

LAI VERB LISTS

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Following are three lists of Lai verbs.¹ All contain the same verbs, but are arranged in different orders. Each list contains 822 items, representing 258 non-alternating verbs and 282 verb-form pairs (see Nurit Melnik's paper on verbal alternations, this issue), for a total of 540 verbs.

The first of the three lists is alphabetized by Lai form. If strict alphabetical order were followed, many verb pairs would be split up, so the order is as follows: non-alternating verbs and Forms 1 of alternating verbs constitute a category together, and are in alphabetical order with respect to one another; Form 2 of a given verb immediately follows its Form 1. /ŋ/, /t/, and /ʔ/ alphabetize immediately after /n/, /t/, and /z/, respectively. When two Forms 1 are identical, the entries are arranged in alphabetical order by English gloss.

The second list is by English gloss, and is in straight alphabetical order.

The third list is by type of alternation, roughly following Nurit Melnik's categories of alternations (this issue). The categories are as follows:

- A Non-alternating, e.g., *bay* 'to limp'; *du?* 'to want, to like'.
- B Non-glottal stop final in Form 1, glottal stop final in Form 2 (with shortened vowel in cases where the Form 1 vowel was a long monophthong), e.g., *fek* / *fe?* 'to be sturdy'; *vaak* / *va?* 'to crawl'.
- C Continuant (i.e., liquid, glide, or nasal) final in Form 1, except /t/ (Form 2 glottalizes final consonant), e.g., *riil* / *ri?l* 'to roll'; *law* / *la?w* 'to disappear'; *tsiin* / *tsi?n* 'to be wet'.
- D /t/ final in Form 1, with subtypes:
 - D1: Form 2 changes /t/ to /n/, e.g., *thooŋ* / *thoon* 'to be strong'.
 - D2: Form 2 glottalizes final nasal, e.g., *boŋ* / *bo?ŋ* 'to pull out'.

¹ Once again, all thanks are due to Ken Van-Bik. Furthermore, I was fortunate enough, thanks to the generous support of STEDT by the NSF and NEH, to receive monetary remuneration for compiling these lists. Without this support these lists would never have been assembled. The work of eliciting the verbs was carried out by the entire Field Methods class, and so credit should go to everyone—with special emphasis on Ken, and of course Jim Matisoff.

- E Open final in Form 1 (vowel is by necessity long), with subtypes:
- E1: Form 2 appends non-glottal stop, vowel retains length, e.g., *tsoo* / *tsook* ‘to buy’.
- E2: Form 2 appends non-glottal stop, vowel is shortened, e.g., *saa* / *sak* ‘to build’.
- E3: Form 2 appends glottal stop, Form-1 long monophthongs are (of necessity) shortened in Form 2, e.g., *thii* / *thi?* ‘to die’.

F Ablaut alternations, with subtypes:

- F1: Form 1 /uaC/, Form 2 /o?C/, e.g., *tuam* / *to?m* ‘to wrap, to bandage’.
- F2: Form 1 /aw#/ , Form 2 /o?#/ , e.g., *thlaw* / *thlo?* ‘to clear (a field)’.

Here is a statistical breakdown:

Type	Number of verbs (by subtype)	Percentage of total (by subtype)	Number of verbs (by type)	Percentage of total (by type)
A	258	47.8	258	47.8
B	54	10.0	54	10.0
C	97	18.0	97	18.0
D1	55	10.2	69	12.8
D2	14	2.6		
E1	36	6.7	49	9.1
E2	8	1.5		
E3	5	0.9		
F1	9	1.7	13	2.4
F2	4	0.7		
Total	540	100.0%	540	100.0%

Table 1. Lai verbs: tokens and percentages by type.

Other notes:

- ‘(R)’ next to a gloss indicates a reflexive verb, e.g., *da?m* ‘to prepare (R)’. Reflexive verbs require a reflexive marker in every use.
- The ‘see also’ column cross-references verbs that are phonetically similar (usually differing in aspiration of initial or glottalization of final) and are semantically closely related, usually by a relationship of causativity, e.g., *lum* ‘to be hot’, and *hlum* ‘to heat (something) up’; *tooy* ‘to be short’, and *to?y* ‘to shorten’.

LIST 1: VERBS BY LAI FORM

<i>Verb</i>	<i>Gloss</i>	<i>Form</i>	<i>Type</i>	<i>See also</i>
baa	owe	1	E2	
bat	owe	2	E2	
baa	tire	1	E1	
baat	tire	2	E1	
baŋ	like, be	-	A	
baŋ	sticky, be	1	D1	
ban	sticky, be	2	D1	
bat	hang	1	B	
ba?	hang	2	B	
baw	bark (dog)	1	C	
ba?w	bark (dog)	2	C	
bay	limp	-	A	
bee	bleat (goat)	-	A	
beek	push against / lean against	1	B	
be?	push against / lean against	2	B	
bii	narrow, be	1	E1	
biit	narrow, be	2	E1	
bi?	peek / peep	-	A	
bok	lie in wait (to ambush)	1	B	
bo?	lie in wait (to ambush)	2	B	
boo	moo (cow)	-	A	
boŋ	pull out	1	D2	ponŋ, phonŋ
bo?ŋ	pull out	2	D2	po?ŋ, pho?ŋ
boom	help	1	C	
bo?m	help	2	C	
buay	confused, be	-	A	
buŋ	tip over	1	D2	
bu?ŋ	tip over	2	D2	
buu	swarm	1	E1	
buut	swarm	2	E1	
bu?n	plant / drive / post	-	A	
dai	still, be / quiet, be	-	A	
dam	heal	-	A	
daw	make war	1	C	
da?w	make war	2	C	
da?m	heal, cause to	-	A	
da?m	prepare (R)	-	A	
dek	play with	1	B	
de?	play with	2	B	
der	weak / skinny	-	A	de?r
de?r	able to shoulder, be	-	A	der

diar	stand	1	C	
dia? r	stand	2	C	
diin	rest (R)	1	C	
di? n	rest (R)	2	C	
diir	stand up / erect, be	1	C	
di? r	stand up / erect, be	2	C	
diit	press	1	B	
di?	press	2	B	
dij	drink	1	D1	di? n
din	drink	2	D1	di? n
dij	straight, be	1	D1	
din	straight, be	2	D1	
di?	finish	-	A	
di? n	drink	-	A	dij / din
donj	welcome	1	D1	
don	welcome	2	D1	
doo	love	1	E1	
doot	love	2	E1	
doon	prohibit	1	C	
do? n	prohibit	2	C	
donj	end / finished, be	1	D2	
do? j	end / finished, be	2	D2	
oop	suck	-	A	
dot	pile	-	A	
do?	beautiful, be (R)	-	A	
do?	drag	-	A	
do? l	swallow	-	A	
do? m	support with the hand	-	A	
dua?	kindle (a fire)	-	A	
dul	shadowy, be	1	C	
du? l	shadowy, be	2	C	
du?	want / like	-	A	
faak	ache	1	B	
fa?	ache	2	B	
fak	praise / flatter	-	A	
feen	wash away / flush	1	C	
fe? n	wash away / flush	2	C	
fek	sturdy, be	1	B	
fe?	sturdy, be	2	B	
fianj	clear, be	1	D1	fia? n
fian	clear, be	2	D1	fia? n
fiar	steal	-	A	
fia? n	clear, make	-	A	fianj / fian
fiim	clear, be / wise, be	-	A	
fiim	tidy up	-	A	
fi?	abhor / detest	-	A	
fooy	easy, be	1	C	

fo?y	easy, be	2	C	
fuun	pack	1	C	
fu?n	pack	2	C	
haal	thirsty, be	1	C	
ha?l	thirsty, be	2	C	
haar	sharp, be	-	A	
haaw	cut down	-	A	
haaw	necessary, be	1	C	
ha?w	necessary, be	2	C	
haaw	provoke	1	C	
ha?w	provoke	2	C	
hak	hard, be (of a substance)	1	B	
ha?	hard, be (of a substance)	2	B	
hal	ask	-	A	
har	difficult, be	-	A	
her	spin / turn around	1	C	
he?r	spin / turn around	2	C	
he?r	necessary, be	-	A	
hit	numb, be / paralyzed, be	-	A	
hlaa	far, be	1	E1	
hlaat	far, be	2	E1	
hlaaj	borrow	1	D1	
hlaan	borrow	2	D1	
hlaay	exhume	-	A	
hlam	compensated for, be / get back	-	A	
hlat	investigate	-	A	
hlay	superfluous, be	1	C	
hla?y	superfluous, be	2	C	
hlen	deceive	-	A	
hlok	jump (R)	1	B	
hlo?	jump (R)	2	B	
hlon	throw	1	C	
hlo?n	throw	2	C	
hlum	heat (sth. up)	-	A	lum
hmaan	true, be / correct, be	-	A	
hmaj	use / have the habit of doing	1	D1	
hman	use / have the habit of doing	2	D1	
hmee	small, be	-	A	
hmeet	press / massage	1	B	
hme?	press / massage	2	B	
hme?r	pinch / twist	-	A	mer / me?r
hmit	put out (light)	1	B	mit
hmi?	put out (light)	2	B	mi?
hmoom	hold in mouth	-	A	
hmuu	see	1	E3	
hmu?	see	2	E3	
hmuy	fragrant, be	1	C	

hmu?y	fragrant, be	2	C
hnam	kiss	1	C
hna?m	kiss	2	C
hnee	urge / push	1	E1
hneek	urge / push	2	E1
hneem	comfort	1	C
hne?m	comfort	2	C
hne?w	graze (bullet)	-	A
hniaŋ	younger, be	-	A
hniim	smell / sniff	1	C
hni?m	smell / sniff	2	C
hniin	shake	1	C
hni?n	shake	2	C
hniit	blow (one's nose)	1	B
hni?	blow (one's nose)	2	B
hnoom	dirty	1	C
hno?m	dirty	2	C
hnoot	wipe	1	B
hno?	wipe	2	B
hjaak	wait	1	B
hja?	wait	2	B
hjal	arrogant, be	-	A
hjal	know	1	C
hja?l	know	2	C
hje?r	stir	-	A
hji?l	asleep, be (R)	-	A
hoŋ	open	1	D1
hon	open	2	D1
ho?l	speak	-	A
hraam	growl / groan	-	A
hraaŋ	blow (wind)	1	D1
hraan	blow (wind)	2	D1
hraap	rough, be	-	A
hraat	rough, be	-	A
hreeŋ	tie / bind	1	D1
hreen	tie / bind	2	D1
hre?n	lock	-	A
hriil	roll, cause to	1	C
hri?l	roll, cause to	2	C
hriŋ	green, be	1	D1
hrin	green, be	2	D1
hrook	destroy	1	B
hro?	destroy	2	B
hrooŋ	fish w/ net (takes 'suur' as obj.)	1	D1
hroon	fish w/ net (takes 'suur' as obj.)	2	D1
hruay	lead	-	A
hrua?y	bring along (R)	-	A

neem**hre?n**
hre?n
hreeŋ / hreen
riil
ri?l**rook**

hruk	put on / wear	-	A	
hruut	crazy, be	1	B	
hru?	crazy, be	2	B	
hua	hate	1	E1	
huat	hate	2	E1	
huam	want	-	A	
huŋ	come (directional)	1	D1	
hun	come (directional)	2	D1	
kaaŋ	burn	1	D2	khaaŋ
ka?ŋ	burn	2	D2	kha?ŋ
kaap	shoot	1	B	
ka?	shoot	2	B	
kaaw	open	-	A	ka?w
kaay	climb	1	C	
ka?y	climb	2	C	
kal	go	-	A	
kaw	in a state, be	-	A	
ka?	play (with)	-	A	
ka?l	entangle	-	A	
ka?w	bite	-	A	
ka?w	widen / extend	-	A	kaaw
kek	break up	1	B	khek
ke?	break up	2	B	khe?
keŋ	bring along	1	D1	ke?n
ken	bring along	2	D1	ke?n
ke?n	bring along, cause to	-	A	keŋ / ken
khaaŋ	burn	1	D2	kaaŋ
kha?ŋ	burn	2	D2	ka?ŋ
khaar	close	-	A	
khaay	chew	-	A	
khal	freeze	-	A	
kham	block	-	A	kha?m
khap	refrain (R)	-	A	
khat	full, be	-	A	
khaw	can / able, be	1	F2	
kho?	can / able, be	2	F2	
kha?m	save / rescue	-	A	kham
khek	break up	1	B	kek
khe?	break up	2	B	ke?
khek	peel off	1	B	
khe?	peel off	2	B	
khe?n	hammer	-	A	
khiak	snap / break	1	B	kiak
khia?	snap / break	2	B	kia?
khim	satiated, be	1	C	
khi?m	satiated, be	2	C	
khi?n	carry on shoulders	-	A	

