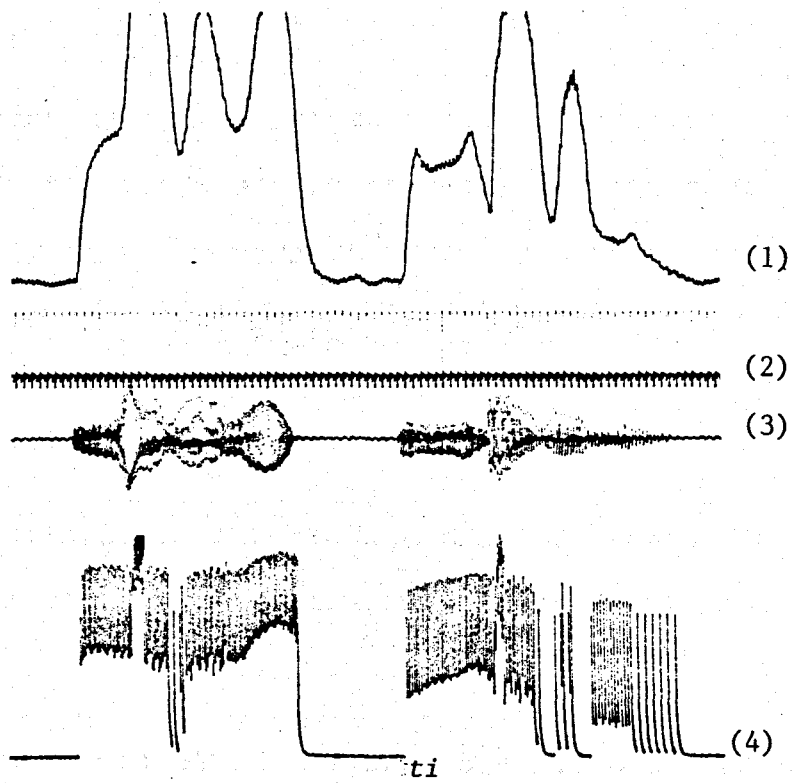


Figure 18: 'excreta', frame C

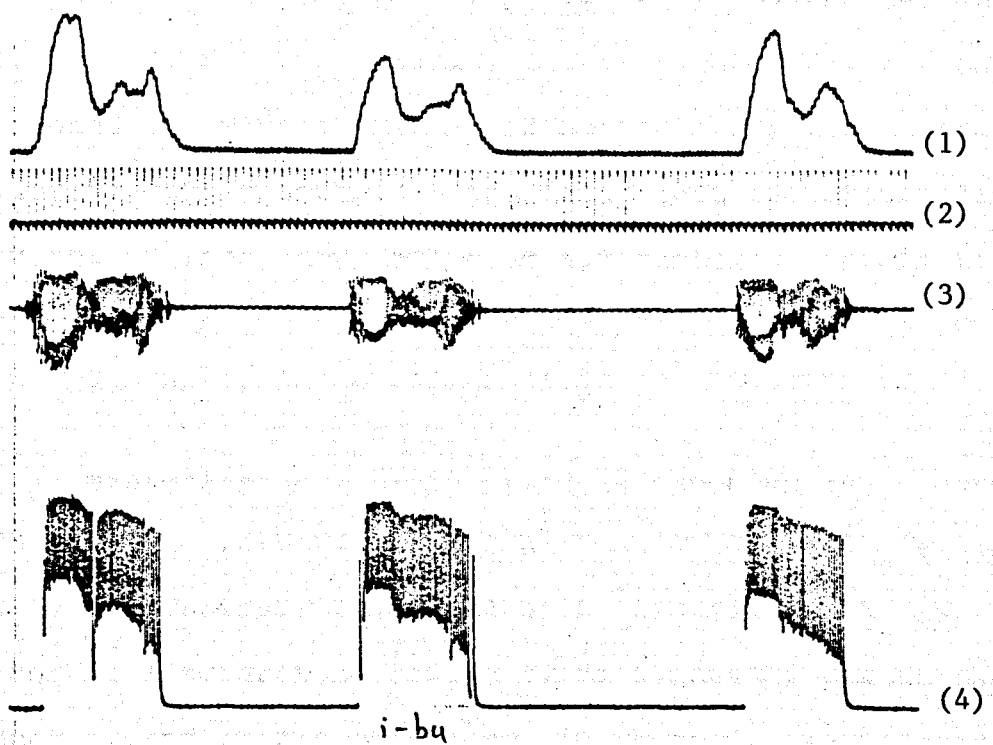


Figure 19: 'come', frame A

The sound intensity, (1), of this item is greater (it rises slightly above the range of the tracer), and the oscillogram (3) is more active, with the subject speaking more forcefully. This forcefulness endures into figure 4, which records the utterance in the set frame, C. Here the item shows no perturbation, and retains its falling contour.

A.2.3.3 Similarly, the mingogram of 1S pronoun in figure 3 shows the tone contour persisting unperturbed by its environment - frame C, again.

A.2.3.4 Item 8, Br: GAM. Figures 5-8 record a monosyllabic item with contrasting falling (F) and level (L) contours. It could be argued that figure 6 shows gi 'fear' to have a slightly rising contour, but in the light of figures 13-18 (the minimal triad *ti*, recorded by the same person) it is interpreted as L.

A.2.3.5 Figure 9 is a mingogram of *te* 'story' (item 10, Amb: GUMU). It can be seen how the oscillogram records the air turbulence around the microphone caused by the aspirated segment [*t^h*]. Figure 10 shows that the item is subject to perturbation in the controlled frame, C, adopting a R contour. Similarly, *te* 'tuft' has its F contour (figure 11) perturbed to a R contour in the same environment (figure 12).

A.2.3.6 A minimal monosyllabic triad is recorded in figures 13-18. This is the form *ti*, item 2 Br:GAM. Figure 13 is interpreted as a F contour, figure 14 as L, and figure 15 as R. The reason for interpreting figure 14 as L, not R, can be seen when figures 17 and 18 are compared: in frame C, *ti* 'excreta' maintains its rising curve more steadily than does *ti* 3P.