khi?r	give back / send back / return	-	A	kiir
khoom	collect	1	C	
kho?m	collect	2	C	
khoonj	hurt (sb.)	1	D1	
khoon	hurt (sb.)	2	D1	
kho?l	clean (with water)	-	A	
kho?y	dig	-	A	
khuak	cluck (hen)	1	B	
khua?	cluck (hen)	2	B	
khuanj	crow (rooster)	1	D1	
khuan	crow (rooster)	2	D1	
khun	droop / wilt	-	A	
kuuu	smoky, be	1	E1	
khuut	smoky, be	2	E1	
khu?	cough	-	A	
khu?m	put into	-	A	
kiak	break	1	B	khiak
kia?	break	2	B	khia?
kiaŋ	wander (only w/ <i>thla-vaay</i>)	1	D1	kia?n
kiān	wander (only w/ <i>thla-vaay</i>)	2	D1	kia?n
kia?n	wander, cause to	-	A	kiaŋ / kian
kiik	cold, be	1	B	
ki?	cold, be	2	B	
kiij	sparse, be	1	D1	
kiin	sparse, be	2	D1	
kiij	knock	1	D2	
ki?ŋ	knock	2	D2	
kiir	return (to starting point)	-	A	khi?r
kom	united, be / friends, be	-	A	ko?m
kooy	twisty, be	-	A	kuay / ko?y
ko?m	unite / make friends	-	A	kom
kua	send	1	E1	
kuat	send	2	E1	
kual	coil	1	C	
kua?l	coil	2	C	
kuay	twisty, make	1	F1	koy
ko?y	twisty, make	2	F1	koy
kur	wrinkled, be	-	A	
ku?l	surround	-	A	
laa	take	1	E1	
laak	take	2	E1	
laam	trample / dance	1	C	
la?m	trample / dance	2	C	
lan	pass through	-	A	
laŋ	visible, be / reveal oneself	1	D2	
la?ŋ	visible, be / reveal oneself	2	D2	
law	disappear	1	C	

la?w	disappear	2	C
law	lacking, be	-	A
law	resemble	1	F2
lo?	resemble	2	F2
leem	persuade	-	A
leen	visit	1	D1
leen	visit	2	D1
lek	rumble (thunder)	1	B
le?	rumble (thunder)	2	B
let	reply / return	1	B
le?	reply / return	2	B
le?m	swallow	-	A
liak	lick	1	B
lia?	lick	2	B
liam	overflow	-	A
liam	pay price for sth.	1	C
lia?m	pay price for sth.	2	C
liin	hot, be (severely)	-	A
liaw	swim	1	C
lia?w	swim	2	C
li?	tell a lie	-	A
loŋ	loose, be	-	A
loom	happy, be (R)	1	C
lo?m	happy, be (R)	2	C
loom	praise	1	C
lo?m	praise	2	C
looŋ	empty, be	1	D1
loon	empty, be	2	D1
lua	vomit	1	E1
luak	vomit	2	E1
luan	pass / surpass / cross a limit	1	F1
lo?n	pass / surpass / cross a limit	2	F1
luan	flow	1	D1
luan	flow	2	D1
lua?n	flow, cause to	-	A
lum	hot, be	1	C
lu?m	hot, be	2	C
luut	enter	1	B
lu?	enter	2	B
ma?n	free, be	-	A
ma?n	dream	-	A
mer	turn, twist	1	C
me?r	turn, twist	2	C
me?	cut (e.g., hair)	-	A
me?r	smile, twist (face)	-	A
miaw	meow (cat)	1	C
mia?w	meow (cat)	2	C
			lua?n
			lua?n
			luan / luau
			hlum
			hme?r (no hmer)
			hme?r
			hme?r

mit	go out (light)	1	B	hmit
mi?	go out (light)	2	B	hmi?
moon	dizzy / crazy, make	1	C	moɔŋ
mo?n	dizzy / crazy, make	2	C	moɔŋ
moɔŋ	drunk, get	-	A	moon / mo?n
naal	glib, be / fluent, be	1	C	
na?l	glib, be / fluent, be	2	C	
naal	slip / slippery, be / smooth, be	-	A	
nak	black, be	-	A	
neek	used to, be	-	A	
neem	soft, be	-	A	hneem
ne?n	press down	-	A	
niam	short, be	1	C	
nia?m	short, be	2	C	
nii	laugh	1	E3	
ni?	laugh	2	E3	
nooy	muddy, be	1	C	
no?y	muddy, be	2	C	
nuam	feel good / happy, be (R)	1	F1	
no?m	feel good / happy, be (R)	2	F1	
nuar	slow, be	1	F1	
no?r	slow, be	2	F1	
nuɔŋ	alive, be	1	D1	nu?n
nun	alive, be	2	D1	nu?n
nu?n	alive, make	-	A	nuɔŋ / nun
ŋay	have	1	C	
ŋa?y	have	2	C	
ŋaay	listen	1	C	
ŋa?y	listen	2	C	
ŋaay	yearn / long for	1	C	
ŋa?y	yearn / long for	2	C	
ŋan	big, be	-	A	
ŋeek	squeal / oink (pig)	-	A	
ŋe?r	entwine	-	A	
ŋia	spy on	1	E1	
ŋiat	spy on	2	E1	
ŋiar	provoke	-	A	
ŋiat	aim (R)	-	A	
paaw	clear (of sky)	-	A	
pan	thin, be	-	A	
pa?l	wrong, be / make mistake	-	A	
pa?n	approach	-	A	
pa?n	cheerful, be	-	A	
pa?r	burst / shatter	-	A	
pa?y	throw (into)	-	A	
pee	give	1	E1	
peek	give	2	E1	

pel	miss (e.g., a meeting)	1	C	
pe?l	miss (e.g., a meeting)	2	C	
per	jump (over)	-	A	
pew	jump / hop	-	A	
pe?l	stumble / dislocated, be	-	A	phe?l
pe?r	kick (of a horse)	-	A	
phaa	arrive	1	E1	
phaak	arrive	2	E1	
phaan	arrive	1	C	
pha?n	arrive	2	C	
phaaŋ	afraid (only has meaning w/ <i>thin</i>)	1	D1	
phaan	afraid (only has meaning w/ <i>thin</i>)	2	D1	
phay	horizontal, be	-	A	
phel	chop	-	A	
phe?l	stumble, cause to / dislocate	-	A	pe?l
phiir	take (on bike/horse) / entwined, be	1	C	
phi?r	take (on bike/horse) / entwined, be	2	C	
phiŋ	swell / swollen, be	1	D1	
phin	swell / swollen, be	2	D1	
phit	block	1	B	pit
phi?	block	2	B	pi?
phi?l	forget	-	A	
phooy	uproot / undo / untie	1	C	
pho?y	uproot / undo / untie	2	C	
phoŋ	loosen	1	D2	boŋ, poŋ
pho?ŋ	loosen	2	D2	bo?ŋ, po?ŋ
pho?r	carry on back	-	A	
phun	stick / plant (sth. vertical)	-	A	
phun	talk nonsense	-	A	
pial	divert	1	C	
pia?l	divert	2	C	
pial	go astray	-	A	
pil	sink	1	C	
pi?l	sink	2	C	
piŋ	tight, be	1	D1	pi?n
pin	tight, be	2	D1	pi?n
pit	blocked, be	1	B	phit
pi?	blocked, be	2	B	phi?
pi?n	tight, be mutually	-	A	piŋ / pin
poŋ	detached, become	1	D2	boŋ, phoŋ
po?ŋ	detached, become	2	D2	bo?ŋ, pho?ŋ
poy	matter / important, be	-	A	
po?r	exaggerate	-	A	
puak	explode	1	B	
pua?	explode	2	B	
puam	big, become	-	A	
puan	shallow, be	1	C	

pua? n	shallow, be	2	C
puaŋ	wild, get / flare up	1	D1
puan	wild, get / flare up	2	D1
puar	swollen, be	-	A
pun	copulate	1	D1
pun	copulate	2	D1
puu	hold / bring (w/ hand)	1	E2
put	hold / bring (w/ hand)	2	E2
puut	gush forth	-	A
raa	come	1	E2
rat	come	2	E2
raaŋ	white, be	1	D1
raan	white, be	2	D1
raŋ	fast, be	1	D1
ran	fast, be	2	D1
ra? n	fast, make	-	A
reel	count	-	A
reel	read	-	A
rem	harmonious, be	-	A
re? m	repair	-	A
riak	stay overnight	1	B
ria?	stay overnight	2	B
rii	drunk, be	1	E1
riit	drunk, be	2	E1
riil	roll	1	C
ri?l	roll	2	C
riin	draw a line	-	A
rit	heavy, be	1	B
ri?	heavy, be	2	B
rook	deteriorate	-	A
root	drag	-	A
ro?	barbecue	-	A
rual	level, be	-	A
rual	stack	1	C
rua? l	stack	2	C
ruat	think (cogitate)	1	B
rua?	think (cogitate)	2	B
saa	build	1	E2
sak	build	2	E2
saa	hot, be (not severe)	1	E2
sat	hot, be (not severe)	2	E2
saan	high, be	1	D1
saan	high, be	2	D1
saaw	long, be / prolong	1	C
sa? w	long, be / prolong	2	C
saay	carve	1	C
sa? y	carve	2	C

sa?	open / breach	-	A
sa?n	put in	-	A
sen	red, be	-	A
ser	make (into)	-	A
se?	bite	-	A
se?r	prepare	-	A
sii	COPULA (identity)	-	A
sii	reprimand	1	E1
siik	reprimand	2	E1
sik	cold, be / pinch	1	B
si?	cold, be / pinch	2	B
soom	invite	-	A
soy	criticize / find fault	-	A
sual	struggle (R)	-	A
suum	control	-	A
suup	control	-	A
suur	precipitate (rain)	1	C
su?r	precipitate (rain)	2	C
suur	squint (eyes)	1	C
su?r	squint (eyes)	2	C
taa	sharpen	1	E1
taat	sharpen	2	E1
taaŋ	stay	1	D1
taan	stay	2	D1
tak	weave	1	B
ta?	weave	2	B
tan	cut / sever	-	A
tar	old, be	-	A
ta?n	stay, make	-	A
ta?r	bait	-	A
tee	small, be	-	A
teet	tight, be	-	A
tel	participate / include	1	C
te?l	participate / include	2	C
tem	suffer	-	A
tep	taste	1	B
te?	taste	2	B
te?r	bait	-	A
thaा	enough, be (R)	-	A
thaaw	fat, be	-	A
thak	itchy, be	1	B
tha?	itchy, be	2	B
than	carry liquid	-	A
thaŋ	audible, be / loud, be	1	D1
than	audible, be / loud, be	2	D1
thar	new, be	-	A
that	kill	1	B