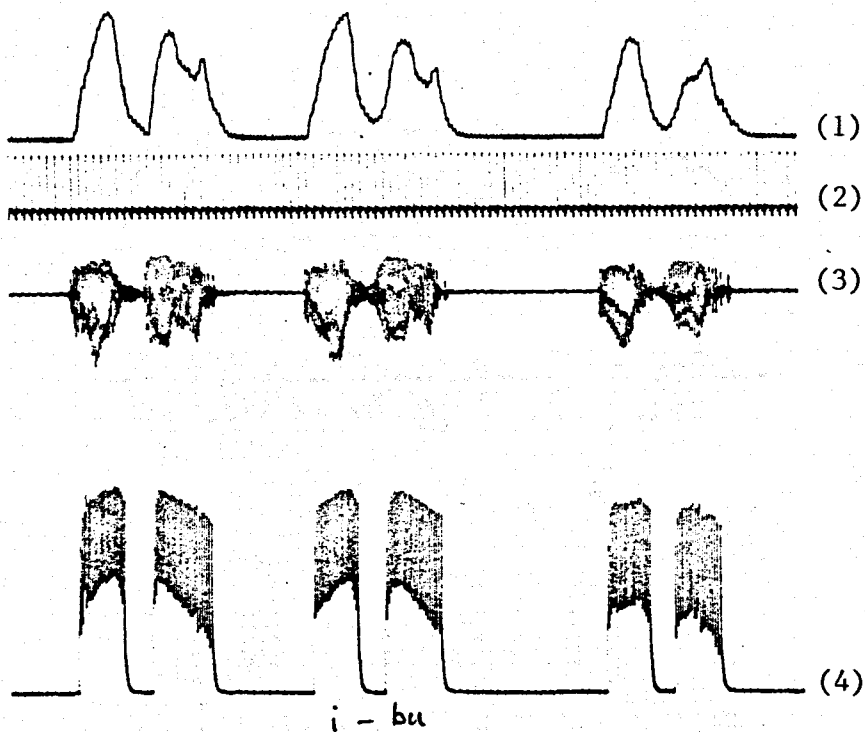


Figure 20 : 3S, frame A

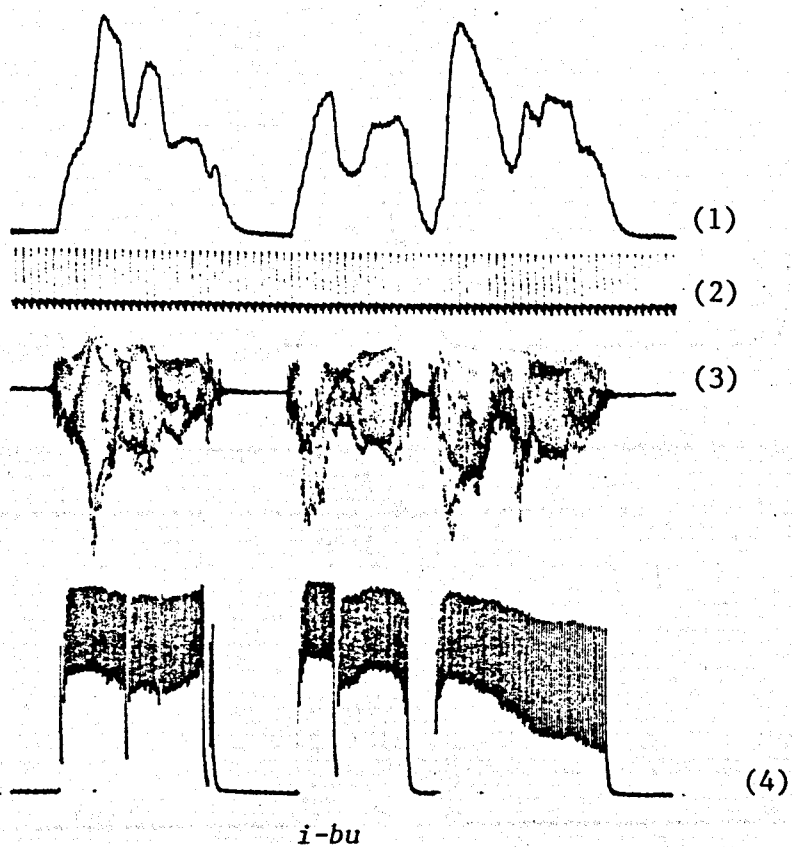


Figure 21 : 'come', frame C

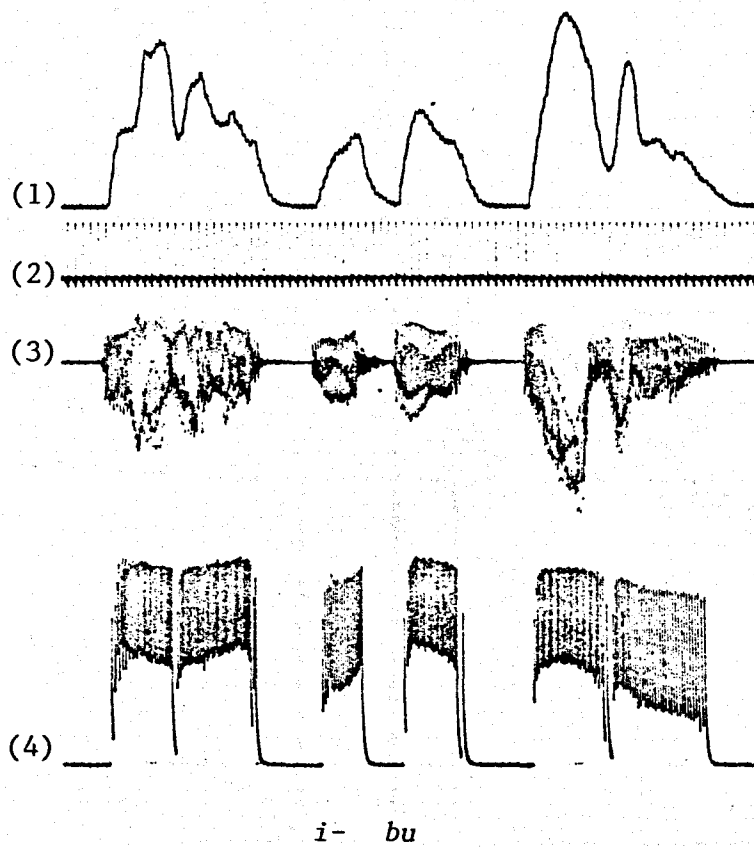


Figure 22 : 33, frame C

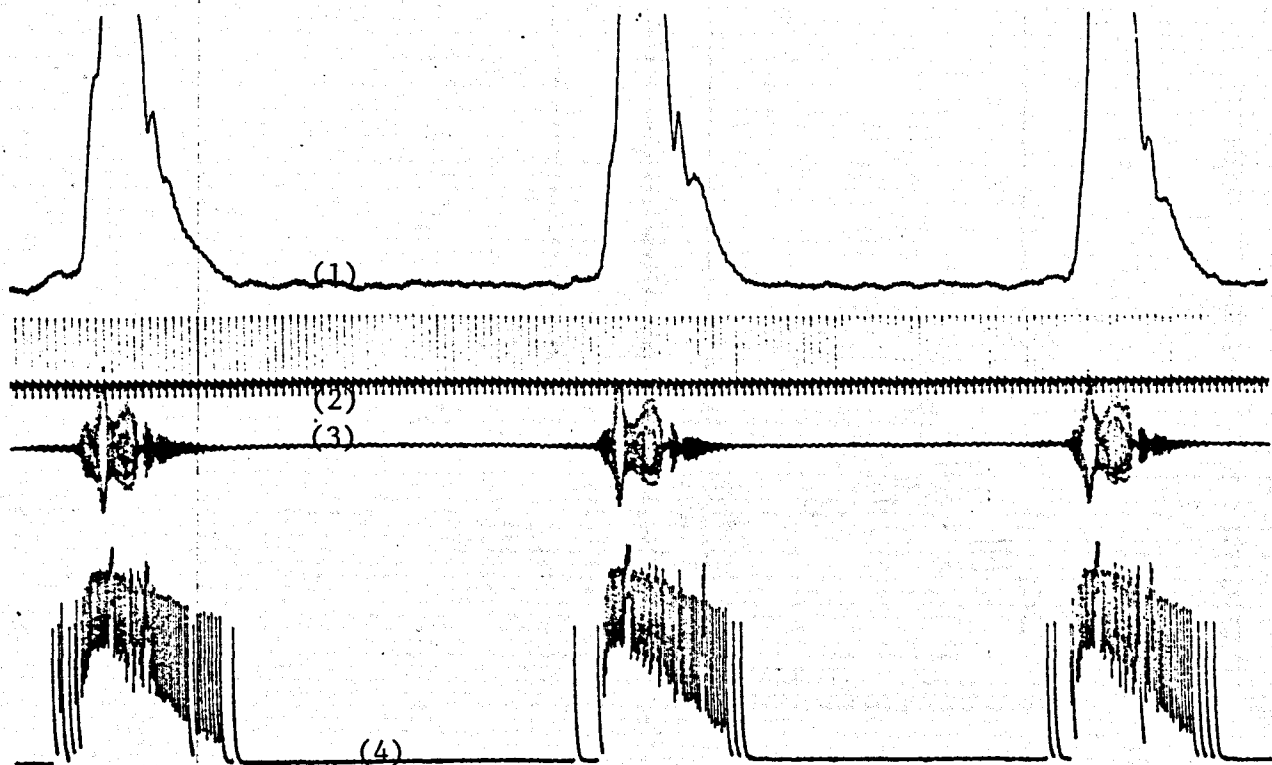


Figure 23 : jari 'decoration', frame A

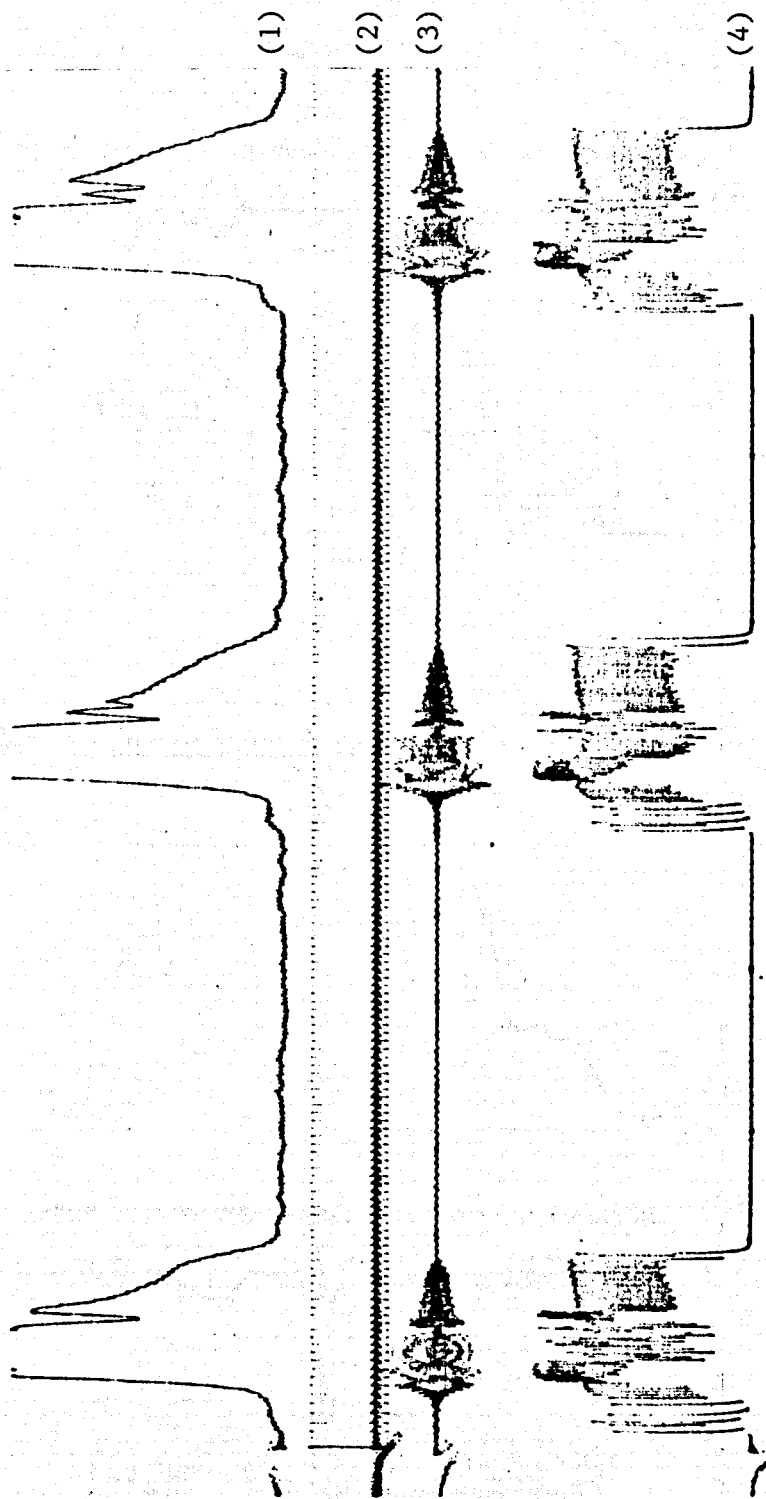


Figure 24 : jari 'cassowary', frame A

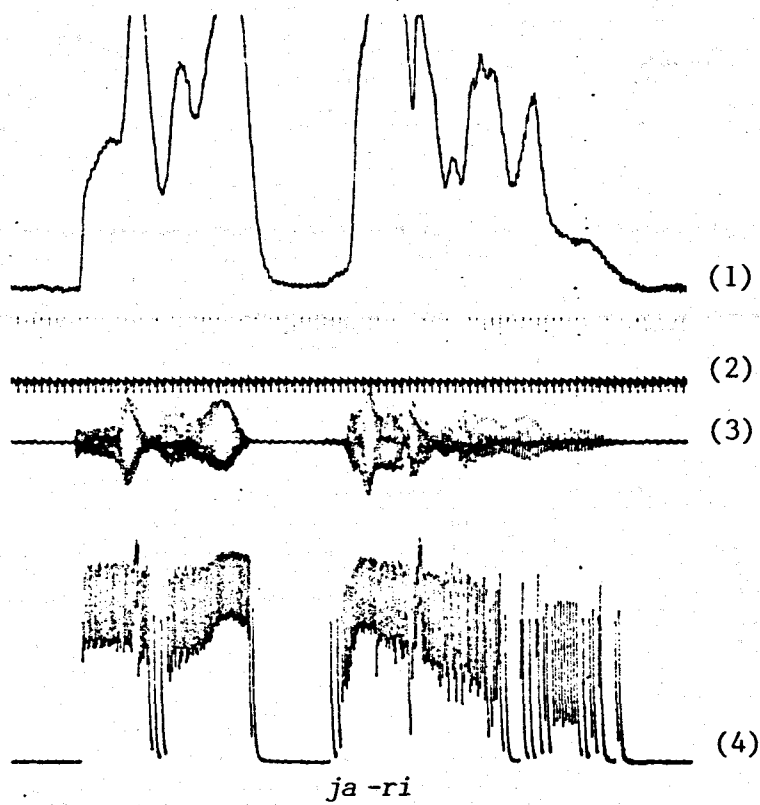


Figure 25 : . 'decoration ' frame C

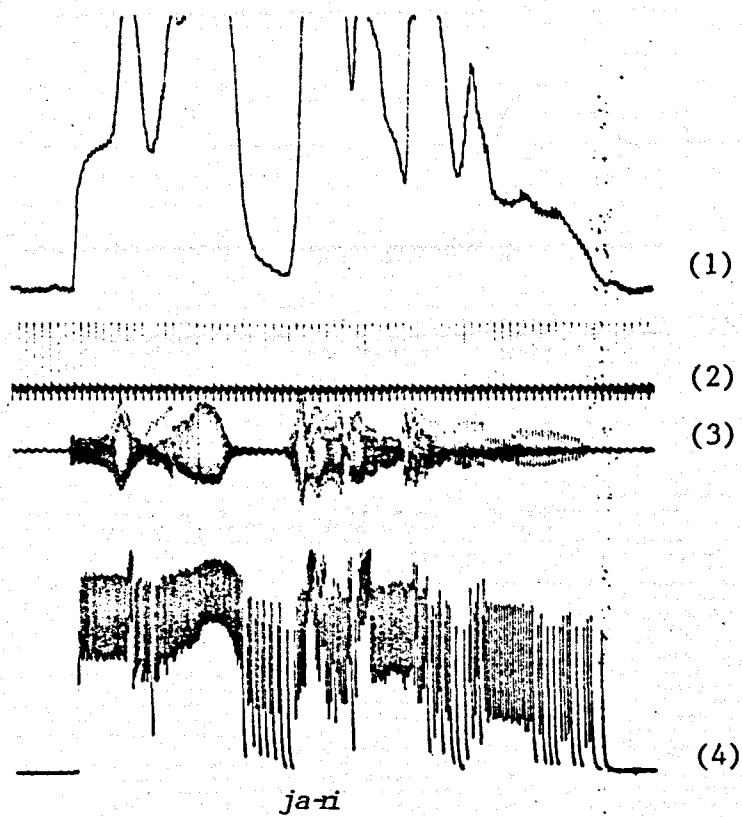


Figure 26 : 'cassowary', frame C

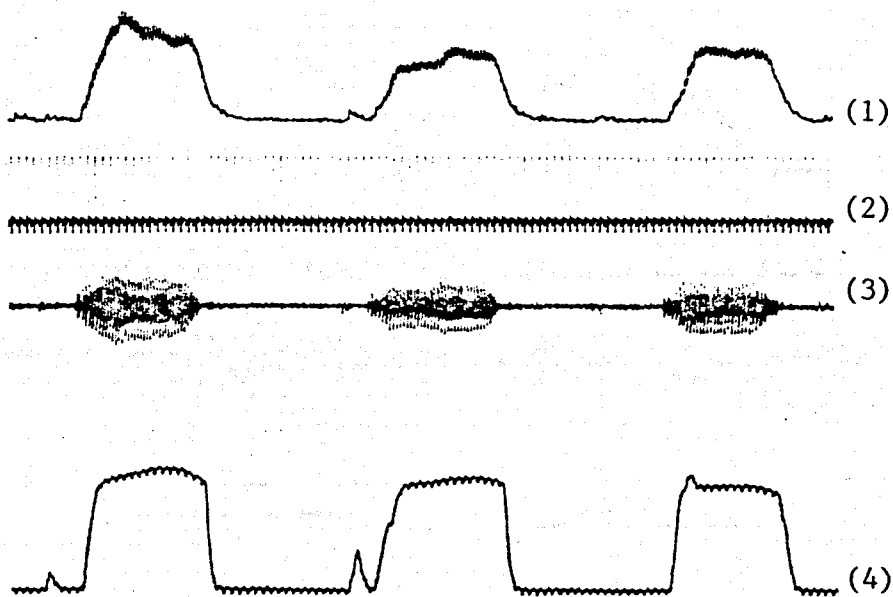


Figure 27 : 1S, frame A

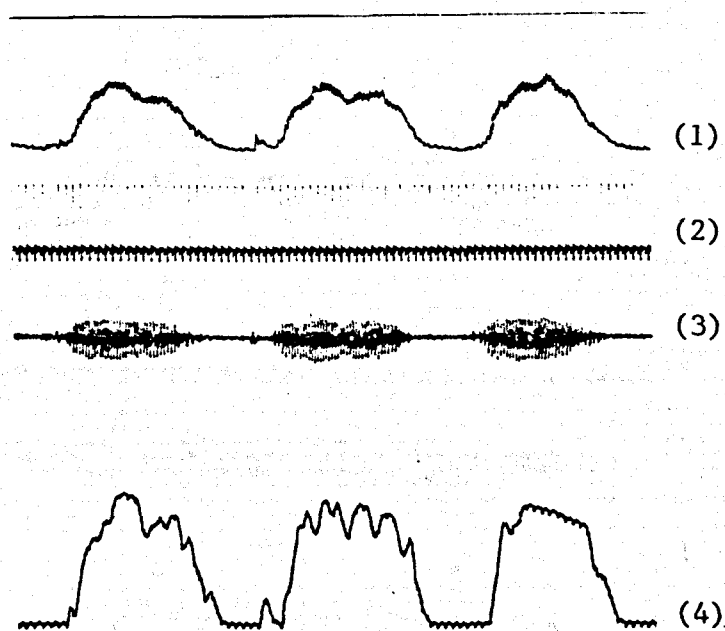


Figure 28 : 2S, frame A

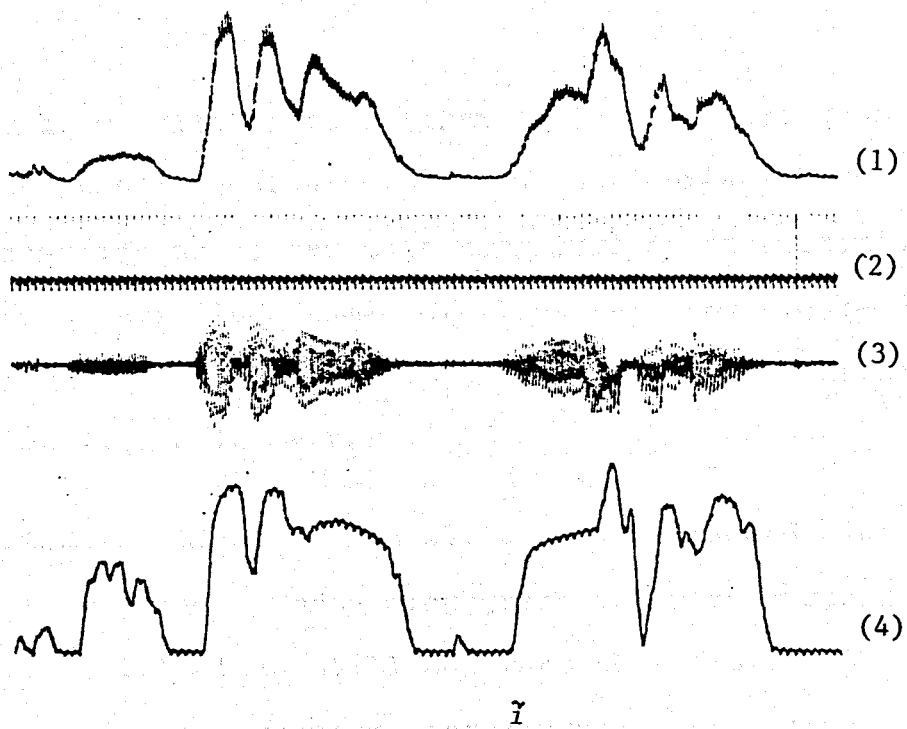


Figure 29 : 1S, frame G

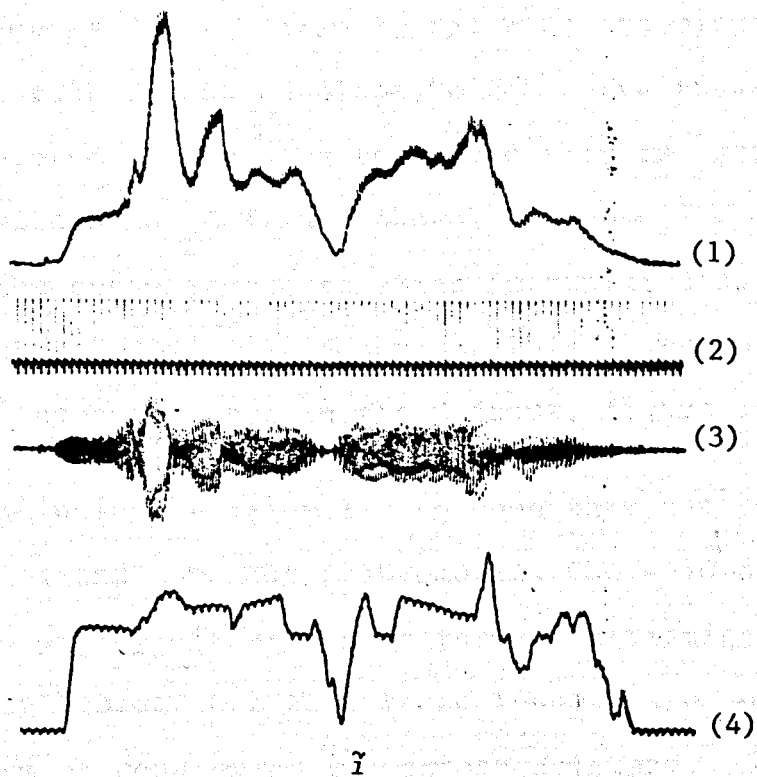


Figure 30 : 2S, frame C

A.2.3.7 A disyllabic pair (item 11, Amb: GUMU), showing a F and RF contrast in contours is shown in figures 19-22. Figure 19 is interpreted as F, and this supported by the item's contour in the controlled frame, C, illustrated by figure 21. In much the same way, figure 22 supports interpreting the tone curve shown in figure 20 as RF.

A.2.3.8 Figures 23-26 (item 13, Br: GAM) record a disyllabic F <--> R contrast. These mingograms are not so clear as the previous ones, but it is still apparent that figure 23 can be argued as showing a F contour, and figure 24 a R contour. Both traces are fractured through intruding noise, and the dislocated traces have to be read as if lowered into their proper slots in the envelopes. Support for the interpretation of pitch curves is present in the mingograms of frame C, figures 25 & 26.

A.2.3.9 Figures 27-30 (item 1, Na: WAB) are mingograms with single line, rather than envelope, pitch curve traces. Figure 27 is interpreted as a rising tone, and this is supported by its contour within the C frame, shown in figure 29. The serrated edge of the curve in figure 28 is interpreted as an overall fall, and corroborative evidence for this is present in the mingogram of its occurrence in the C frame, figure 30.