ta?n**ta?n****taaŋ / taan****tha?n****tha?n**

tha?	kill	2	B	
thaw	rise	1	C	
tha?w	rise	2	C	
thay	hear	1	C	
tha?y	hear	2	C	
thay	know	1	C	
tha?y	know	2	C	
tha?n	audible, make	-	A	thaŋ / than
ther	tremble / shiver / shudder	-	A	
thiam	have skill	-	A	
thiam	know	-	A	
thiaŋ	clean, be	1	D1	thia?n
thian	clean, be	2	D1	thia?n
thia?n	clean, cause to be	-	A	thaŋ / thian
thii	die	1	E3	
thi?	die	2	E3	
thlaa	drop	1	E1	tlaa
thlaak	drop	2	E1	tlaak
thlaaw	disappear, make	-	A	tlaaw
thlaw	clear (a field) / weed	1	F2	
thlo?	clear (a field) / weed	2	F2	
thlay	separate	-	A	
thla?	release	-	A	
thleek	tear	1	B	
thle?	tear	2	B	
tliaŋ	clear, be	1	D1	tlia?n
tlian	clear, be	2	D1	tlia?n
tlia?n	clear, make	-	A	thaŋ / tlian
thloŋ	pull out / loosen	1	D2	tloŋ
thlo?ŋ	pull out / loosen	2	D2	tlo?ŋ
thlum	sweet, be	-	A	thlu?m
thluu	knock over	1	E1	tluu
thluuk	knock over	2	E1	tluuk
thlu?m	sweet, make	-	A	thlum
thoo	strong, be (alcohol)	-	A	
thoo	tasty, be	-	A	
thoon	move	-	A	
thoŋ	hit	1	D2	
tho?ŋ	hit	2	D2	
tho?n	stack	-	A	
thul	pierce and hang (meat)	1	C	
thu?l	pierce and hang (meat)	2	C	
thup	hide	1	B	
thu?	hide	2	B	
thur	sour, be	1	C	
thu?r	sour, be	2	C	
thur	unruly, be	1	C	

thu? r	unruly, be	2	C	
thuu	stink	1	E1	
thuut	stink	2	E1	
thuuk	deep, be	-	A	
thu?	smear	-	A	
tiι	melt / lay (egg)	1	E1	
tiit	melt / lay (egg)	2	E1	
tiι	say / name / call	-	A	
tiim	attempt / prepare (R)	1	C	
ti?m	attempt / prepare (R)	2	C	
ti?	enflame	-	A	
tlaa	fall	1	E1	thlaa
tlaak	fall	2	E1	thlaak
tlaa	settle (to live)	1	E1	
tlaak	settle (to live)	2	E1	
tlaak	match (R)	-	A	
tlaaw	disappear	-	A	thlaaw
tlaay	catch / ensnare / hold	1	C	
tla?y	catch / ensnare / hold	2	C	
tla?y	arrest / grasp	-	A	
tlew	shiny, be	-	A	
tle?r	threaten / resound	-	A	
tlia?r	resound	-	A	
tlii	run	1	E1	
tliik	run	2	E1	
tliŋ	fulfilled, be	1	D1	tli?n
tlin	fulfilled, be	2	D1	tli?n
tli?n	fulfill	-	A	tliŋ / tlin
tlok	boil	1	B	
tlo?	boil	2	B	
tloŋ	fall out / fall off	1	D2	thloŋ
tlo?ŋ	fall out / fall off	2	D2	thlo?ŋ
tlooŋ	visit	1	D1	
tloon	visit	2	D1	
tluk	equal, be	-	A	
tlun	visited by disease, be	1	C	
tlu?n	visited by disease, be	2	C	
tluŋ	return	1	D1	
tlun	return	2	D1	
tluŋ	stay as a guest	1	D1	tlu?n 'put up'
tlun	stay as a guest	2	D1	tlu?n 'put up'
thuu	fall over	1	E1	thluu
thuuk	fall over	2	E1	thluuk
tlu?n	put up (as a guest)	-	A	tluŋ, tlun
ton	meet / greet	1	D1	
ton	meet / greet	2	D1	
tooŋ	touch	1	D2	

to?ŋ	touch	2	D2	
tooy	short, be	-	A	to?y
to?	pick	-	A	
to?y	shorten	-	A	tooy
tsaar	dry / dry, be	1	C	
tsa?r	dry / dry, be	2	C	
tsaaw	look up	-	A	
tsaay	copulate	-	A	
tsam	pray (only w <i>thlaa</i>)	1	C	
tsa?m	pray (only w/ <i>thlaa</i>)	2	C	
tsan	cut (meat)	-	A	
tsaŋ	become / happen	1	D1	
tsan	become / happen	2	D1	
tsat	break (as in dawn) / sever	1	B	tshat
tsa?	break (as in dawn) / sever	2	B	tsha?
tsaw	dig	1	F2	
tso?	dig	2	F2	
tsaw	win (as a prize)	-	A	
tsa?n	be same size	-	A	
tser	bright, be	1	C	
tse?r	bright, be	2	C	
tsew	shine / shine, cause to	1	C	
tse?w	shine / shine, cause to	2	C	
tshaa	spit	1	E1	
tshaak	spit	2	E1	
tshat	sever, tear	1	B	tsat
tsha?	sever, tear	2	B	tsa?
tsha?y	beat up	-	A	
tsha?	thick, be	-	A	
tsheem	blow	-	A	
tshew	split up / share	1	C	
tshe?w	split up / share	2	C	
tshia	bad, be	1	E1	
tshiat	bad, be	2	E1	
tshia	put	1	E3	
tshia?	put	2	E3	
tshim	say / teach	1	C	
tshi?m	say / teach	2	C	
tshool	bounce	-	A	
tshoon	speak / converse	1	C	
tsho?n	speak / converse	2	C	
tshoor	show off / proud of, be	1	C	
tsho?r	show off / proud of, be	2	C	
tshuak	come out / born, be	1	B	
tshua?	come out / born, be	2	B	
tshuanj	cook	1	D1	tshua?n
tshuan	cook	2	D1	tshua?n

tshua? n	cook for (sb.)	-	A	tshuaŋ / tshuan
tshun	poke / stab / prick	1	C	
tshu? n	poke / stab / prick	2	C	
tsiap	cheep (chick)	-	A	
tsiin	wet, be	1	C	
tsi? n	wet, be	2	C	
tsiiŋ	plant / grow	1	D1	
tsiin	plant / grow	2	D1	
tsiit	ride (bike, horse, car)	-	A	
tsoo	buy	1	E1	
tsook	buy	2	E1	
tsoonj	learn, imitate	1	D1	
tsoon	learn, imitate	2	D1	
tsooy	lift	-	A	tso?y
tso?y	share	-	A	
tso?y	unburden	-	A	tsooy
tsuanj	conspicuous, be / board (vehicle)	1	D1	tsua? n
tsuan	conspicuous, be / board (vehicle)	2	D1	tshua? n
tsua? n	view from above	-	A	tsuanj / tsuan
tsuk	bite	-	A	
tuam	wrap / bandage	1	F1	
to?m	wrap / bandage	2	F1	
tuan	early, be	1	F1	
to?n	early, be	2	F1	
tuar	endure / suffer	1	F1	
to?r	endure / suffer	2	F1	
tuŋ	vertical, be	1	D1	
tun	vertical, be	2	D1	
tuu	swat / strike	1	E2	
tuk	swat / strike	2	E2	
taam	hungry, be	1	C	
ta?m	hungry, be	2	C	
taŋ	try	1	D1	ta?n
tan	try	2	D1	ta?n
tap	cry / weep	1	B	
ta?	cry / weep	2	B	
ta?n	try, cause to / support	-	A	taŋ / tan
tee	branch off	-	A	
teem	fasten / tie	1	C	
te?m	fasten / tie	2	C	
tet	worn out, be	1	B	thet
te?	worn out, be	2	B	the?
thaα	good, be	1	E2	
that	good, be	2	E2	
thanj	awake, be	1	D2	
tha?ŋ	awake, be	2	D2	
thanj	grow	1	D1	

than	grow	2	D1	
then	give freely	1	C	
the?n	give freely	2	C	
then	separate	-	A	
thep	blink	1	B	
the?	blink	2	B	
thet	wear out	1	B	tet
the?	wear out	2	B	te?
thiaw	scatter / plunder	-	A	tiaw
thii	marry (of a man)	1	E1	
thiit	marry (of a man)	2	E1	
thii	sew	1	E1	
thiit	sew	2	E1	
thil	fall, cause to (from hang. p.)	1	C	til
thi?l	fall, cause to (from hang. p.)	2	C	ti?l
thi?	frighten	-	A	ti?
thoɔŋ	strong, be	1	D1	
thoon	strong, be	2	D1	
thuam	scoop by hand	1	C	
thua?m	scoop by hand	2	C	
thum	descend, cause to	1	C	tum
thu?m	descend, cause to	2	C	(no tu?m)
thuu	sit down	1	E2	
thut	sit down	2	E2	
tial	write / make stripes	1	C	
ta?l	write / make stripes	2	C	
tiaw	scattered, be	-	A	thiaw
ti?	fear	1	E3	
ti?	fear	2	E3	
tiin	return home	-	A	
til	fall (from hanging position)	1	C	thil
ti?l	fall (from hanging position)	2	C	thi?l
ti?	afraid, be	-	A	thi?
tool	wash	-	A	
tuan	work	-	A	
tum	descend	-	A	thum
vaa	marry (of a woman)	1	E1	
vaat	marry (of a woman)	2	E1	
vaak	crawl	1	B	
va?	crawl	2	B	
vaanɔ	bright, be / enlightened, be	1	D1	
vaan	bright, be / enlightened, be	2	D1	
vaay	wander	1	C	
va?y	wander	2	C	
van	brandish	-	A	
veel	beat up	1	C	
ve?l	beat up	2	C	

vel	turn around / go around	-	A	
vo?y	fart	-	A	
vuan	float	1	F1	
vo?n	float	2	F1	
zaa	enough, be / mature, be	1	E1	
zaat	enough, be / mature, be	2	E1	
zaa	tickle	1	E1	
zaat	tickle	2	E1	
zaal	prepare	1	C	
za?l	prepare	2	C	
zaaw	lie down	-	A	
za?w	see / look at	-	A	
zak	embarrassed, be	1	B	
za?	embarrassed, be	2	B	
zeel	surround	1	C	
ze?l	surround	2	C	
zen	numb, be / paralyzed, be	-	A	
zi?r	molt (R)	-	A	
zoo	ill, be / hurt, be	1	E1	
zoot	ill, be / hurt, be	2	E1	
zoom	deride	1	C	
zo?m	deride	2	C	
zor	decrease / recede	-	A	
zo?	follow a path	-	A	
zuam	try	-	A	
zuaŋ	fly	1	D1	
zuan	fly	2	D1	
zuar	sell	1	F1	
zo?r	sell	2	F1	
zuŋ	urinate	1	D1	zu?n
zun	urinate	2	D1	zu?n
zuu	smoke	1	E1	
zuuk	smoke	2	E1	
zuuk	draw / take out	1	B	
zu?	draw / take out	2	B	
zuul	follow	1	C	
zu?l	follow	2	C	
zuum	believe	1	C	
zu?m	believe	2	C	
zu?n	urinate on	-	A	zuŋ / zun
?aan	open mouth / gape	1	D1	
?aan	open mouth / gape	2	D1	
?aaw	shout / roar	1	C	
?a?w	shout / roar	2	C	
?al	contradict / reject	-	A	
?al	salty, be	1	C	
?a?l	salty, be	2	C	

?ar	shocked, be	-	A	
?ay	eat	-	A	?a?y
?a?l	aflame, be	-	A	
?a?y	poison / force to eat	-	A	?ay
?ee	defecate	1	E1	
?eek	defecate	2	E1	
?em	warm, make (by fire)	1	C	
?e?m	warm, make (by fire)	2	C	
?eŋ	push	1	D1	
?en	push	2	D1	
?it	sleep	1	B	
?i?	sleep	2	B	
?i?l	sprain	-	A	
?on	open	1	D1	
?on	open	2	D1	
?ook	hang (R)	-	A	
?oon	make sound	1	C	
?o?n	make sound	2	C	
?ooŋ	have holes	1	D1	
?oon	have holes	2	D1	
?ot	begin / take up	-	A	
?o?	trap / trapped, be	-	A	
?o?n	open for	-	A	?on / ?on
?uar	admire	-	A	
?uay	limp, be / wilted, be	-	A	
?uk	dominate / rule	-	A	
?um	COPULA (stative)	-	A	
?um	live (dwell)	-	A	
?u?y	stinky, become	-	A	