A.3 Conclusion. It will be seen that the question of tone is complex and somewhat problematic. The evidence suggests that speakers employ either two or three contrasting tones with mono- and disyllabics, but that these tonemes are not employed in any uniform or consistent way across Huliland. General statements about tonal contrasts - eg that the minimal pair jari 'cassowary' and jari 'decoration' are distinguished by a low-

rising tone and a high-falling tone respectively - are difficult to maintain in the light of the evidence presented in table A.

A.3.1 About the most that can be said is that there seems to be a lot of agreement on the tones discriminating the 1S and 2S pronouns, and certain items (such as *jari* 'decoration') seem to be accorded the same tone in most/all areas.

A.3.2 Huli monosyllabics and disyllabics yield evidence of the four contrasting tones:

Tone 1 (falling)	:	grave (à)
Tone 2 (rising)	:	acute (á)
Tone 3 (level)	:	macron (ā)
Tone 4 (rising-falling)	:	circumflex (â)

These tones will now be described.

A.4 TONE 1 : FALLING

A.4.1 Both mono- and disyllabics showing this tone contour can be described as HM or ML falls. Examples of monosyllabics are given in figure 31a-d, and examples of disyllabics in figure 32a-d.

A.4.2 The pitchline of the mingograms given in figure 31 illustrates the salient feature of this tone: a downward glide. Although this tone is described as a HM or ML fall, it is not the length but the direction of the fall that is critical in interpreting its status.

A.4.3 In disyllabics, also, it is the direction of the tone contour that indicates whether or not an item is in this tone

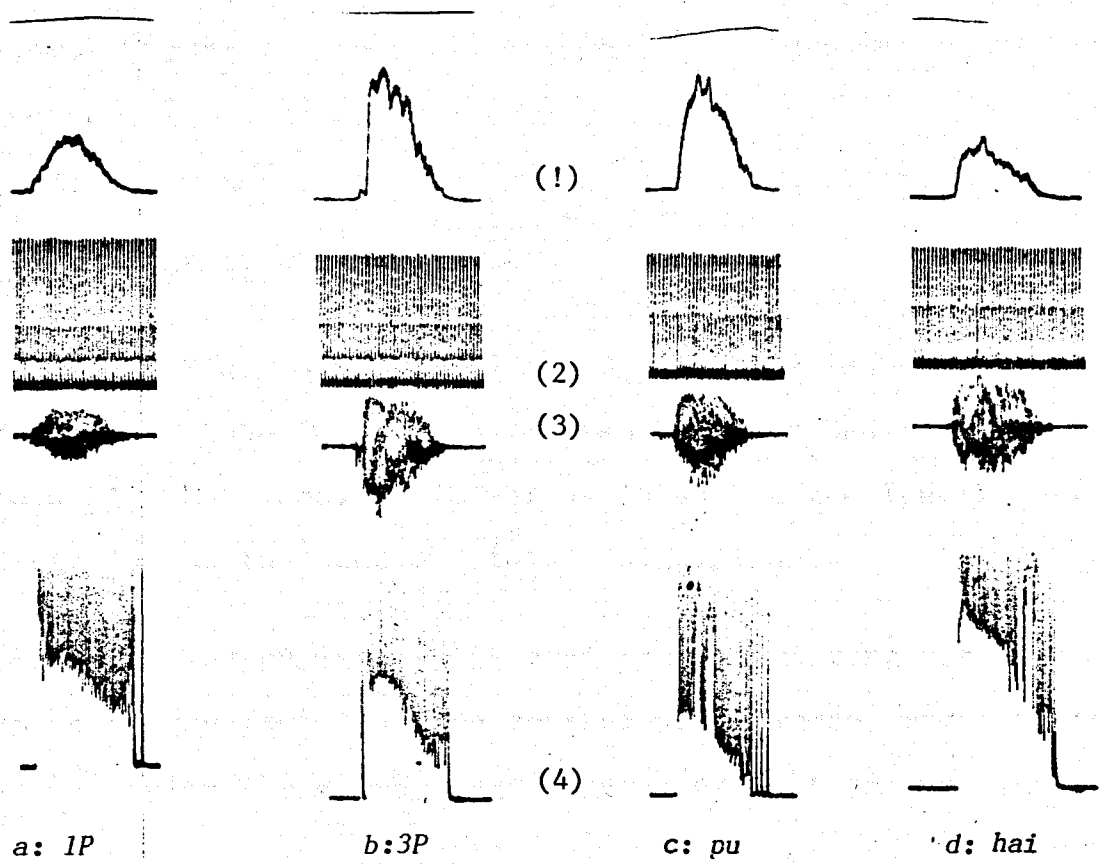


Figure 31: Tone 1 monosyllabics

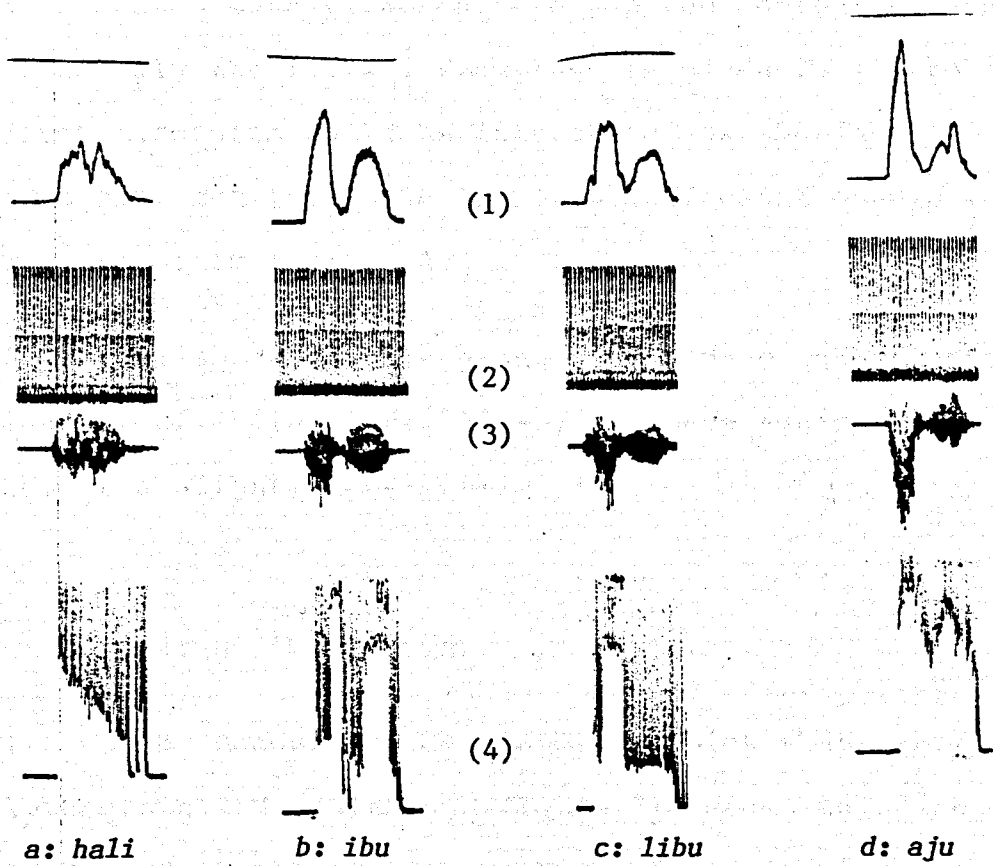


Figure 32: Tone 1 disyllabics

group. Figure 32 exemplifies this with mingograms of disyllabic items.

A.5 TONE 2: RISING

A.5.1 Figures 33a-d and 34a-d exemplify monosyllabic and disyllabic tone 2 items, which can be described as LM, MH or, possibly, LH rises. Once again, it is not the length but the direction of the contour that is significant.

A.5.2 The duplex oscillogram trace in figure 33a owes its shape to the fact that the speaker was a woman, and frequencies in her voice above 800 Hz were registered below the line.

A.6 TONE 3: LEVEL

A.6.1 Tone 3 monosyllabics have a pitch contour of HH, LL, or MM : usually the latter. Examples are given in figure 35a-d. The first mingogram could be interpreted as showing a slight rise in pitch, but this rise is not significant enough to suggest that the item is tone 1.

A.6.2 Disyllabics of this group show a MM or HH pitch curve. Examples are given in figure 36a-d, and once again, there is a evidence of a slight, non-tonemic rise.

A.7 TONE 4: RISING-FALLING

A.7.1 Both monosyllabics and disyllabics that carry tone 4 usually begin at M (although figure 37a seems to start at L), rise to H, and then fall away to M or to L. As with the other

tones, it is the directional pattern that is significant.

A.7.2 Figure 37a-d illustrates tone 4 monosyllabics, and figure 38a-d tone 4 disyllabics.

A.8 POLYSYLLABICS

A.8.1 Under this heading, polysyllabics of more than two syllables will be considered. With one possible exception, and excluding mono- and disyllabic diads and triads that have undergone affixation, there are no minimally contrasting items of more than two syllables. The possible exception is *damene*, which can be glossed as 'kinsfolk/friends' or 'kindred things', some speakers claiming that the meanings are differentiated by tone. However, in the survey *damene* was always produced as tone 4, whatever its environment or meaning.

A.8.2 The survey gathered data on tri-, tetra-, penta- and hexasyllabics. As was the case with with contrasting diads and triads, no pattern of universal usage emerged, beyond there being a correspondence between three of the contrasting tones and the tonal patterns assigned to trisyllabics and above. These will be described briefly, in turn.

A.8.3 Trisyllabics. The four tones were not all found in the data, there being no example of a rising tone contour (tone 2).

A.8.3.1 Items with falling tone contours (tone 1), were such as the following:

dongone skin

hariga track

mbalini sibling of opposite sex

igibu vine

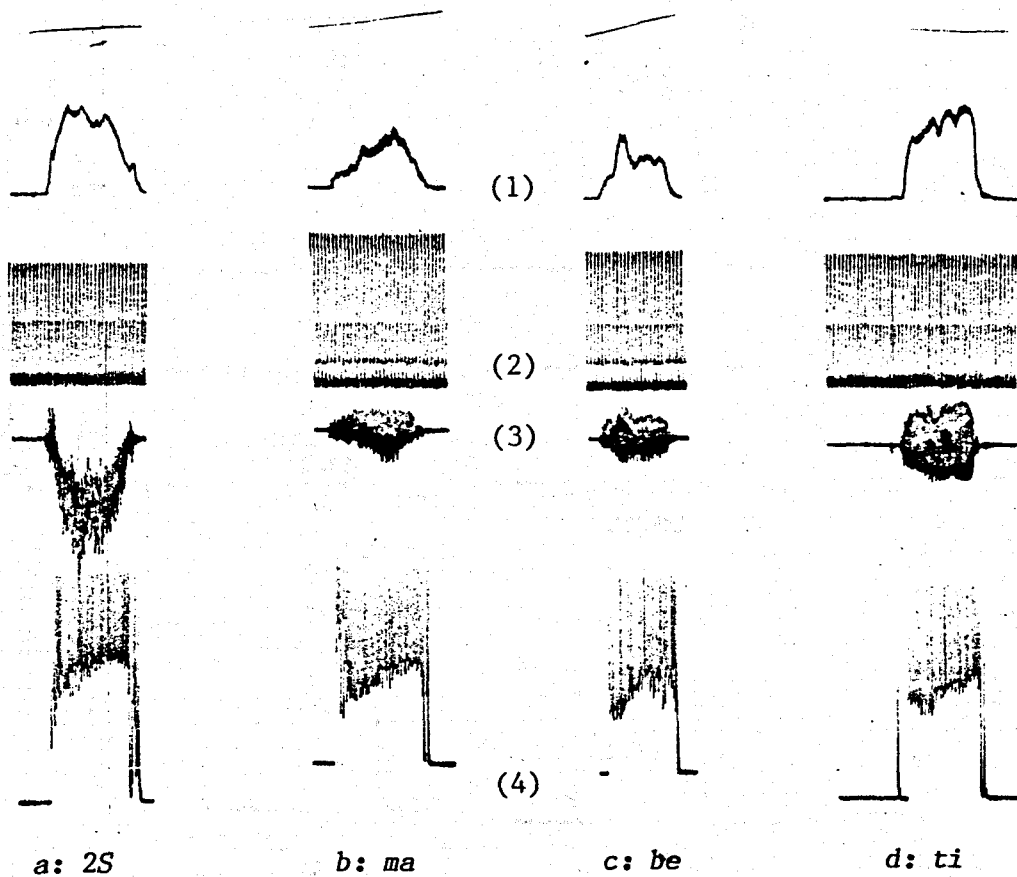


Figure 33: Tone 2 monosyllabics

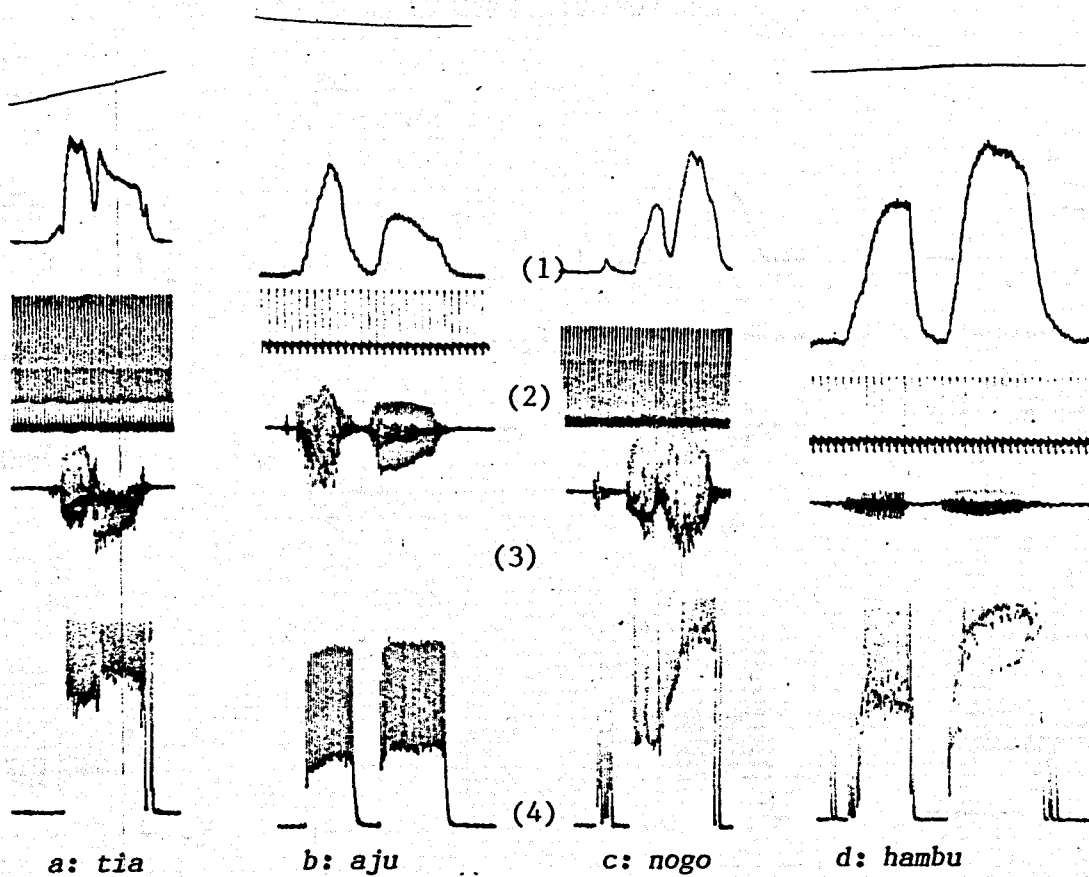


Figure 34: Tone 2 disyllabics

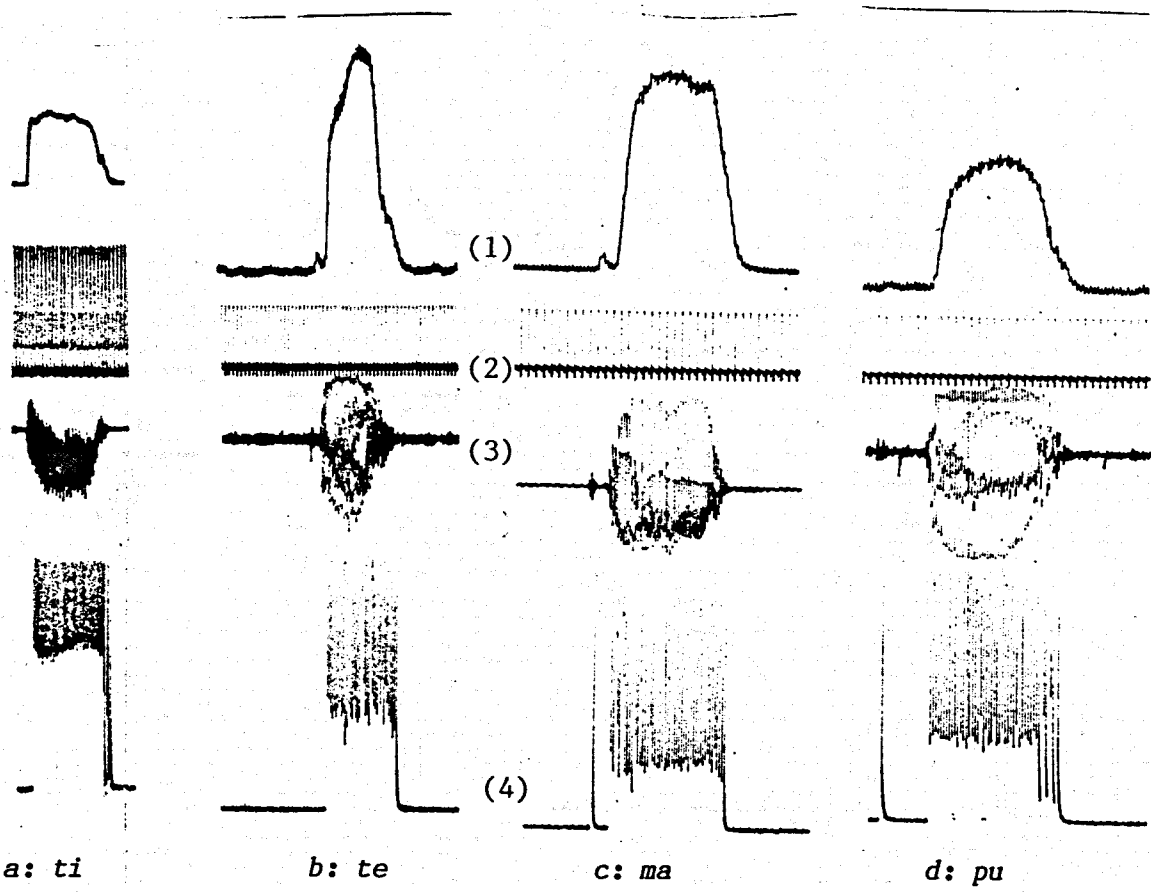


Figure 35: Tone 3 monosyllabics

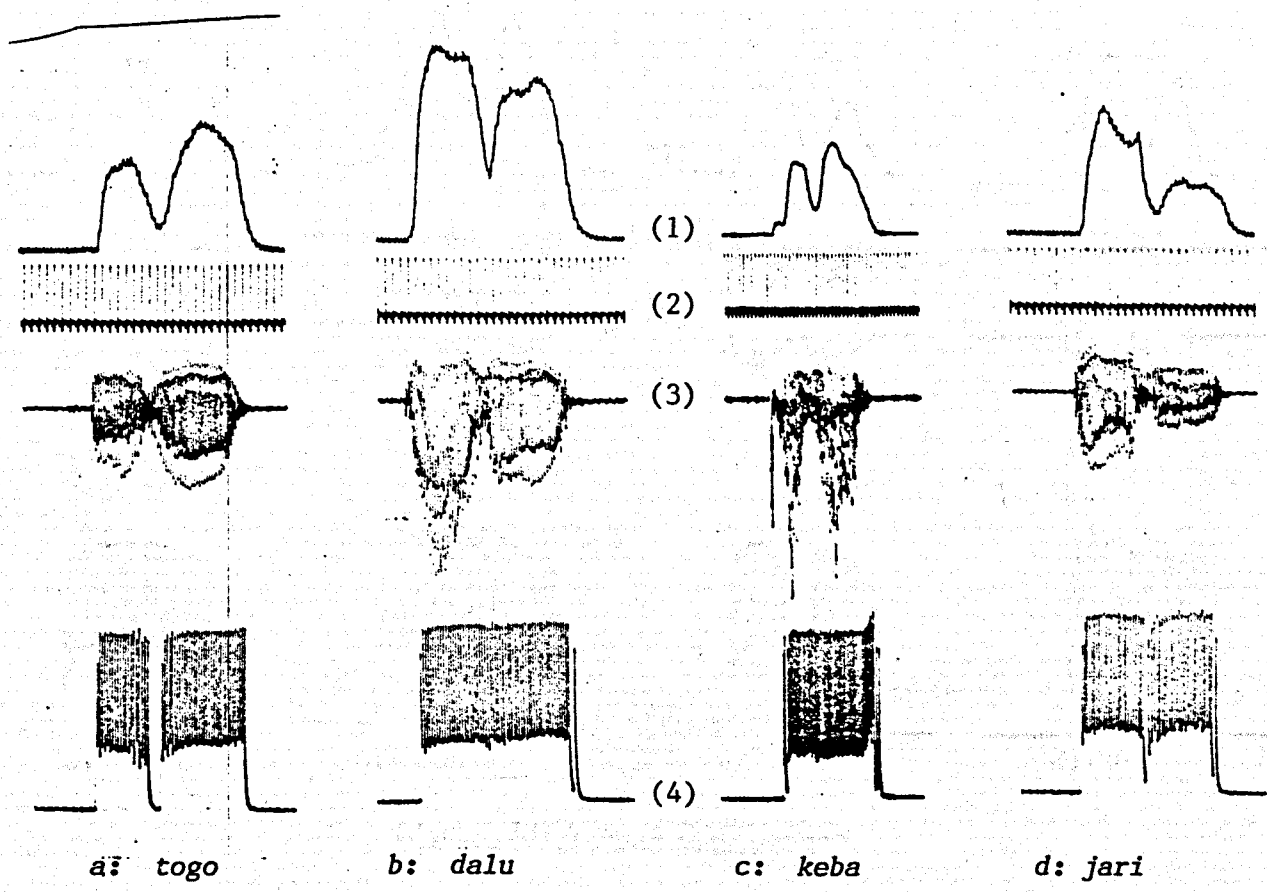


Figure 36: Tone 3 disyllabics

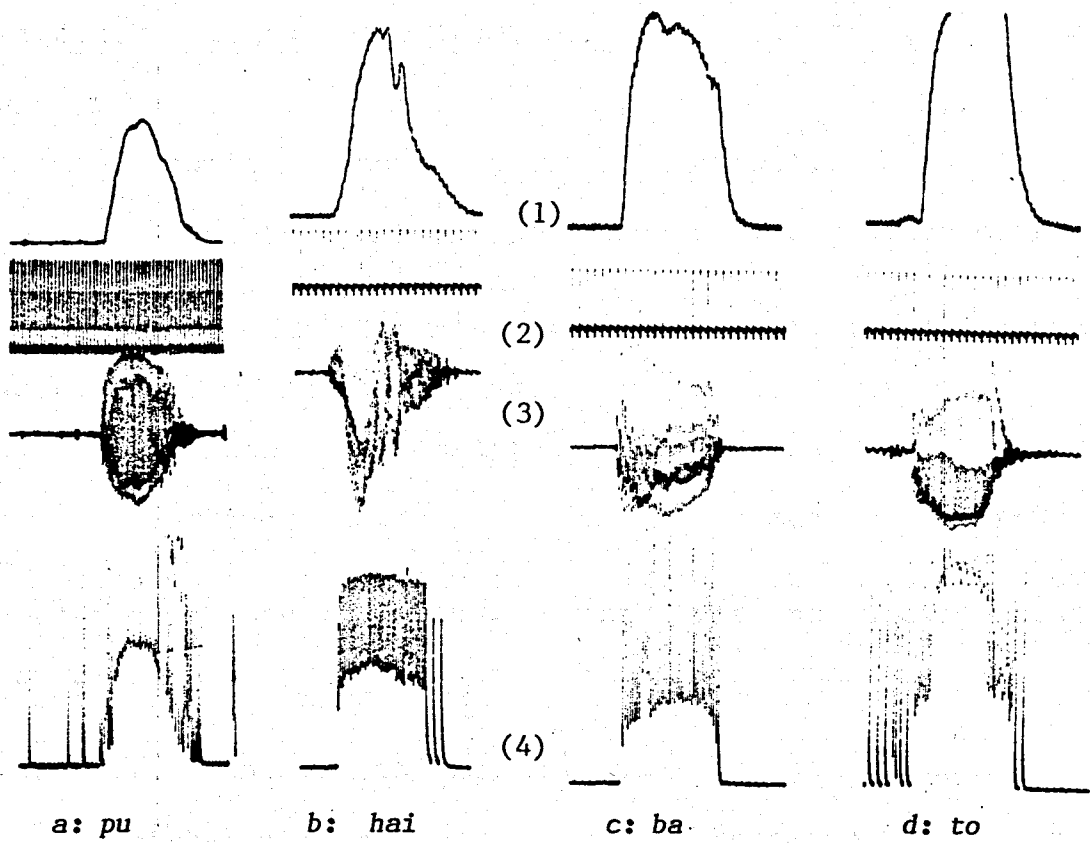


Figure 37: Tone 4 monosyllabics

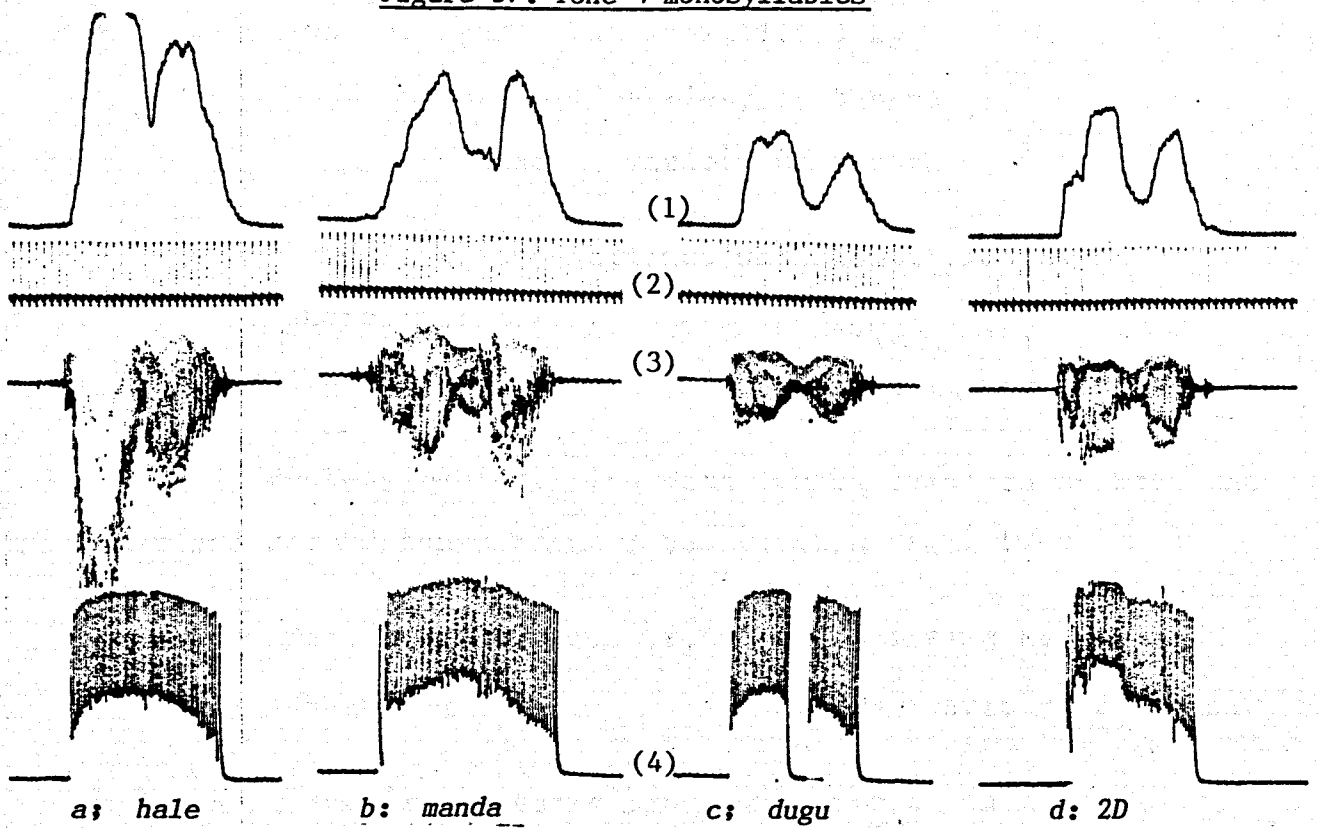


Figure 38: Tone 4 disyllabics

A.8.3.2 Items with level contours (tone 3) were exemplified by

igiri	boy	agali	man
jandare	spear	gambagwa	cane grass

A.8.3.3 Items with rising-falling contours (tone 4) were such as

mememe	accidentally	hamene	brother
abwaga	bird	damene	kindred

A.8.4 Tetrasyllabics. Tone 2 was once again absent from the data.

A.8.4.1 Tone 1, falling, was exemplified by

igibali	vine	henemane	truly
humburini	abode of the dead	hawalanga	string game

A.8.4.2 Tone 3, level, was exemplified by

hogorale	variety of banana
maramara	variety of banana

A.8.4.3 Tone 4, rising-falling, was exemplified by

bibahende	all, every	babagane	wing
angibuni	sow, female	hingiduli	hiccoughs

A.8.5 Pentasyllabics. The data lacked evidence of both the first and second tones among five-syllable items.

A.8.5.1 Tone 3, level contour, was exemplified by

arangojabe	bird	miaramara	variety of banana
------------	------	-----------	-------------------

A.8.5.2 Tone 4, rising-falling, was exemplified by

halombijane	ankle	elebaijanga	bird
homagaliba	species of pandanus	arangojabe	bird

A.8.6 Hexasyllabics. Only two examples of six-syllable unaffixed, simple - ie non-compound - words were present in the survey, since in previous data collections these were all I had found. They were omitted by most participants, possibly because they were from another dialect, and unfamiliar. One of them, *girolalemame* 'scented shrub', was produced on a rising-falling tone (tone 4) by most of those who tackled it, while the other, a variety of sweet potato called *telolobaijanga*, was generally recorded as a level contour (tone 3).

APPENDIX B

SOME MINGOGRAPHIC DATA ON INTONATION

APPENDIX B

SOME MINGOGRAPHIC DATA ON INTONATION

These data are presented as samples that lend some support to the interpretation of intonation given in 4.4.

B.1 The first mingogram illustrates intonation 3 across an initial group, leading in to the second, final, group, which is intonation 4. This is the interpretation given in 4.4.3.3.

B.2 The second and third figures illustrate stepping up, in both cases on the S pronoun. This is a device for giving salience to an item (cf 4.4.4.4): "Yesterday I went to the garden", and "Where were YOU yesterday?".