LIST 2: VERBS BY ENGLISH GLOSS

<i>Verb</i>	<i>Gloss</i>	<i>Form</i>	<i>Type</i>	<i>See also</i>
fi?	abhor / detest	-	A	
de?r	able to shoulder, be	-	A	der
faak	ache	1	B	
fa?	ache	2	B	
?uar	admire	-	A	
?a?l	aflame, be	-	A	
phaaŋ	afraid (only has meaning w/ <i>thin</i>)	1	D1	
phaan	afraid (only has meaning w/ <i>thin</i>)	2	D1	
t̪i?	afraid, be	-	A	thi?
ŋiat	aim (R)	-	A	
nuŋ	alive, be	1	D1	nu?n
nun	alive, be	2	D1	nu?n
nu?n	alive, make	-	A	nuŋ / nun
pa?n	approach	-	A	
tla?y	arrest / grasp	-	A	
phaa	arrive	1	E1	
phaak	arrive	2	E1	
phaan	arrive	1	C	
pha?n	arrive	2	C	
hŋal	arrogant, be	-	A	
hal	ask	-	A	
hŋi?l	asleep, be (R)	-	A	
tiim	attempt / prepare (R)	1	C	
ti?m	attempt / prepare (R)	2	C	
thaŋ	audible, be / loud, be	1	D1	tha?n
than	audible, be / loud, be	2	D1	tha?n
tha?n	audible, make	-	A	thaŋ / than
t̪haŋ	awake, be	1	D2	
t̪ha?ŋ	awake, be	2	D2	
tshia	bad, be	1	E1	
tshiat	bad, be	2	E1	
ta?r	bait	-	A	
te?r	bait	-	A	
ro?	barbecue	-	A	
baw	bark (dog)	1	C	
ba?w	bark (dog)	2	C	
tsa?n	be same size	-	A	
tsha?y	beat up	-	A	
veel	beat up	1	C	
ve?l	beat up	2	C	
do?	beautiful, be (R)	-	A	

tsan̥	become / happen	1	D1	
tsan̥	become / happen	2	D1	
?ot̥	begin / take up	-	A	
zuum̥	believe	1	C	
zu?m̥	believe	2	C	
ŋan̥	big, be	-	A	
puam̥	big, become	-	A	
ka?w̥	bite	-	A	
se?	bite	-	A	
tsuk̥	bite	-	A	
nak̥	black, be	-	A	
bee	bleat (goat)	-	A	
t̥hep̥	blink	1	B	
t̥he?	blink	2	B	
kham̥	block	-	A	kha?m̥
phit̥	block	1	B	pit̥
phi?	block	2	B	pi?
pit̥	blocked, be	1	B	phit̥
pi?	blocked, be	2	B	phi?
tsheem̥	blow	-	A	
hniit̥	blow (one's nose)	1	B	
hni?	blow (one's nose)	2	B	
hraaŋ̥	blow (wind)	1	D1	
hraan̥	blow (wind)	2	D1	
tlok̥	boil	1	B	
tlo?	boil	2	B	
hlaaŋ̥	borrow	1	D1	
hlaan̥	borrow	2	D1	
tshool̥	bounce	-	A	
tee	branch off	-	A	
van̥	brandish	-	A	
kiak̥	break	1	B	khiak̥
kia?	break	2	B	khia?
tsat̥	break (as in dawn) / sever	1	B	tshat̥
tsa?	break (as in dawn) / sever	2	B	tsha?
kek̥	break up	1	B	khek̥
ke?	break up	2	B	khe?
khek̥	break up	1	B	kek̥
khe?	break up	2	B	ke?
tser̥	bright, be	1	C	
tse?r̥	bright, be	2	C	
vaŋ̥	bright, be / enlightened, be	1	D1	
vaan̥	bright, be / enlightened, be	2	D1	
ken̥	bring along	1	D1	ke?n̥
ken̥	bring along	2	D1	ke?n̥
hrua?y	bring along (R)	-	A	
ke?n̥	bring along, cause to	-	A	keŋ̥ / ken̥

saa	build	1	E2	
sak	build	2	E2	
kaaŋ	burn	1	D2	khaaŋ
ka?ŋ	burn	2	D2	kha?ŋ
khaaŋ	burn	1	D2	kaaŋ
kha?ŋ	burn	2	D2	ka?ŋ
pa?r	burst / shatter	-	A	
tsoo	buy	1	E1	
tsook	buy	2	E1	
khaw	can / able, be	1	F2	
kho?	can / able, be	2	F2	
than	carry liquid	-	A	
pho?r	carry on back	-	A	
khi?n	carry on shoulders	-	A	
saay	carve	1	C	
sa?y	carve	2	C	
tlaay	catch / ensnare / hold	1	C	
tla?y	catch / ensnare / hold	2	C	
tsiap	cheep (chick)	-	A	
pa?n	cheerful, be	-	A	
khaay	chew	-	A	
phel	chop	-	A	
kho?l	clean (with water)	-	A	
thiaŋ	clean, be	1	D1	thia?n
thian	clean, be	2	D1	thia?n
thia?n	clean, cause to be	-	A	thiaŋ / thian
thlaw	clear (a field) / weed	1	F2	
thlo?	clear (a field) / weed	2	F2	
paaw	clear (of sky)	-	A	
fiaŋ	clear, be	1	D1	fia?n
fian	clear, be	2	D1	fia?n
tliaŋ	clear, be	1	D1	tlia?n
tlian	clear, be	2	D1	tlia?n
fiim	clear, be / wise, be	-	A	
fia?n	clear, make	-	A	fiaŋ / fian
tlia?n	clear, make	-	A	tliaŋ / tlian
kaay	climb	1	C	
ka?y	climb	2	C	
khaar	close	-	A	
khuak	cluck (hen)	1	B	
khua?	cluck (hen)	2	B	
kual	coil	1	C	
kua?l	coil	2	C	
kiik	cold, be	1	B	
ki?	cold, be	2	B	
sik	cold, be / pinch	1	B	
si?	cold, be / pinch	2	B	

khoom	collect	1	C	
kho?m	collect	2	C	
raa	come	1	E2	
rat	come	2	E2	
hunj	come (directional)	1	D1	
hun	come (directional)	2	D1	
tshuak	come out / born, be	1	B	
tshua?	come out / born, be	2	B	
hneem	comfort	1	C	neem
hne?m	comfort	2	C	
hlam	compensated for, be / get back	-	A	
buay	confused, be	-	A	
tsuaŋ	conspicuous, be / board (vehicle)	1	D1	tsua?n
tsuan	conspicuous, be / board (vehicle)	2	D1	tshua?n
?al	contradict / reject	-	A	
suum	control	-	A	
suup	control	-	A	
tshuaŋ	cook	1	D1	tshua?n
tshuan	cook	2	D1	tshua?n
tshua?n	cook for (sb.)	-	A	tshuaŋ / tshuan
sii	COPULA (identity)	-	A	
?um	COPULA (stative)	-	A	
punj	copulate	1	D1	
pun	copulate	2	D1	
tsaay	copulate	-	A	
khu?	cough	-	A	
reel	count	-	A	
vaak	crawl	1	B	
va?	crawl	2	B	
hruut	crazy, be	1	B	
hru?	crazy, be	2	B	
soy	criticize / find fault	-	A	
khuaŋ	crow (rooster)	1	D1	
khuan	crow (rooster)	2	D1	
tap	cry / weep	1	B	
ta?	cry / weep	2	B	
me?	cut (e.g., hair)	-	A	
tsan	cut (meat)	-	A	
haaw	cut down	-	A	
tan	cut / sever	-	A	
hlen	deceive	-	A	
zor	decrease / recede	-	A	
thuuk	deep, be	-	A	
?ee	defecate	1	E1	
?eek	defecate	2	E1	
zoom	deride	1	C	
zo?m	deride	2	C	

tum	descend	-	A	thum
thum	descend, cause to	1	C	ṭum
thu?m	descend, cause to	2	C	(no tu?m)
hrook	destroy	1	B	rook
hro?	destroy	2	B	
ponj	detached, become	1	D2	boŋ, phoŋ
po?ŋ	detached, become	2	D2	bo?ŋ, pho?ŋ
rook	deteriorate	-	A	hrook
thii	die	1	E3	
thi?	die	2	E3	
har	difficult, be	-	A	
kho?y	dig	-	A	
tsaw	dig	1	F2	
tso?	dig	2	F2	
hnoom	dirty	1	C	
hno?m	dirty	2	C	
law	disappear	1	C	
la?w	disappear	2	C	
tlaaw	disappear	-	A	thlaaw
thlaaw	disappear, make	-	A	tlaaw
pial	divert	1	C	
pia?l	divert	2	C	
moon	dizzy / crazy, make	1	C	moŋ
mo?n	dizzy / crazy, make	2	C	moŋ
?uk	dominate / rule	-	A	
do?	drag	-	A	
root	drag	-	A	
riin	draw a line	-	A	
zuuk	draw / take out	1	B	
zu?	draw / take out	2	B	
ma?n	dream	-	A	
diŋ	drink	1	D1	di?n
din	drink	2	D1	di?n
di?n	drink	-	A	diŋ / din
khun	droop / wilt	-	A	
thlaa	drop	1	E1	tlaa
thlaak	drop	2	E1	tlaak
rii	drunk, be	1	E1	
riit	drunk, be	2	E1	
moŋ	drunk, get	-	A	moon / mo?n
tsaar	dry / dry, be	1	C	
tsa?r	dry / dry, be	2	C	
tuan	early, be	1	F1	
to?n	early, be	2	F1	
fooy	easy, be	1	C	
fo?y	easy, be	2	C	
?ay	eat	-	A	?a?y

zak	embarrassed, be	1	B
za?	embarrassed, be	2	B
looŋ	empty, be	1	D1
loon	empty, be	2	D1
doŋ	end / finished, be	1	D2
do?ŋ	end / finished, be	2	D2
tuar	endure / suffer	1	F1
to?r	endure / suffer	2	F1
ti?	enflame	-	A
thaā	enough, be (R)	-	A
zaa	enough, be / mature, be	1	E1
zaat	enough, be / mature, be	2	E1
ka?l	entangle	-	A
luut	enter	1	B
lu?	enter	2	B
ŋe?r	entwine	-	A
tluk	equal, be	-	A
po?r	exaggerate	-	A
hlaay	exhume	-	A
puak	explode	1	B
pua?	explode	2	B
tlaa	fall	1	E1
tlaak	fall	2	E1
til	fall (from hanging position)	1	C
ti?l	fall (from hanging position)	2	C
tloŋ	fall out / fall off	1	D2
tlo?ŋ	fall out / fall off	2	D2
tluu	fall over	1	E1
tluuk	fall over	2	E1
thil	fall, cause to (from hang. p.)	1	C
thi?l	fall, cause to (from hang. p.)	2	C
hlaa	far, be	1	E1
hlaat	far, be	2	E1
vo?y	fart	-	A
raŋ	fast, be	1	D1
ran	fast, be	2	D1
ra?n	fast, make	-	A
teem	fasten / tie	1	C
te?m	fasten / tie	2	C
thaaw	fat, be	-	A
ti?	fear	1	E3
ti?	fear	2	E3
nuam	feel good / happy, be (R)	1	F1
no?m	feel good / happy, be (R)	2	F1
di?	finish	-	A
hrooŋ	fish w/ net (takes <i>suur</i> as obj.)	1	D1
hroon	fish w/ net (takes <i>suur</i> as obj.)	2	D1

vuan	float	1	F1	
vo?n	float	2	F1	
luan̩	flow	1	D1	lua?n̩
luan	flow	2	D1	lua?n̩
lua?n	flow, cause to	-	A	luan̩ / luan
zuan̩	fly	1	D1	
zuan	fly	2	D1	
zuul	follow	1	C	
zu?l	follow	2	C	
zo?	follow a path	-	A	
phi?l	forget	-	A	
hmuy	fragrant, be	1	C	
hmu?y	fragrant, be	2	C	
ma?n	free, be	-	A	
khal	freeze	-	A	
t̩hi?	frighten	-	A	t̩i?
tli?n	fulfill	-	A	tliŋ / tlin
tliŋ	fulfilled, be	1	D1	tli?n
tlin	fulfilled, be	2	D1	tli?n
khat	full, be	-	A	
pee	give	1	E1	
peek	give	2	E1	
khi?r	give back / send back / return	-	A	kiir
t̩hen	give freely	1	C	
the?n	give freely	2	C	
naal	glib, be / fluent, be	1	C	
na?l	glib, be / fluent, be	2	C	
kal	go	-	A	
pial	go astray	-	A	
mit	go out (light)	1	B	hmit
mi?	go out (light)	2	B	hmi?
t̩haa	good, be	1	E2	
t̩hat	good, be	2	E2	
hne?w	graze (bullet)	-	A	
hrin̩	green, be	1	D1	
hrin	green, be	2	D1	
t̩han̩	grow	1	D1	
t̩han	grow	2	D1	
hraam	growl / groan	-	A	
puut	gush forth	-	A	
khe?n	hammer	-	A	
bat	hang	1	B	
ba?	hang	2	B	
?ook	hang (R)	-	A	
loom	happy, be (R)	1	C	
lo?m	happy, be (R)	2	C	
hak	hard, be (of a substance)	1	B	

ha?	hard, be (of a substance)	2	B	
rem	harmonious, be	-	A	re?m
hua	hate	1	E1	
huat	hate	2	E1	
ŋay	have	1	C	
ŋa?y	have	2	C	
?ooŋ	have holes	1	D1	
?oon	have holes	2	D1	
thiam	have skill	-	A	
dam	heal	-	A	
da?m	heal, cause to	-	A	
thay	hear	1	C	
tha?y	hear	2	C	
hlum	heat (sth. up)	-	A	lum
rit	heavy, be	1	B	
ri?	heavy, be	2	B	
boom	help	1	C	
bo?m	help	2	C	
thup	hide	1	B	
thu?	hide	2	B	
saan	high, be	1	D1	
saan	high, be	2	D1	
thoŋ	hit	1	D2	
tho?ŋ	hit	2	D2	
hmoom	hold in mouth	-	A	
puu	hold / bring (w/ hand)	1	E2	
put	hold / bring (w/ hand)	2	E2	
phay	horizontal, be	-	A	
lum	hot, be	1	C	hlum
lu?m	hot, be	2	C	
saa	hot, be (not severe)	1	E2	
sat	hot, be (not severe)	2	E2	
liin	hot, be (severely)	-	A	
taam	hungry, be	1	C	
ta?m	hungry, be	2	C	
khoon	hurt (sb.)	1	D1	
khoon	hurt (sb.)	2	D1	
zoo	ill, be / hurt, be	1	E1	
zoot	ill, be / hurt, be	2	E1	
kaw	in a state, be	-	A	
hlat	investigate	-	A	
soom	invite	-	A	
thak	itchy, be	1	B	
tha?	itchy, be	2	B	
hlok	jump (R)	1	B	
hlo?	jump (R)	2	B	
per	jump (over)	-	A	

pew	jump / hop	-	A	
pe?r	kick (of a horse)	-	A	
that	kill	1	B	
tha?	kill	2	B	
dua?	kindle (a fire)	-	A	
hnam	kiss	1	C	
hna?m	kiss	2	C	
kiŋ	knock	1	D2	
ki?ŋ	knock	2	D2	
thluu	knock over	1	E1	tluu
thluuk	knock over	2	E1	tluuk
hŋal	know	1	C	
hŋa?l	know	2	C	
thay	know	1	C	
tha?y	know	2	C	
thiam	know	-	A	
law	lacking, be	-	A	
nii	laugh	1	E3	
ni?	laugh	2	E3	
hruay	lead	-	A	
tsooŋ	learn, imitate	1	D1	
tsoon	learn, imitate	2	D1	
rual	level, be	-	A	
liak	lick	1	B	
lia?	lick	2	B	
zaaw	lie down	-	A	
bok	lie in wait (to ambush)	1	B	
bo?	lie in wait (to ambush)	2	B	
tsooy	lift	-	A	tso?y
baŋ	like, be	-	A	
bay	limp	-	A	
?uay	limp, be / wilted, be	-	A	
ŋaay	listen	1	C	
ŋa?y	listen	2	C	
?um	live (dwell)	-	A	
hre?n	lock	-	A	hreenŋ / hreen
saaw	long, be / prolong	1	C	
sa?w	long, be / prolong	2	C	
tsaaw	look up	-	A	
loŋ	loose, be	-	A	
phon	loosen	1	D2	bon, poŋ
pho?ŋ	loosen	2	D2	bo?ŋ, po?ŋ
doo	love	1	E1	
doot	love	2	E1	
ser	make (into)	-	A	
?oon	make sound	1	C	
?o?n	make sound	2	C	

daw	make war	1	C	
da?w	make war	2	C	
thii	marry (of a man)	1	E1	
thiit	marry (of a man)	2	E1	
vaa	marry (of a woman)	1	E1	
vaat	marry (of a woman)	2	E1	
tlaak	match (R)	-	A	
poy	matter / important, be	-	A	
toŋ	meet / greet	1	D1	
ton	meet / greet	2	D1	
tiı	melt / lay (egg)	1	E1	
tiit	melt / lay (egg)	2	E1	
miaw	meow (cat)	1	C	
mia?w	meow (cat)	2	C	
pel	miss (e.g., a meeting)	1	C	
pe?l	miss (e.g., a meeting)	2	C	
zi?r	molt (R)	-	A	
boo	moo (cow)	-	A	
thoon	move	-	A	
nooy	muddy, be	1	C	
no?y	muddy, be	2	C	
bii	narrow, be	1	E1	
biit	narrow, be	2	E1	
haaw	necessary, be	1	C	
ha?w	necessary, be	2	C	
he?r	necessary, be	-	A	
thar	new, be	-	A	
hit	numb, be / paralyzed, be	-	A	
zeŋ	numb, be / paralyzed, be	-	A	
tar	old, be	-	A	
hoŋ	open	1	D1	
hon	open	2	D1	
kaaw	open	-	A	ka?w
?oŋ	open	1	D1	
?on	open	2	D1	
?o?n	open for	-	A	?oŋ / ?on
?aan	open mouth / gape	1	D1	
?aan	open mouth / gape	2	D1	
sa?	open / breach	-	A	
liam	overflow	-	A	
baa	owe	1	E2	
bat	owe	2	E2	
fuun	pack	1	C	
fu?n	pack	2	C	
tel	participate / include	1	C	
te?l	participate / include	2	C	
lan	pass through	-	A	

luan	pass / surpass / cross a limit	1	F1
lo?n	pass / surpass / cross a limit	2	F1
liam	pay price for sth.	1	C
lia?m	pay price for sth.	2	C
bi?	peek / peep	-	A
khek	peel off	1	B
khe?	peel off	2	B
leem	persuade	-	A
to?	pick	-	A
thul	pierce and hang (meat)	1	C
thu?l	pierce and hang (meat)	2	C
dot	pile	-	A
hme?r	pinch / twist	-	A
bu?n	plant / drive / post	-	A
tsiiŋ	plant / grow	1	D1
tsiin	plant / grow	2	D1
ka?	play (with)	-	A
dek	play with	1	B
de?	play with	2	B
?a?y	poison / force to eat	-	A
tshun	poke / stab / prick	1	C
tshu?n	poke / stab / prick	2	C
loom	praise	1	C
lo?m	praise	2	C
fak	praise / flatter	-	A
tsam	pray (only w/ <i>thlaa</i>)	1	C
tsa?m	pray (only w/ <i>thlaa</i>)	2	C
suur	precipitate (rain)	1	C
su?r	precipitate (rain)	2	C
se?r	prepare	-	A
zaal	prepare	1	C
za?l	prepare	2	C
da?m	prepare (R)	-	A
diit	press	1	B
di?	press	2	B
ne?n	press down	-	A
hmeet	press / massage	1	B
hme?	press / massage	2	B
doon	prohibit	1	C
do?n	prohibit	2	C
haaw	provoke	1	C
ha?w	provoke	2	C
ŋiar	provoke	-	A
boŋ	pull out	1	D2
bo?ŋ	pull out	2	D2
thloŋ	pull out / loosen	1	D2
thlo?ŋ	pull out / loosen	2	D2

mer / me?r**?ay****poŋ, phoŋ**
po?ŋ, pho?ŋ
tloŋ
tlo?ŋ

?en	push	1	D1	
?en	push	2	D1	
beek	push against / lean against	1	B	
be?	push against / lean against	2	B	
tshia	put	1	E3	
tshia?	put	2	E3	
sa?n	put in	-	A	
khu?m	put into	-	A	
hruk	put on / wear	-	A	
hmit	put out (light)	1	B	mit
hmi?	put out (light)	2	B	mi?
tlu?n	put up (as a guest)	-	A	tluŋ, tlun
reel	read	-	A	
sen	red, be	-	A	
khap	refrain (R)	-	A	
thla?	release	-	A	
re?m	repair	-	A	rem
let	reply / return	1	B	
le?	reply / return	2	B	
sii	reprimand	1	E1	
siik	reprimand	2	E1	
law	resemble	1	F2	
lo?	resemble	2	F2	
tlia?r	resound	-	A	
diin	rest (R)	1	C	
di?n	rest (R)	2	C	
tluŋ	return	1	D1	
tlun	return	2	D1	
kiir	return (to starting point)	-	A	khi?r
tiin	return home	-	A	
tsiit	ride (bike, horse, car)	-	A	
thaw	rise	1	C	
tha?w	rise	2	C	
riil	roll	1	C	hriil
ri?l	roll	2	C	hri?l
hriil	roll, cause to	1	C	riil
hri?l	roll, cause to	2	C	ri?l
hraap	rough, be	-	A	
hraat	rough, be	-	A	
lek	rumble (thunder)	1	B	
le?	rumble (thunder)	2	B	
thii	run	1	E1	
tliik	run	2	E1	
?al	salty, be	1	C	
?a?l	salty, be	2	C	
khim	satiated, be	1	C	
khi?m	satiated, be	2	C	

kha?m	save / rescue	-	A	kham
ti	say / name / call	-	A	
tshim	say / teach	1	C	
tshi?m	say / teach	2	C	
thiaw	scatter / plunder	-	A	tiaw
tiaw	scattered, be	-	A	thiaw
thuam	scoop by hand	1	C	
thua?m	scoop by hand	2	C	
hmuu	see	1	E3	
hmu?	see	2	E3	
za?w	see / look at	-	A	
zuar	sell	1	F1	
zo?r	sell	2	F1	
kua	send	1	E1	
kuat	send	2	E1	
thlay	separate	-	A	
then	separate	-	A	
tlaa	settle (to live)	1	E1	
tlaak	settle (to live)	2	E1	
tshat	sever, tear	1	B	tsat
tsha?	sever, tear	2	B	tsa?
thii	sew	1	E1	
thiit	sew	2	E1	
dul	shadowy, be	1	C	
du?l	shadowy, be	2	C	
hniin	shake	1	C	
hni?n	shake	2	C	
puan	shallow, be	1	C	
pua?n	shallow, be	2	C	
tso?y	share	-	A	
haar	sharp, be	-	A	
taa	sharpen	1	E1	
taat	sharpen	2	E1	
tsew	shine / shine, cause to	1	C	
tse?w	shine / shine, cause to	2	C	
tlew	shiny, be	-	A	
?ar	shocked, be	-	A	
kaap	shoot	1	B	
ka?	shoot	2	B	
niam	short, be	1	C	
nia?m	short, be	2	C	
tooy	short, be	-	A	to?y
to?y	shorten	-	A	tooy
?aaw	shout / roar	1	C	
?a?w	shout / roar	2	C	
tshoor	show off / proud of, be	1	C	
tsho?r	show off / proud of, be	2	C	