B.3 Figure 4 similarly gives salience to

BU pu
hit/cut-STM go-2S-IMP PRES

by stepping up in tone, indicated on the mingogram.

B.4 Figures 5-7 are mingograms that make up text 3 (cf 12.2.3), and illustrate the basis for the interpretation of the intonation contours ascribed to that text.

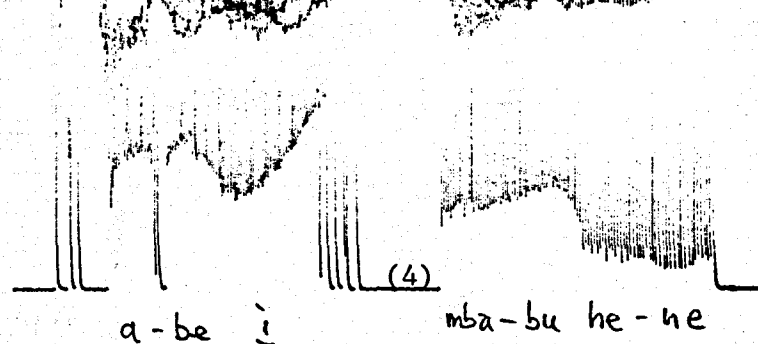
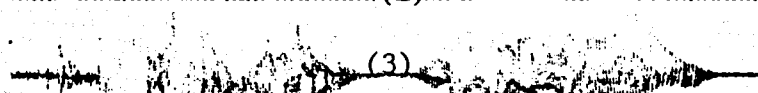
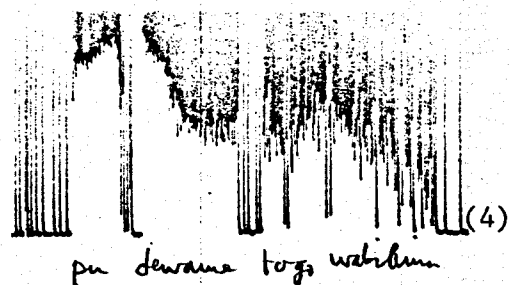
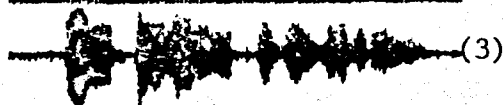
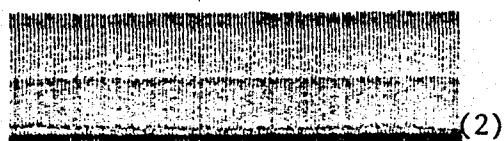


Figure 1

Figure 2

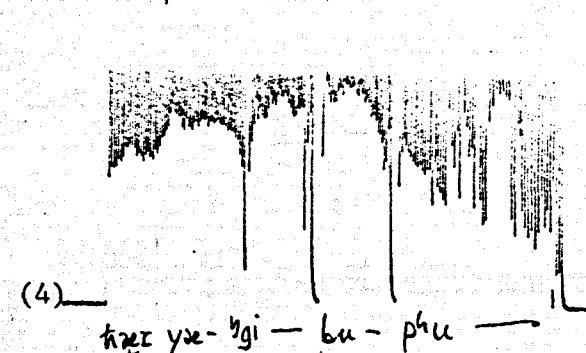
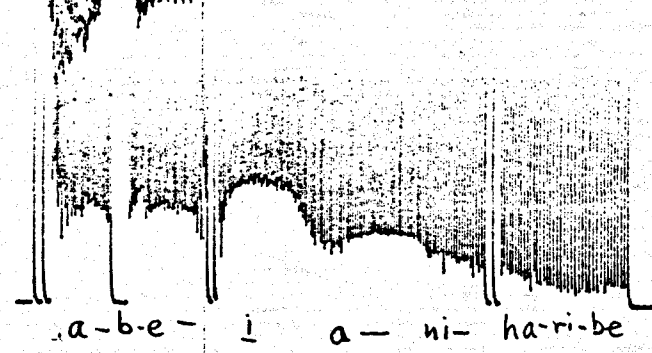
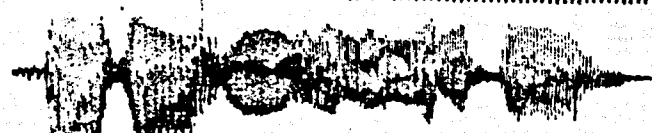
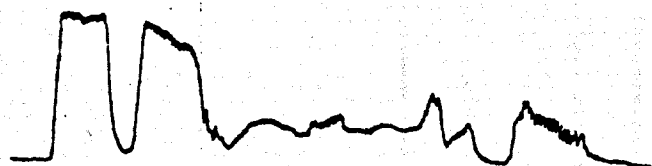


Figure 3

Figure 4

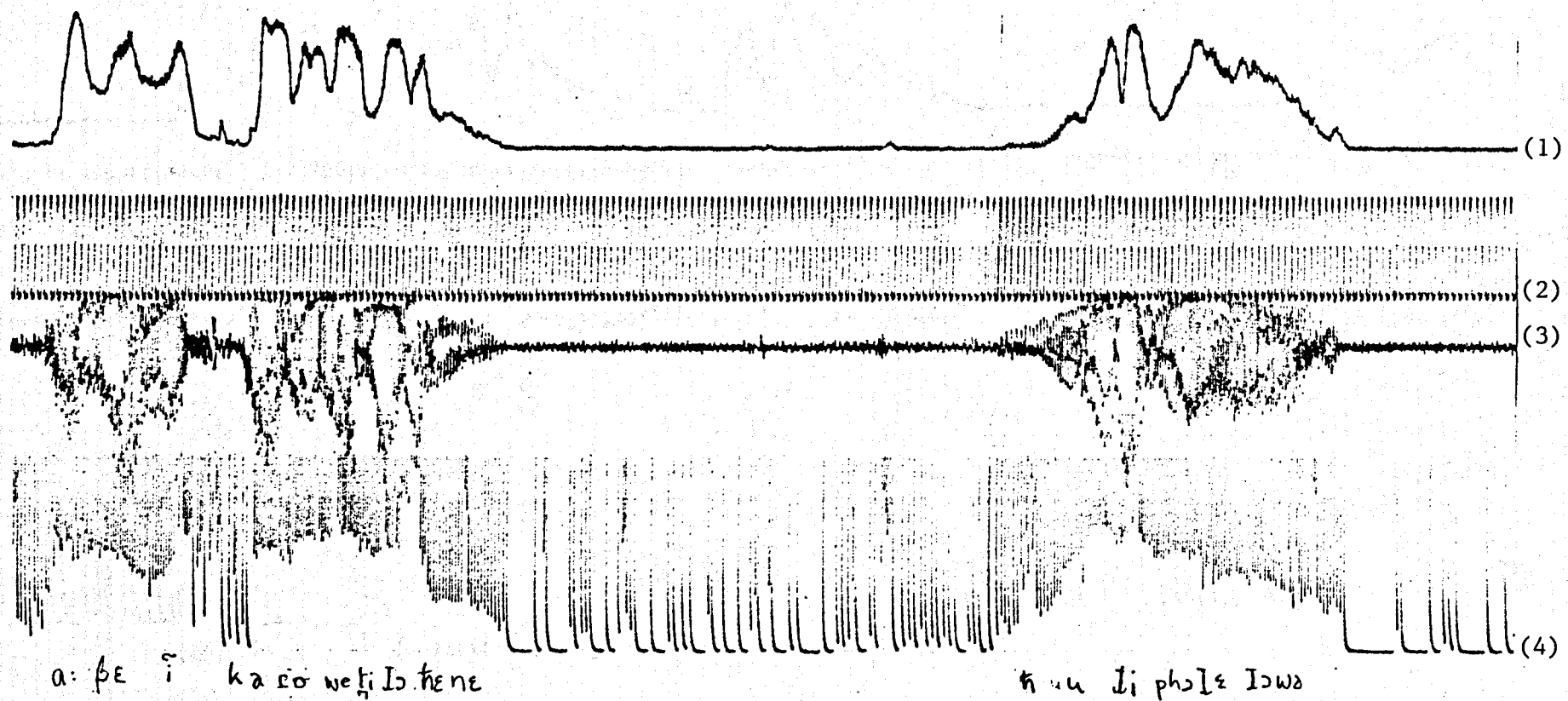


Figure 5

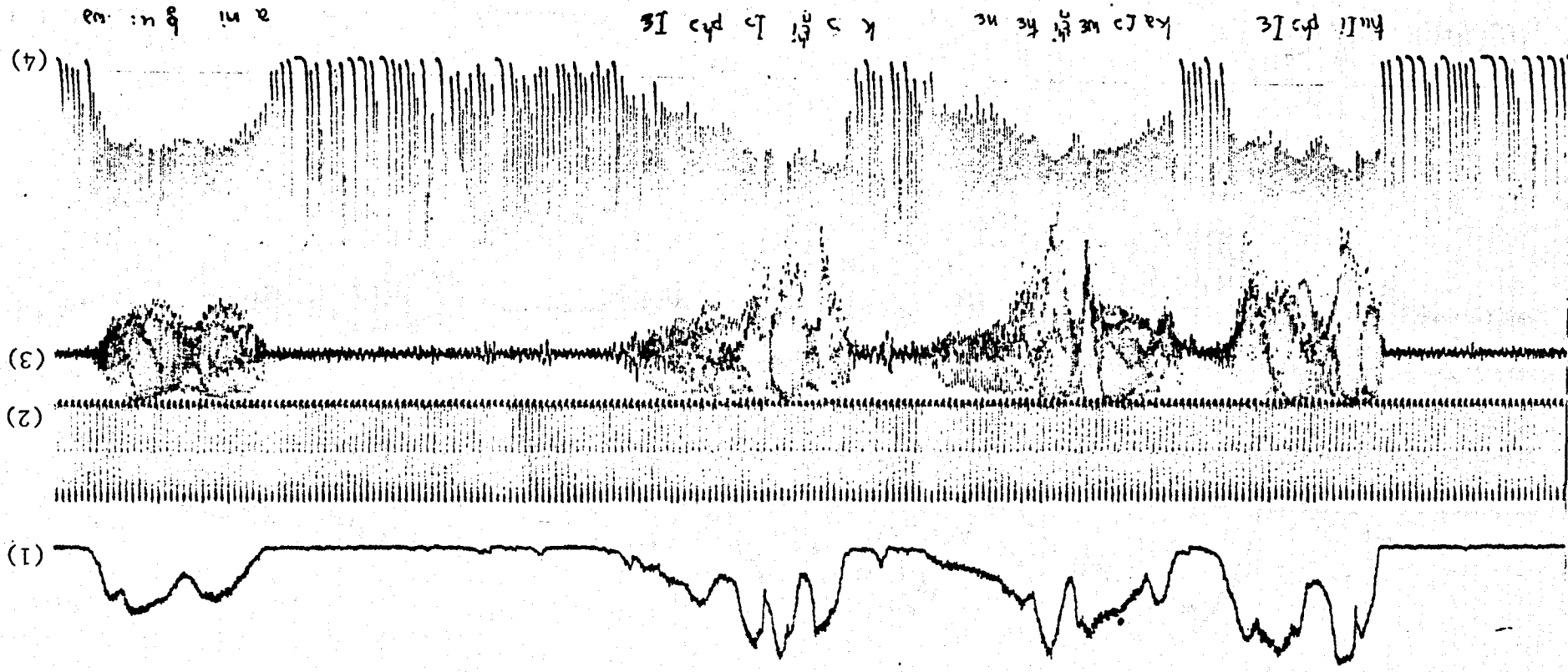
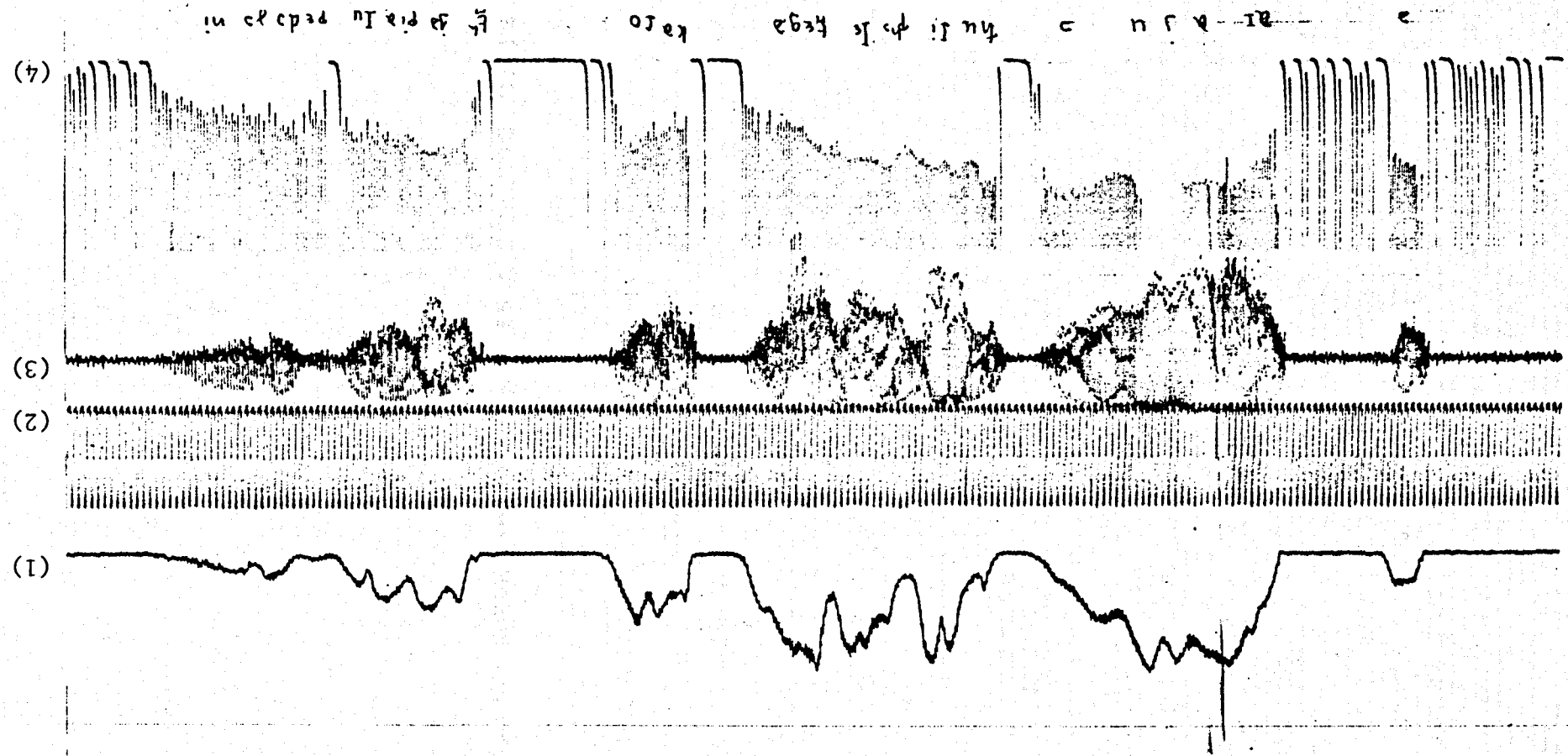