pil	sink	1	C
pi?l	sink	2	C
thuu	sit down	1	E2
thut	sit down	2	E2
?it	sleep	1	B
?i?	sleep	2	B
naal	slip / slippery, be / smooth, be	-	A
nuar	slow, be	1	F1
no?r	slow, be	2	F1
hmee	small, be	-	A
tee	small, be	-	A
thu?	smear	-	A
hniim	smell / sniff	1	C
hni?m	smell / sniff	2	C
me?r	smile, twist (face)	-	A
zuu	smoke	1	E1
zuuk	smoke	2	E1
khuu	smoky, be	1	E1
khuut	smoky, be	2	E1
khiak	snap / break	1	B
khia?	snap / break	2	B
neem	soft, be	-	A
thur	sour, be	1	C
thu?r	sour, be	2	C
kiij	sparse, be	1	D1
kiin	sparse, be	2	D1
ho?l	speak	-	A
tshoon	speak / converse	1	C
tsho?n	speak / converse	2	C
her	spin / turn around	1	C
he?r	spin / turn around	2	C
tshaa	spit	1	E1
tshaak	spit	2	E1
tshew	split up / share	1	C
tshe?w	split up / share	2	C
?i?l	sprain	-	A
ŋja	spy on	1	E1
ŋiat	spy on	2	E1
ŋeek	squeal / oink (pig)	-	A
suur	squint (eyes)	1	C
su?r	squint (eyes)	2	C
rual	stack	1	C
rua?l	stack	2	C
tho?n	stack	-	A
diar	stand	1	C
dia?r	stand	2	C
diir	stand up / erect, be	1	C

di? r	stand up / erect, be	2	C	
taaŋ	stay	1	D1	ta? n
taan	stay	2	D1	ta? n
tluŋ	stay as a guest	1	D1	tlu? n 'put up'
tlun	stay as a guest	2	D1	tlu? n 'put up'
riak	stay overnight	1	B	
ria?	stay overnight	2	B	
ta? n	stay, make	-	A	taaŋ / taan
fiar	steal	-	A	
phun	stick / plant (sth. vertical)	-	A	
baŋ	sticky, be	1	D1	
ban	sticky, be	2	D1	
dai	still, be / quiet, be	-	A	
thuu	stink	1	E1	
thuut	stink	2	E1	
?u? y	stinky, become	-	A	
hŋe? r	stir	-	A	
dij	straight, be	1	D1	
din	straight, be	2	D1	
thooŋ	strong, be	1	D1	
thoon	strong, be	2	D1	
thoo	strong, be (alcohol)	-	A	
sual	struggle (R)	-	A	
phe? l	stumble, cause to / dislocate	-	A	pe? l
pe? l	stumble / dislocated, be	-	A	phe? l
fek	sturdy, be	1	B	
fe?	sturdy, be	2	B	
doop	suck	-	A	
tem	suffer	-	A	
hlay	superfluous, be	1	C	
hla? y	superfluous, be	2	C	
do? m	support with the hand	-	A	
ku? l	surround	-	A	
zeel	surround	1	C	
ze? l	surround	2	C	
do? l	swallow	-	A	
le? m	swallow	-	A	
buu	swarm	1	E1	
buut	swarm	2	E1	
tuu	swat / strike	1	E2	
tuk	swat / strike	2	E2	
thlum	sweet, be	-	A	thlu? m
thlu? m	sweet, make	-	A	thlum
phin	swell / swollen, be	1	D1	
phin	swell / swollen, be	2	D1	
liaw	swim	1	C	
lia? w	swim	2	C	

puar	swollen, be	-	A	
laa	take	1	E1	
laak	take	2	E1	
phiir	take (on bike/horse)/entwined, be	1	C	
phi?r	take (on bike/horse)/entwined, be	2	C	
phun	talk nonsense	-	A	
tep	taste	1	B	
te?	taste	2	B	
thoo	tasty, be	-	A	
thleek	tear	1	B	
thle?	tear	2	B	
li?	tell a lie	-	A	
tsha?	thick, be	-	A	
pan	thin, be	-	A	
ruat	think (cogitate)	1	B	
rua?	think (cogitate)	2	B	
haal	thirsty, be	1	C	
ha?l	thirsty, be	2	C	
tle?r	threaten / resound	-	A	
hlon	throw	1	C	
hlo?n	throw	2	C	
pa?y	throw (into)	-	A	
zaa	tickle	1	E1	
zaat	tickle	2	E1	
fim	tidy up	-	A	
hreeŋ	tie / bind	1	D1	hre?n
hreen	tie / bind	2	D1	hre?n
piŋ	tight, be	1	D1	pi?n
pin	tight, be	2	D1	pi?n
teet	tight, be	-	A	
pi?n	tight, be mutually	-	A	piŋ / pin
buŋ	tip over	1	D2	
bu?ŋ	tip over	2	D2	
baa	tire	1	E1	
baat	tire	2	E1	
tooŋ	touch	1	D2	
to?ŋ	touch	2	D2	
laam	trample / dance	1	C	
la?m	trample / dance	2	C	
?o?	trap / trapped, be	-	A	
ther	tremble / shiver / shudder	-	A	
hmaan	true, be / correct, be	-	A	
taŋ	try	1	D1	ta?n
tan	try	2	D1	ta?n
zuam	try	-	A	
ta?n	try, cause to / support	-	A	taŋ / tan
vel	turn around / go around	-	A	

mer	turn, twist	1	C	hme?r (no hmer)
me?r	turn, twist	2	C	hme?r
kooy	twisty, be	-	A	kuay / ko?y
kuay	twisty, make	1	F1	koy
ko?y	twisty, make	2	F1	koy
tso?y	unburden	-	A	tsooy
ko?m	unite / make friends	-	A	kom
kom	united, be / friends, be	-	A	ko?m
thur	unruly, be	1	C	
thu?r	unruly, be	2	C	
phooy	uproot / undo / untie	1	C	
pho?y	uproot / undo / untie	2	C	
hnée	urge / push	1	E1	
hneek	urge / push	2	E1	
zuŋ	urinate	1	D1	zu?n
zun	urinate	2	D1	zu?n
zu?n	urinate on	-	A	zuŋ / zun
hmaŋ	use / have the habit of doing	1	D1	
hman	use / have the habit of doing	2	D1	
neek	used to, be	-	A	
tuŋ	vertical, be	1	D1	
tun	vertical, be	2	D1	
tsua?n	view from above	-	A	tsuaŋ / tsuan
laŋ	visible, be / reveal oneself	1	D2	
la?ŋ	visible, be / reveal oneself	2	D2	
leenŋ	visit	1	D1	
leen	visit	2	D1	
tlooŋ	visit	1	D1	
tloon	visit	2	D1	
tlun	visited by disease, be	1	C	
tlu?n	visited by disease, be	2	C	
lua	vomit	1	E1	
luak	vomit	2	E1	
hṇaak	wait	1	B	
hṇa?	wait	2	B	
vaay	wander	1	C	
va?y	wander	2	C	
kiaŋ	wander (only w/ <i>thla-vaay</i>)	1	D1	kia?n
kiān	wander (only w/ <i>thla-vaay</i>)	2	D1	kia?n
kia?n	wander, cause to	-	A	kiaŋ / kiān
huam	want	-	A	
du?	want / like	-	A	
?em	warm, make (by fire)	1	C	
?e?m	warm, make (by fire)	2	C	
tool	wash	-	A	
feen	wash away / flush	1	C	
fe?n	wash away / flush	2	C	

der	weak / skinny	-	A	de?r
t̪het	wear out	1	B	t̪et
t̪he?	wear out	2	B	t̪e?
tak	weave	1	B	
ta?	weave	2	B	
dɔŋ	welcome	1	D1	
don	welcome	2	D1	
tsiin	wet, be	1	C	
tsi?n	wet, be	2	C	
raaŋ	white, be	1	D1	
raan	white, be	2	D1	
ka?w	widen / extend	-	A	kaaw
puan̄	wild, get / flare up	1	D1	
puan	wild, get / flare up	2	D1	
tsaw	win (as a prize)	-	A	
hnoot	wipe	1	B	
hno?	wipe	2	B	
t̪uan	work	-	A	
t̪et	worn out, be	1	B	t̪et
t̪e?	worn out, be	2	B	t̪e?
tuam	wrap / bandage	1	F1	
to?m	wrap / bandage	2	F1	
kur	wrinkled, be	-	A	
t̪ial	write / make stripes	1	C	
t̪ia?l	write / make stripes	2	C	
pa?l	wrong, be / make mistake	-	A	
ŋaay	yearn / long for	1	C	
ŋa?y	yearn / long for	2	C	
hniaŋ	younger, be	-	A	

LIST 3: VERBS BY FORM-ALTERNATION TYPE

<i>Verb</i>	<i>Gloss</i>	<i>Form</i>	<i>Type</i>	<i>See also</i>
baŋ	like, be	-	A	
bay	limp	-	A	
bee	bleat (goat)	-	A	
bi?	peek / peep	-	A	
boo	moo (cow)	-	A	
buay	confused, be	-	A	
bu?n	plant / drive / post	-	A	
dai	still, be / quiet, be	-	A	
dam	heal	-	A	
da?m	heal, cause to	-	A	
da?m	prepare (R)	-	A	
der	weak / skinny	-	A	de?r
de?r	able to shoulder, be	-	A	der
di?	finish	-	A	
di?n	drink	-	A	diŋ / din
doop	suck	-	A	
dot	pile	-	A	
do?	beautiful, be (R)	-	A	
do?	drag	-	A	
do?l	swallow	-	A	
do?m	support with the hand	-	A	
dua?	kindle (a fire)	-	A	
du?	want / like	-	A	
fak	praise / flatter	-	A	
fiar	steal	-	A	
fia?n	clear, make	-	A	fiaŋ / fian
fiim	clear, be / wise, be	-	A	
fiim	tidy up	-	A	
fi?	abhor / detest	-	A	
haar	sharp, be	-	A	
haaw	cut down	-	A	
hal	ask	-	A	
har	difficult, be	-	A	
he?r	necessary, be	-	A	
hit	numb, be / paralyzed, be	-	A	
hlaay	exhume	-	A	
hlam	compensated for, be / get back	-	A	
hlat	investigate	-	A	
hlen	deceive	-	A	
hlum	heat (sth. up)	-	A	lum
hmaan	true, be / correct, be	-	A	

hmee	small, be	-	A	
hme?r	pinch / twist	-	A	mer / me?r
hmoom	hold in mouth	-	A	
hne?w	graze (bullet)	-	A	
hniaŋ	younger, be	-	A	
hŋal	arrogant, be	-	A	
hŋe?r	stir	-	A	
hŋi?l	asleep, be (R)	-	A	
ho?l	speak	-	A	
hraam	growl / groan	-	A	
hraap	rough, be	-	A	
hraat	rough, be	-	A	
hre?n	lock	-	A	hreenj / hreen
hruay	lead	-	A	
hrua?y	bring along (R)	-	A	
hruk	put on / wear	-	A	
huam	want	-	A	
kaaw	open	-	A	ka?w
kal	go	-	A	
kaw	in a state, be	-	A	
ka?	play (with)	-	A	
ka?l	entangle	-	A	
ka?w	bite	-	A	
ka?w	widen / extend	-	A	kaaw
ke?n	bring along, cause to	-	A	keŋ / ken
khaar	close	-	A	
khaay	chew	-	A	
khal	freeze	-	A	
kham	block	-	A	kha?m
khap	refrain (R)	-	A	
khat	full, be	-	A	
kha?m	save / rescue	-	A	kham
khe?n	hammer	-	A	
khi?n	carry on shoulders	-	A	
khi?r	give back / send back / return	-	A	kiir
kho?l	clean (with water)	-	A	
kho?y	dig	-	A	
khun	droop / wilt	-	A	
khu?	cough	-	A	
khu?m	put into	-	A	
kia?n	wander, cause to	-	A	kiaŋ / kian
kiir	return (to starting point)	-	A	khi?r
kom	united, be / friends, be	-	A	ko?m
kooy	twisty, be	-	A	kuay / ko?y
ko?m	unite / make friends	-	A	kom
kur	wrinkled, be	-	A	
ku?l	surround	-	A	

lan	pass through	-	A
law	lacking, be	-	A
leem	persuade	-	A
le?m	swallow	-	A
liam	overflow	-	A
liin	hot, be (severely)	-	A
li?	tell a lie	-	A
loŋ	loose, be	-	A
lua?n	flow, cause to	-	A
ma?n	free, be	-	A
ma?n	dream	-	A
me?	cut (e.g., hair)	-	A
me?r	smile, twist (face)	-	A
moŋ	drunk, get	-	A
naal	slip / slippery, be / smooth, be	-	A
nak	black, be	-	A
neek	used to, be	-	A
neem	soft, be	-	A
ne?n	press down	-	A
nu?n	alive, make	-	A
ŋan	big, be	-	A
ŋeek	squeal / oink (pig)	-	A
ŋe?r	entwine	-	A
ŋiar	provoke	-	A
ŋiat	aim (R)	-	A
paaw	clear (of sky)	-	A
pan	thin, be	-	A
pa?l	wrong, be / make mistake	-	A
pa?n	approach	-	A
pa?n	cheerful, be	-	A
pa?r	burst / shatter	-	A
pa?y	throw (into)	-	A
per	jump (over)	-	A
pew	jump / hop	-	A
pe?l	stumble / dislocated, be	-	A
pe?r	kick (of a horse)	-	A
phay	horizontal, be	-	A
phel	chop	-	A
phe?l	stumble, cause to / dislocate	-	A
phi?l	forget	-	A
pho?r	carry on back	-	A
phun	stick / plant (sth. vertical)	-	A
phun	talk nonsense	-	A
pial	go astray	-	A
pi?n	tight, be mutually	-	A
poy	matter / important, be	-	A
po?r	exaggerate	-	A

luaj / luan**hme?r****moon / mo?n****hneem****nuŋ / nun****phe?l****pe?l****piŋ / pin**

puam	big, become	-	A	
puar	swollen, be	-	A	
puut	gush forth	-	A	
ra?n	fast, make	-	A	raŋ / ran
reel	count	-	A	
reel	read	-	A	
rem	harmonious, be	-	A	re?m
re?m	repair	-	A	rem
riin	draw a line	-	A	
rook	deteriorate	-	A	hrook
root	drag	-	A	
ro?	barbecue	-	A	
rual	level, be	-	A	
sa?	open / breach	-	A	
sa?n	put in	-	A	
sen	red, be	-	A	
ser	make (into)	-	A	
se?	bite	-	A	
se?r	prepare	-	A	
sii	COPULA (identity)	-	A	
soom	invite	-	A	
soy	criticize / find fault	-	A	
sual	struggle (R)	-	A	
suum	control	-	A	
suup	control	-	A	
tan	cut / sever	-	A	
tar	old, be	-	A	
ta?n	stay, make	-	A	taaŋ / taan
ta?r	bait	-	A	
tee	small, be	-	A	
teet	tight, be	-	A	
tem	suffer	-	A	
te?r	bait	-	A	
thaan	enough, be (R)	-	A	
thaaw	fat, be	-	A	
than	carry liquid	-	A	
thar	new, be	-	A	
tha?n	audible, make	-	A	thaŋ / than
ther	tremble / shiver / shudder	-	A	
thiam	have skill	-	A	
thiam	know	-	A	
thia?n	clean, cause to be	-	A	thianŋ / thian
thlaaw	disappear, make	-	A	tlaaw
thlay	separate	-	A	
thla?	release	-	A	
tlia?n	clear, make	-	A	tlianŋ / tlian
thlum	sweet, be	-	A	thlu?m

thlu?m	sweet, make	-	A	thlum
thoo	strong, be (alcohol)	-	A	
thoo	tasty, be	-	A	
thoon	move	-	A	
tho?n	stack	-	A	
thuuk	deep, be	-	A	
thu?	smear	-	A	
ti?	say / name / call	-	A	
ti?	enflame	-	A	
tlaak	match (R)	-	A	
tlaaw	disappear	-	A	thlaaw
tla?y	arrest / grasp	-	A	
tlew	shiny, be	-	A	
tle?r	threaten / resound	-	A	
tlia?r	resound	-	A	
tli?n	fulfill	-	A	tliŋ / tlin
tluk	equal, be	-	A	
tlu?n	put up (as a guest)	-	A	tluŋ, tlun
tooy	short, be	-	A	to?y
to?	pick	-	A	
to?y	shorten	-	A	tooy
tsaaw	look up	-	A	
tsaay	copulate	-	A	
tsan	cut (meat)	-	A	
tsaw	win (as a prize)	-	A	
tsa?n	be same size	-	A	
tsha?y	beat up	-	A	
tsha?	thick, be	-	A	
tsheem	blow	-	A	
tshool	bounce	-	A	
tshua?n	cook for (sb.)	-	A	tshuanj / tshuan
tsiap	cheep (chick)	-	A	
tsiit	ride (bike, horse, car)	-	A	
tsooy	lift	-	A	tso?y
tso?y	share	-	A	
tso?y	unburden	-	A	tsooy
tsua?n	view from above	-	A	tsuaŋ / tsuan
tsuk	bite	-	A	
ta?n	try, cause to / support	-	A	tanj / tan
tee	branch off	-	A	
then	separate	-	A	
thiaw	scatter / plunder	-	A	tiaw
thi?	frighten	-	A	ti?
tiaw	scattered, be	-	A	thiaw
tiin	return home	-	A	
ti?	afraid, be	-	A	thi?
tool	wash	-	A	

tuan	work	-	A	
tum	descend	-	A	thum
van	brandish	-	A	
vel	turn around / go around	-	A	
vo?y	fart	-	A	
zaaw	lie down	-	A	
za?w	see / look at	-	A	
zeŋ	numb, be / paralyzed, be	-	A	
zi?r	molt (R)	-	A	
zor	decrease / recede	-	A	
zo?	follow a path	-	A	
zuam	try	-	A	
zu?n	urinate on	-	A	zuŋ / zun
?al	contradict / reject	-	A	
?ar	shocked, be	-	A	
?ay	eat	-	A	?a?y
?a?l	aflame, be	-	A	
?a?y	poison / force to eat	-	A	?ay
?i?l	sprain	-	A	
?ook	hang (R)	-	A	
?ot	begin / take up	-	A	
?o?	trap / trapped, be	-	A	
?o?n	open for	-	A	?onj / ?on
?uar	admire	-	A	
?uay	limp, be / wilted, be	-	A	
?uk	dominate / rule	-	A	
?um	COPULA (stative)	-	A	
?um	live (dwell)	-	A	
?u?y	stinky, become	-	A	
bat	hang	1	B	
ba?	hang	2	B	
beek	push against / lean against	1	B	
be?	push against / lean against	2	B	
bok	lie in wait (to ambush)	1	B	
bo?	lie in wait (to ambush)	2	B	
dek	play with	1	B	
de?	play with	2	B	
diit	press	1	B	
di?	press	2	B	
faak	ache	1	B	
fa?	ache	2	B	
fek	sturdy, be	1	B	
fe?	sturdy, be	2	B	
hak	hard, be (of a substance)	1	B	
ha?	hard, be (of a substance)	2	B	
hlok	jump (R)	1	B	
hlo?	jump (R)	2	B	

hmeet	press / massage	1	B	
hme?	press / massage	2	B	
hmit	put out (light)	1	B	mit
hmi?	put out (light)	2	B	mi?
hniit	blow (one's nose)	1	B	
hni?	blow (one's nose)	2	B	
hnoot	wipe	1	B	
hno?	wipe	2	B	
hŋaak	wait	1	B	
hŋa?	wait	2	B	
hrook	destroy	1	B	rook
hro?	destroy	2	B	
hruut	crazy, be	1	B	
hru?	crazy, be	2	B	
kaap	shoot	1	B	
ka?	shoot	2	B	
kek	break up	1	B	khek
ke?	break up	2	B	khe?
khek	break up	1	B	kek
khe?	break up	2	B	ke?
khek	peel off	1	B	
khe?	peel off	2	B	
khiak	snap / break	1	B	kiak
khia?	snap / break	2	B	kia?
khuak	cluck (hen)	1	B	
khua?	cluck (hen)	2	B	
kiak	break	1	B	khiak
kia?	break	2	B	khia?
kiik	cold, be	1	B	
ki?	cold, be	2	B	
lek	rumble (thunder)	1	B	
le?	rumble (thunder)	2	B	
let	reply / return	1	B	
le?	reply / return	2	B	
liak	lick	1	B	
lia?	lick	2	B	
luut	enter	1	B	
lu?	enter	2	B	
mit	go out (light)	1	B	hmit
mi?	go out (light)	2	B	hmi?
phit	block	1	B	pit
phi?	block	2	B	pi?
pit	blocked, be	1	B	phit
pi?	blocked, be	2	B	phi?
puak	explode	1	B	
pua?	explode	2	B	
riak	stay overnight	1	B	

ria?	stay overnight	2	B	
rit	heavy, be	1	B	
ri?	heavy, be	2	B	
ruat	think (cogitate)	1	B	
rua?	think (cogitate)	2	B	
sik	cold, be / pinch	1	B	
si?	cold, be / pinch	2	B	
tak	weave	1	B	
ta?	weave	2	B	
tep	taste	1	B	
te?	taste	2	B	
thak	itchy, be	1	B	
tha?	itchy, be	2	B	
that	kill	1	B	
tha?	kill	2	B	
thleek	tear	1	B	
thle?	tear	2	B	
thup	hide	1	B	
thu?	hide	2	B	
tlok	boil	1	B	
tlo?	boil	2	B	
tsat	break (as in dawn) / sever	1	B	tshat
tsa?	break (as in dawn) / sever	2	B	tsha?
tshat	sever, tear	1	B	tsat
tsha?	sever, tear	2	B	tsa?
tshuak	come out / born, be	1	B	
tshua?	come out / born, be	2	B	
tap	cry / weep	1	B	
ta?	cry / weep	2	B	
tet	worn out, be	1	B	thet
te?	worn out, be	2	B	the?
thep	blink	1	B	
the?	blink	2	B	
thet	wear out	1	B	tet
the?	wear out	2	B	te?
vaak	crawl	1	B	
va?	crawl	2	B	
zak	embarrassed, be	1	B	
za?	embarrassed, be	2	B	
zuuk	draw / take out	1	B	
zu?	draw / take out	2	B	
?it	sleep	1	B	
?i?	sleep	2	B	
baw	bark (dog)	1	C	
ba?w	bark (dog)	2	C	
boom	help	1	C	
bo?m	help	2	C	

daw	make war	1	C
da?w	make war	2	C
diar	stand	1	C
dia?r	stand	2	C
diin	rest (R)	1	C
di?n	rest (R)	2	C
diir	stand up / erect, be	1	C
di?r	stand up / erect, be	2	C
doon	prohibit	1	C
do?n	prohibit	2	C
dul	shadowy, be	1	C
du?l	shadowy, be	2	C
feen	wash away / flush	1	C
fe?n	wash away / flush	2	C
fooy	easy, be	1	C
fo?y	easy, be	2	C
fuun	pack	1	C
fu?n	pack	2	C
haal	thirsty, be	1	C
ha?l	thirsty, be	2	C
haaw	necessary, be	1	C
ha?w	necessary, be	2	C
haaw	provoke	1	C
ha?w	provoke	2	C
her	spin / turn around	1	C
he?r	spin / turn around	2	C
hlay	superfluous, be	1	C
hla?y	superfluous, be	2	C
hlon	throw	1	C
hlo?n	throw	2	C
hmuy	fragrant, be	1	C
hmu?y	fragrant, be	2	C
hnam	kiss	1	C
hna?m	kiss	2	C
hneem	comfort	1	C
hne?m	comfort	2	C
hniim	smell / sniff	1	C
hni?m	smell / sniff	2	C
hniin	shake	1	C
hni?n	shake	2	C
hnoom	dirty	1	C
hno?m	dirty	2	C
hŋal	know	1	C
hŋa?l	know	2	C
hriil	roll, cause to	1	C
hri?l	roll, cause to	2	C
kaay	climb	1	C