Figure 6

Figure 7



APPENDIX C

SAMPLE SURVEY OF VERB CLASSES & SEMANTIC FIELDS

APPENDIX C

SAMPLE SURVEY OF VERB CLASSES & SEMANTIC FIELDS

(Numerals indicate the class/es to which the verbs belong. The initial numeral shows the primary morpho-semantic classificatory category, and subsequent numerals - separated by full-stops - secondary semantic fields.)

a	he	1.3	recline, support, lean against
a	le	1	wilt, wither
abi	bi	2	pay wergild
amburi	bi	2.1	make shiverings, be cold
anda	he	1	grow, spread, proliferate
ande	le	1.3	incline, bank in flight
andiba	he	1.2	control, secure, tie up
anga	le	1	open, stretch
angwa	he	1.2	by-pass, cross, step over
are	bi	2	acupuncture
arema	bi	2	repair thatch
areme	le	1	say thanks, thank
ari	bi	2	change
ariba	he	1.2	tie, tether
arini	he	1	become old, age
arini	le	1	say again, repeat
au	le	1	wither, fade
bai	he	1.2	dismiss, throw away/down
bali	he	1.2	have/be part full
bani	he	1	appear, come to notice
bau	le	1.2	scour
baulwa	he	1.2	make dull sound
	be	1	strike, hit
bega	bi	2	peel, pare off
bereba	he	1	disappear, pass from sight
	bi	2	make, do
bi	le	1	talk, speak, say, tell
bibiau	le	1	shudder, shiver
biri	le	1.3	jerk, kick out (in womb)
	biru	3	sit down, squat
boga	bi	2.1	ripen
	boge	1.2	pare down, whittle
bolangwa	he	1.2	overtake, pass, cross in front
bondo	le	1.2.	leak, drip
bonge	le	1.2	test, try
bū	le	1	snap, break, give way
burugu	le	1	moan, sigh
da	le	1.2	intertwine, weave
da	li	2.3	descend, come down
	dabe	1.2	choose
dabi	he	1	recover, regain health
dabu	bi	2	pay brideprice
dagare	bi	2.1	make cold, be cold
dago	bi	2.1	reprimand, scold
dai	bi	2	return
dai	le	1	harden

dali	he	1.3	descend, come down
dambi	he	1.2	conceal, cover
dambola	he	1	quieten, domesticate, tame
dano	he	1.2	incur debt
dano	henge	1	repay debt
dara	he	1	have empathy
dariba	he	1.2	control, tether
	dawe	1	steam-bake in the ground
dawe	he	1.3	quiver, flutter, hover
de	hende	1	see
de	le	1.2	light, make to shine
dege	de	1	fray, wear
dembola	he	1	be silent, be still
	dibi	2	cut, chop down, fell
dimagoli	he	1	have envy/jealousy, covert
dimbu	bi	2	join, make a joining
diri	le	1	stretch (oneself)
do	le	1	whistle
dõ	le	1.3	strike/stick out, swim
doborobo	bi	2	exchange
dodo	le	1	snap, break
dogo	de	1.3	cut across
	dome	1.3	cross, erase, ford
dondo	le	1.2	cut back, prune
donge	bi	2	disregard, disobey
donge	he	1	have motionlessness, be still
doro	bi	2	heat
doro	le	1.3	pursue, stalk, creep after
du	le	1	weave, plait
dũ	le	1	sniff
duau	le	1	bark
	dugwi	2.3	lift up, raise
dungwa	he	1.2	spread out, lay out, cover
duru	bi	2.1	scratch, itch
dwē	le	1	retch
e	de	1.2	draw a bowstring
eanogo	de	1	commit suicide by hanging
ela	he	1	touch
ema	bi	2.1	shake, tremble
embeda	he	1	forget
enene	he	1	have fear, be afraid
enge	he	1	betray, envy
ereba	he	1.3	disappear, pass from sight
ga	bi	2	chop into pieces
gã	bi	2.1	scream
gaba	he	1	become dry, dry out
gabu	bi	2.1	dry, wither
gaea	bi	2	be fine (of weather)
gaei	bi	2.3	meet-and-greet
gai	bi	2	break-and-share (food)
gãĩ	le	1	meow
	gambiru	3.2	insert, stuff
gandu	le	1.2	cut, clip (vine)
garali	bi	2.1	scratch
garere	bi	2	squabble over possessions
garibi	le	1	be hungry, feel hunger
gãũ	le	1	howl
gembo	le	1	show anger
gi	he	1	have fear, be afraid

gia	le	1.2	dismantle, take down
gili	bi	2	drag, draw, write
gini	bi	2	play
go	de	1.2	mound earth
go	le	1	undress, take off
goba	he	1	get old, rot
gomogomo	le	1	grumble
gondo	le	1.3	slip
gono	wi	2	set a trap
gugu	he	1	be overcast, be dull
gumu	wi	2	set down land boundaries
gungu	bi	2	fight with fists
	guji	2	bake in ashes
ha	de	1.2	untie, loosen
hā	le	1	pant, gasp
hai	bi	2	seek, look for
hāī	he	1	smear, anoint, cover
halaga	bi	2.1	dream, see a vision
hale	he	1	hear, listen
hale	he	1.3	remove (oneself), step aside
hālō	he	1	stand still, rest.
hame	le	1	like, love
	he	1	have, be, exist
	hende	1	sense, feel, experience
	hene	1	have/carry (in a string bag)
hē	le	1.2	grunt, push
	hiri	2	roast in flames
	hundi	2.3	die down, recede
	ibu	3	come
iraga	he	1.3	rise, climb
kambu	le	1.2	shatter, smash, break
keba	he	1	have anger, be angry
kera	he	1	have anger, be angry
korali	bi	2.1	scratch
	le	1	utter, speak
	li	2	adze
mali	he	1.3	lean against, support, recline
mali	li	2.3	dance a mali
manda	bi	2.1	work-head, know, think
	mi	2	take, give
mitangi	bi	2.1	think, remember
mugu	le	1	close, shut
nde	le	1	betray
ndibu	le	1.2	close, tighten
	ne	1	ingest
	ngi	2	take, give
ngola	he	1.3	encounter, meet along the road
ngwā	le	1	squeal
o	he	1	mourn, lament, wail
	palu	3	recline, lie down, sleep
pambu	le	1	break, splinter
	pu	3	go
pu	te	1	urinate
taga	he	1	have shame, lose face
tai	bi	2	seek, search for
	te	1	emit, eject
ti	te	1	defecate
tongo	le	1	snap, break, give way, expire
tū	le	1	blow one's nose

turu	he	1	have well-being, be happy
	ungwi	2	pluck (fruit)
	ware	1.2	herd, drove
	wi	2	place, put down

APPENDIX D

GLOSSARY

APPENDIX D

GLOSSARY

Huli items that appear in the thesis are entered here in lexicon form, loan words being indicated in the usual way. Numeratives (7.6), determiners (7.7) and special lexical sets (cf 10.5.2.2) are mostly excluded. Nominals are indicated by 'n', and verbals by 'v', otherwise abbreviations are as in the body of the study, but in the lower case. Numerals indicate classes, and upper case single letters indicate the ev to which an item is normally assigned (thus: K signifies an item assigned to ka).

aba	father	n2K
abale	quickly; previously	adv
abe	yesterday	adv
abi bi	pay wergild	apv2
adagudi bi		apv2
adoge	armpit	nl
ãẽã	blessing	nl
aea	descendant	nlB/K
aga	cloak	nlNg
agali	man	nlK
agalini	husband	nlK
agi	what?	adv
agi	what?	adv
ago	which? where?	adv
agwa	how?	adv
agwa	good! ah!	excl
agwane	ancestor	nlK/B
ai	ah!	excl
ãĩja	mother	n2B
ala	before; long ago	adv
alendo	afternoon	adv
alwa	sp. bird	nlB
aluba	reed grass	nlK
ama	maternal aunt <--> niece/nephew	n2B/K
ambwa	yellow clay	nl
amu	along across there	adv
anda	house; dwelling place	nlK
andane	covering	nl
andira	shelter	nlK
andoba	soot	nl
andwane	owner	nlK
anga	pandanus	nlK
angari	beard	nl
ange	bund	nl
angi	when?	adv
ani	thus	adv
ani	where?	adv
anona	sp. tree	nlK
au	here!	excl
auhe	dim	adn

aula	everlasting daisy	nlK
aule	withered	adn
aware	close, nearby	adv
ajane	paternal uncle <--> nephew/niece	n2K/B
ajo	sp. frog	nlB
aju	axe	nlNg
aju	now; today	adv
ba	thigh	nl
baba	along with	com
bai	sp. tree	nlK
bai he	cast aside	apvl
bamba	before	adv
bame	nothing	adv
bapalo*	buffalo	nlK
bare	steep	adn
baulwa	dull sound	nl
bajale	good	adn
bajwa	well; good	adv
be	bamboo	nlK
be	hit; kill	vl
beba*	paper	nlNg
beda	exists	ev
bedaguli	boil; swelling	nlK
berelibu	cloud	nlK/Ng
bi	make/do	v2
bi	word; talk; speech	nl
bi te	folktale	nl
biabe	work	nl
biabe bi	work	apv
biango	dog	nlK
bibahende	all; every	adn
biru	sit down	v3
bodo	hide; nest	nl
bolangwa he	pass; step by	apvl
bu	liver	nlP/Ng
bu le	break; snap	apvl
bu de	tear open	apvl
bule	broken	adn
buni	liver	nlP/Ng
da	exists	ev
da bi	choose	apv2
da li	descend	apv2
dabe	choose	vl
dade	recede	vl
dagia	plank	nlK/Ng
dai bi	return	apv2
daliga	up above	adv
dalimu	loudly	adn
daliwa	strongly	adv
dalo	spouse-less	nl/adn
daloali	leader of bachelor cult	nlK
dalun	homeland	nlK
dalun	rain	nl
dalun tu	raincape	nlNg
dama	spirit	nlK
damba bi	mediator talk	nl
dambale	string sporran	nlK/Ng

damene	related things/persons	nl
danda	bow	nlK/Ng
dandaji	warrior; hunter; bowman	nlK
dange	cowrie shell	nlNg/K
darama	blood	nlB
daramabi	red	adn
datani	swordgrass	nlK
dawe	steam-cook in the ground	vl
dawe	wake; dance	nl
dawere	sp. bird	nlB
de	eye	nlP
de	shine	vl
debene	good	adn
dege	only	adv
dele	flying squirrel	nlB
dendebe	sweet; tender	adn
dengwi	face	nlK
dewa	many	adn
dibe	chop; fell	apvl
dindi	ground; soil	nlK
dinini	ghost	nlK
do le	whistle	apvl
dō le	swim	apvl
dodo	dirt	nlK/Ng
doe le	retch	apvl
dombagwa	mediator	nlK
du	sugar cane	nlK
dugi	sp. sweet potato	nlP
dugu	sp. tree	nlK
dugu	womens' mourning chant	nl
dugu bi	wail; cry	apv2
dugwi	lift up; pull up	apv2
dwā le	howl	apvl
dwani	break into	v2
dwī le	twitter	apvl
e	new garden	nlNg
ē	yes!	pos
eanogo de	commit suicide	apvl
ede	across over there	adv
ega	bird	nlB
egari	feather	nl
ege	moon; rock	nlK
ege tōlē	stone	nlK
egene	shoot; sapling	nlK
egerebagi	morning	adv
embone	pate; skull	nl
emene	small; little	adn
gabamanali*	administration officer	nlK
gabamane*	government; administration	nlK
gabwa	wild	adn
gaea bi	fair up; be fine;	apv2
gahange	new	adn
gai bi	tire; be tired	apv2
gali	baby	nlB/K
galone	important	adn
gambe	cane grass	nlK
gana	ditch	nl

ganarwa	drain; large ditch	nl
gandebo	vision	nl
gandoma	sp. sweet potato	nlP
garere bi	squabble over possessions	apv2
garo*	car; tractor	nlK
gauni	new	adn
gāwā	mouth bow	nlNg/K
ge	leg; foot	nlK
ge su*	shoe	nl
gebeali	cave shrine curator; clan totem	nlK
gereba	green leaf vegetable	nlK
gewa	cane vine	nlNg/B
gi	arm; hand	nlK
gi he	fear; be afraid	apv1
giambe	hard	adn
gimbu	joint; joining	nl
gini bi	play	apv2
ginu	mist	nl
gobi	type of arrow	nlK/Ng
gode	mound earth	vl
golia	pen; cage	nl
goloba	vermillion clay	nl
golobabi	vermillion	adn
gono	trap	nlK
goti*	court	nl
gugu	sp. nut tree	nlK
gumba	shade	nl
gumbwa	shade	nl
gungu bi	fight	apv2
guni*	corn	nlK
gununu	sp. beetle; aeroplane	nlB.K
guriyage	swing	nl
guji	bake in ashes	v2
gwa bi	hollow out	apv2
gwali	glittering	adn
gwane	groove; hollow	nl/adn
habagwa	sp. bird	nlB
habane	fat	nl
habe	sp. tree	nlK
habia	slime cabbage	nlK
habono	digging stick	nlK/Ng
habwabi	greedy	adn
hagabuni	woman's sister	n2B
hai	banana	nlK/D
hāī he	smear; spread	apvl
hale	ear	nlK
hale he	listen; hear	apvl
hālō he	be breathless	apvl
hama	cleared ground	nlK
hame le	like	apvl
hamene	man's brother	nlK
hamigini	clan	nlP
hamigini emene	subclan	nlP
hanare*	hundred	num
hangu	alone; only	adv
haño	sp. bird	nlB
hari	mountain; sky	nlK
hariga	track	nlNg

haroli	member of bachelor cult	nlK
hāū he	collapse	apvl
hē le	push	apvl
hende	sense; feel; see	vl
hende	pig rope	nlNg
hendore	softly	adv
henene	true; truly	adn
henge	plant	vl
henge	space	nl
herelibī	salt	nlNg
hewa	sp. tree	nlK
heji	stand up	v2
hi he	sweep	apvl
hibu ne	kindle	apvl
hina	sweet potato	nlP/Ng
hiri	roast	v2
hirijule	jaws' harp	nlNg/K
hiwa	sago	nlK
homakwi	burial pall	nlK
home	be sick; die	vl
homogo	wealthy man	nlK
hona / hone	ginger pig	nlK
honabi	gingerish; pale; whiteman	nlK
hondo	to	adv
hondo he	wait	apvl
hondwa	sp. banana	nlK
hone	spirit stone	nlK
hongo	strength	nlNg
hongohe	strong	adn
horo	day	adv
horwa	rafter	nlK
horombe	midday	adv
hubane	bundle	nlNg
hubi	sp. shrub	nlK
hubwa	wrapping	nl
hungi	sp. shrub	nlK
huru	rodent	nlB
hurwa	grass skirt	nl
ī	1S	prn
ī	2S	prn
iba	water	nlB
iba be	water container	nlNg/B
iba gana	drain; song	nl
ibi	salt	nlNg
ibu	3S	prn
ibu	come	v3
igini	son	nlK
igiri	boy; young man	nlK
ilili	custom	nlNg
imane	man's in-laws	nlK/B
ina	1P	prn
ira	tree; wood; fire	nlK/Ng
irabu	bush	nlK
iraga he	climb	apvl
iri	hair	nlNg/K
irigijidi	sp. fungus	nld
ija	1D	prn

ka	exists	ev
kāī	poetry; praise	nl
kāī le	praise; recite	apvl
kango	club	nlK/Ng
karajakē	cockroach	nlB
kaju bi	steal	apv2
kē he	lie	apvl
keba	digging stick	nlK/Ng
keba he	be angry	avpl
kebeali	cave-shrine curator; clan totem	nlK
ko	bad	nl
kōnō	bladder	nlP
korali	shallow pit	nl
kulāū he	pet; fondle; pat	apvl
kujama	threatening; dour	adn
kwa	sp. tree	nlK
kwē	sp. bird	nlB
kwikwi bi	have a formal dispute	apv2
labolabo*	cloth	nlK/Ng
lai he	swear	apvl
lamu*	lamp	nl
lau le	sprinkle	apvl
le	utter	vl
le bi	sew	apv2
lebage	sp. snake	nlNg
lebe	two days ago	adv
lebene	three days ago	adv
li	adze; plane	v2
li	up there	adv
lone	again	adv
lotu*	prayer service	nl
lu / luni	long	adn
luma	two days hence	adv
lumani	three days hence	adv
lwabi	sp. frog	nlB
ma	neck	nl
ma	taro	nlK
mabu	garden	nlK
mabwage	marriageable	adn
madane bi	be mean; be spiteful	apv2
magadi*	market	nl
mani	later	adv
mali	dance; burial platform	nl
mamage he	guard	apvl
mamali	ancestor	nlK/B
mana	lore	nlNg
manaji	wise man; holder of lore	nlK
manda	wig; head	nl
manda bi	know; think	apv2
mandiri	hair (on head)	nl
manga he	dislike	apvl
marasini*	medicine	nl
majabu	raincape	nl
mbagwa	tree oil	nl
mbalape	flat	adn
mbalini	sibling of opposite sex	n2K/B
mbira	one	num

mbiraga	darkness	nl
mbirini	meat	nl
mbiru	once	adv
mbola	sp frog	nlB
mbu	peel, shaving	nl
me	nothing	adv
mege bi	mock; insult	apv2
mememe	accidently	adv
mende	second; other	adn
mi	take/give	v3
minana	by chance	adv
mind	black pig	nlK
mindibi	black/blue	adn
mine	catch	v1
mini	name; mind	nlNg
misa*	Mass	nl
mitangi bi	remember; think	apv2
mogo le	start; be surprised	apv1
mone	wasp	nlD/B
mu	sand	nl
muna	dawn	nl
mundu	tobacco	nlNg
mundu be	tobacco pipe	nlNg
muni*	money	nlNg
naga wi	sharpen	apv2
nai	across nearby	adv
nama	diging stick	nlNg/K
nana	down at the bottom	adv
nano	fungus	nlD
nde	then!	excl
ndoba	tree sap	nlD/Ng
nduli	wedge	nlNg
ndwē le		apv1
ne	ingest	v1
ne	tooth	nlK/Ng
nga	exists	ev
nga bi	smell sweet	apv2
ngi	give	v2
ngu bi	smell foul	apv2
ngwe	worm	nlP
ngwa he	farewell	apv1
ngwai he	gather	apv1
ngwi	nose	nlK/Ng
ni	down below	adv
ni	sun	nlK
nigi	nettle	nl
nogo	pig	nlK
nogoba	fighting pick	nlK/Ng
nu	string bag	nlNg
nunu	down across	adv
o	this; here	det
o	women's mourning chant	nl
oali	local person	nlK/B
oba he	smile; laugh	apv1
obene	stranger	nlK/B
ogoni	that	det
omwa	sp. grub	nlP

one	wife	nlB
ore	very	adv?
pabe	fence	nlNg
paboro	bean	nlK
pada	exists	ev
pada*	minister; priest	nlK
pagida	armband	nl
palu	lie down	v3
pani	retribution	nl
pau le	crease; fold	apvl
paja	shoulder	nl
pi	stake	nlK
pi le	stumble; fall	apvl
pī pō le	slander	apvl
pi-em-bi*	public motor vehicle	nlK
pīāū he	shake; shiver	apvl
pigane	first	adv
pilipe	bamboo flute	nlNg/K
pini	root	nlP/Ng
pira	ten	num
po	pungent odour	nlNg
podagi	pointed roofed	adn
pode	quarter; butcher	apvl
pongo	knot	nlNg
pu	go	v3
pu	urine	nlNg/B
pu	vine; rope	nlNg
pungunu	poor man	nlK
pugwa	swamp	nlB/Ng
pungwa	soot	nl
puja	sp. python	nlNg
pujulabe	ceremonial braid	nl
sande*	Sunday	n2
sarere*	Saturday; week	n2
sarere*	emene Saturday	n2
sarere*	timbuni Sunday	n2
siki*	sick; ill	adn
sindaun*	sit down	v?
stoa*	store	nlK
stretim*	bi correct; put right	apv2
tabage	drum	nl
tabuhe	decrepit	adn
taga he	lose face; be ashamed	apvl
tagira	outside	adv
tago	addition	adn/adv
taiga*	tiger	nlK
tambone	cold	adn
tamu	inside	adv
tamunguru	sleeping mat	nl
tandaga	pain	nl
tangwi	paddle; churn up	v2
tani	weed/s	nlK
tau	dust	nlNg
tau	scrotum	nlK
tajanda	high bush	nlK
te	emit	vl

te	stand; clump; (story)	n1Ng/K
ti	2P	prn
ti	3P	prn
tī tū le	sparkle	apvl
tia	possum	n1B
tiabu	asparagus	n1K
tidu	fibre	n1
tiga	straight	adn/adv
tigi le	cut wood into sticks	apvl
tigija*	ticket	n1Ng
tiki*	sick; ill	adn
timbuni	large; big	adn
timu	arrow	n1K/Ng
tini	intestines	n1P/Ng
to	gesture	n1
togo	bridge	n1Ng
togo le	rot	apvl
tōlē	stone	n1Ng/K
tombe	till	v1
tombe	stomach	n1P/K
tomia	spell; curse	n1
tomo	food	n1Ng
tu	boundary	n1Ng
tu le	clear away	apvl
tugwi	pluck	v2
tui	sp. bird	n1B
tumagi	short	adn
turu he	be happy	apvl
turungu	kindling leaves	n1
twā	cheek	n1
twalimbu	sp. vine	n1K/Ng
twē le	splutter	apvl

ū	men's chant	n1
u le	yodel	apvl
ubi ja	sp. bird	n1B
udu	up over there	adv
uli	hole; pit	n1Ng
umu le	doze	apvl
ungwa he	farewell	apvl
unu	down at the bottom	adv
uju	up there	adv

wagaya	wax; tree gum	n1Ng
wahē	old	adn
wai bi	make war	apv2
wali	woman	n1B
wali he	show	apvl
walia he	show	apvl
wandari	girl	n1B
wane	daughter	n1B
wanehange	new	adv
wanekuni	forehead	n1
wanigini	children	n1K/B
ware	herd	v1
wash* bi	wash	apv2
wē le	gesture rudely	apvl
wedi*	wait	v?
wedi* le	wait	apvl

weli* oil
wena fish
wene shortly; soon
wi penis
wi place; put down

nlNg
nlB
adv
nlK/D/Ng
v2

jagibano poor man
jago frog
jakundi star
jandare spear
jari cassowary
jari decoration
jatagaja star
jawi tomorrow
ji hold
jobage cryptic action/saying
jole crooked
jolo bi buy
joroma bi decant

nlK
nlB
nlK
nlK/Ng
nlB
nlNg
nlK
adv
v2
adn
adn
apv2
apv2