neem

riil

ri?l

ka?y	climb	2	C
khim	satiated, be	1	C
khi?m	satiated, be	2	C
khoom	collect	1	C
kho?m	collect	2	C
kual	coil	1	C
kua?l	coil	2	C
laam	trample / dance	1	C
la?m	trample / dance	2	C
law	disappear	1	C
la?w	disappear	2	C
liam	pay price for sth.	1	C
lia?m	pay price for sth.	2	C
liaw	swim	1	C
lia?w	swim	2	C
loom	happy, be (R)	1	C
lo?m	happy, be (R)	2	C
loom	praise	1	C
lo?m	praise	2	C
lum	hot, be	1	C
lu?m	hot, be	2	C
mer	turn, twist	1	C
me?r	turn, twist	2	C
miaw	meow (cat)	1	C
mia?w	meow (cat)	2	C
moon	dizzy / crazy, make	1	C
mo?n	dizzy / crazy, make	2	C
naal	glib, be / fluent, be	1	C
na?l	glib, be / fluent, be	2	C
niam	short, be	1	C
nia?m	short, be	2	C
nooy	muddy, be	1	C
no?y	muddy, be	2	C
ŋay	have	1	C
ŋa?y	have	2	C
ŋaay	listen	1	C
ŋa?y	listen	2	C
ŋaay	yearn / long for	1	C
ŋa?y	yearn / long for	2	C
pel	miss (e.g., a meeting)	1	C
pe?l	miss (e.g., a meeting)	2	C
phaan	arrive	1	C
pha?n	arrive	2	C
phiir	take (on bike/horse)/entwined, be	1	C
phi?r	take (on bike/horse)/entwined, be	2	C
phooy	uproot / undo / untie	1	C
pho?y	uproot / undo / untie	2	C

pial	divert	1	C
pia?l	divert	2	C
pil	sink	1	C
pi?l	sink	2	C
puan	shallow, be	1	C
pua?n	shallow, be	2	C
riil	roll	1	C
ri?l	roll	2	C
rual	stack	1	C
rua?l	stack	2	C
saaw	long, be / prolong	1	C
sa?w	long, be / prolong	2	C
saay	carve	1	C
sa?y	carve	2	C
suur	precipitate (rain)	1	C
su?r	precipitate (rain)	2	C
suur	squint (eyes)	1	C
su?r	squint (eyes)	2	C
tel	participate / include	1	C
te?l	participate / include	2	C
thaw	rise	1	C
tha?w	rise	2	C
thay	hear	1	C
tha?y	hear	2	C
thay	know	1	C
tha?y	know	2	C
thul	pierce and hang (meat)	1	C
thu?l	pierce and hang (meat)	2	C
thur	sour, be	1	C
thu?r	sour, be	2	C
thur	unruly, be	1	C
thu?r	unruly, be	2	C
tiim	attempt / prepare (R)	1	C
ti?m	attempt / prepare (R)	2	C
tlaay	catch / ensnare / hold	1	C
tla?y	catch / ensnare / hold	2	C
tlun	visited by disease, be	1	C
tlu?n	visited by disease, be	2	C
tsaar	dry / dry, be	1	C
tsa?r	dry / dry, be	2	C
tsam	pray (only w/ <i>thlaa</i>)	1	C
tsa?m	pray (only w/ <i>thlaa</i>)	2	C
tser	bright, be	1	C
tse?r	bright, be	2	C
tsew	shine / shine, cause to	1	C
tse?w	shine / shine, cause to	2	C
tshew	split up / share	1	C

tshe?w	split up / share	2	C	
tshim	say / teach	1	C	
tshi?m	say / teach	2	C	
tshoon	speak / converse	1	C	
tsho?n	speak / converse	2	C	
tshoor	show off / proud of, be	1	C	
tsho?r	show off / proud of, be	2	C	
tshun	poke / stab / prick	1	C	
tshu?n	poke / stab / prick	2	C	
tsiin	wet, be	1	C	
tsi?n	wet, be	2	C	
taam	hungry, be	1	C	
ta?m	hungry, be	2	C	
teem	fasten / tie	1	C	
te?m	fasten / tie	2	C	
then	give freely	1	C	
the?n	give freely	2	C	
thil	fall, cause to (from hang. p.)	1	C	til
thi?l	fall, cause to (from hang. p.)	2	C	ti?l
thuam	scoop by hand	1	C	
thua?m	scoop by hand	2	C	
thum	descend, cause to	1	C	tum
thu?m	descend, cause to	2	C	(no tu?m)
tial	write / make stripes	1	C	
ti?l	write / make stripes	2	C	
til	fall (from hanging position)	1	C	thil
ti?l	fall (from hanging position)	2	C	thi?l
vaay	wander	1	C	
va?y	wander	2	C	
veel	beat up	1	C	
ve?l	beat up	2	C	
zaal	prepare	1	C	
za?l	prepare	2	C	
zeel	surround	1	C	
ze?l	surround	2	C	
zoom	deride	1	C	
zo?m	deride	2	C	
zuul	follow	1	C	
zu?l	follow	2	C	
zuum	believe	1	C	
zu?m	believe	2	C	
?aaw	shout / roar	1	C	
?a?w	shout / roar	2	C	
?al	salty, be	1	C	
?a?l	salty, be	2	C	
?em	warm, make (by fire)	1	C	
?e?m	warm, make (by fire)	2	C	

?oon	make sound	1	C	
?o?n	make sound	2	C	
baŋ	sticky, be	1	D1	
ban	sticky, be	2	D1	
diŋ	drink	1	D1	di?n
din	drink	2	D1	di?n
diŋ	straight, be	1	D1	
din	straight, be	2	D1	
doŋ	welcome	1	D1	
don	welcome	2	D1	
fiaŋ	clear, be	1	D1	fia?n
fian	clear, be	2	D1	fia?n
hlaaŋ	borrow	1	D1	
hlaan	borrow	2	D1	
hmaŋ	use / have the habit of doing	1	D1	
hman	use / have the habit of doing	2	D1	
hoŋ	open	1	D1	
hon	open	2	D1	
hraaŋ	blow (wind)	1	D1	
hraan	blow (wind)	2	D1	
hreeŋ	tie / bind	1	D1	hre?n
hreen	tie / bind	2	D1	hre?n
hriŋ	green, be	1	D1	
hrin	green, be	2	D1	
hrooŋ	fish w/ net (takes <i>suur</i> as obj.)	1	D1	
hroon	fish w/ net (takes <i>suur</i> as obj.)	2	D1	
huŋ	come (directional)	1	D1	
hun	come (directional)	2	D1	
keŋ	bring along	1	D1	ke?n
ken	bring along	2	D1	ke?n
khoonŋ	hurt (sb.)	1	D1	
khoon	hurt (sb.)	2	D1	
khuanŋ	crow (rooster)	1	D1	
khuan	crow (rooster)	2	D1	
kiaŋ	wander (only w/ <i>thla-vaay</i>)	1	D1	kia?n
kian	wander (only w/ <i>thla-vaay</i>)	2	D1	kia?n
kiiŋ	sparse, be	1	D1	
kiin	sparse, be	2	D1	
leenŋ	visit	1	D1	
leen	visit	2	D1	
loonŋ	empty, be	1	D1	
loon	empty, be	2	D1	
luanŋ	flow	1	D1	lua?n
luan	flow	2	D1	lua?n
nuŋ	alive, be	1	D1	nu?n
nun	alive, be	2	D1	nu?n
phaaŋ	afraid (only has meaning w/ <i>thin</i>)	1	D1	

phaan	afraid (only has meaning w/ <i>thin</i>)	2	D1	
phiŋ	swell / swollen, be	1	D1	
phin	swell / swollen, be	2	D1	
piŋ	tight, be	1	D1	pi?n
pin	tight, be	2	D1	pi?n
puaŋ	wild, get / flare up	1	D1	
puan	wild, get / flare up	2	D1	
punŋ	copulate	1	D1	
pun	copulate	2	D1	
raaŋ	white, be	1	D1	
raan	white, be	2	D1	
raŋ	fast, be	1	D1	ra?n
ran	fast, be	2	D1	ra?n
saaŋ	high, be	1	D1	
saan	high, be	2	D1	
taaŋ	stay	1	D1	ta?n
taan	stay	2	D1	ta?n
thaŋ	audible, be / loud, be	1	D1	tha?n
than	audible, be / loud, be	2	D1	tha?n
thiaŋ	clean, be	1	D1	thia?n
thian	clean, be	2	D1	thia?n
tliŋ	clear, be	1	D1	tli?n
tlian	clear, be	2	D1	tli?n
tliŋ	fulfilled, be	1	D1	tli?n
tlin	fulfilled, be	2	D1	tli?n
tlooŋ	visit	1	D1	
tloon	visit	2	D1	
tluŋ	return	1	D1	
tlun	return	2	D1	
tluŋ	stay as a guest	1	D1	tlu?n 'put up'
tlun	stay as a guest	2	D1	tlu?n 'put up'
toŋ	meet / greet	1	D1	
ton	meet / greet	2	D1	
tsaŋ	become / happen	1	D1	
tsan	become / happen	2	D1	
tshuaŋ	cook	1	D1	tshua?n
tshuan	cook	2	D1	tshua?n
tsiŋ	plant / grow	1	D1	
tsiin	plant / grow	2	D1	
tsooŋ	learn, imitate	1	D1	
tsoon	learn, imitate	2	D1	
tsuaŋ	conspicuous, be / board (vehicle)	1	D1	tsua?n
tsuan	conspicuous, be / board (vehicle)	2	D1	tshua?n
tuŋ	vertical, be	1	D1	
tun	vertical, be	2	D1	
taŋ	try	1	D1	ta?n
tan	try	2	D1	ta?n

thaŋ	grow	1	D1
than	grow	2	D1
thooŋ	strong, be	1	D1
thoon	strong, be	2	D1
vaan	bright, be / enlightened, be	1	D1
vaan	bright, be / enlightened, be	2	D1
zuaŋ	fly	1	D1
zuan	fly	2	D1
zuŋ	urinate	1	D1
zun	urinate	2	D1
?aan	open mouth / gape	1	D1
?aan	open mouth / gape	2	D1
?eŋ	push	1	D1
?en	push	2	D1
?oŋ	open	1	D1
?on	open	2	D1
?ooŋ	have holes	1	D1
?oon	have holes	2	D1
boŋ	pull out	1	D2
bo?ŋ	pull out	2	D2
buŋ	tip over	1	D2
bu?ŋ	tip over	2	D2
doŋ	end / finished, be	1	D2
do?ŋ	end / finished, be	2	D2
kaaŋ	burn	1	D2
ka?ŋ	burn	2	D2
khaaŋ	burn	1	D2
kha?ŋ	burn	2	D2
kiŋ	knock	1	D2
ki?ŋ	knock	2	D2
laŋ	visible, be / reveal oneself	1	D2
la?ŋ	visible, be / reveal oneself	2	D2
phoŋ	loosen	1	D2
pho?ŋ	loosen	2	D2
poŋ	detached, become	1	D2
po?ŋ	detached, become	2	D2
thloŋ	pull out / loosen	1	D2
thlo?ŋ	pull out / loosen	2	D2
thoŋ	hit	1	D2
tho?ŋ	hit	2	D2
tloŋ	fall out / fall off	1	D2
tlo?ŋ	fall out / fall off	2	D2
tooŋ	touch	1	D2
to?ŋ	touch	2	D2
thaŋ	awake, be	1	D2
tha?ŋ	awake, be	2	D2
baa	tire	1	E1

baat	tire	2	E1	
bii	narrow, be	1	E1	
biit	narrow, be	2	E1	
buu	swarm	1	E1	
buut	swarm	2	E1	
doo	love	1	E1	
doot	love	2	E1	
hlaa	far, be	1	E1	
hlaat	far, be	2	E1	
hnee	urge / push	1	E1	
hneek	urge / push	2	E1	
hua	hate	1	E1	
huat	hate	2	E1	
khuu	smoky, be	1	E1	
khuut	smoky, be	2	E1	
kua	send	1	E1	
kuat	send	2	E1	
laa	take	1	E1	
laak	take	2	E1	
lua	vomit	1	E1	
luak	vomit	2	E1	
ŋia	spy on	1	E1	
ŋiat	spy on	2	E1	
pee	give	1	E1	
peek	give	2	E1	
phaa	arrive	1	E1	
phaak	arrive	2	E1	
rii	drunk, be	1	E1	
riit	drunk, be	2	E1	
sii	reprimand	1	E1	
siik	reprimand	2	E1	
taa	sharpen	1	E1	
taat	sharpen	2	E1	
thlaa	drop	1	E1	tlaa
thlaak	drop	2	E1	tlak
thluu	knock over	1	E1	tluu
thluuk	knock over	2	E1	tluuk
thuu	stink	1	E1	
thuut	stink	2	E1	
ti	melt / lay (egg)	1	E1	
tiit	melt / lay (egg)	2	E1	
tlaa	fall	1	E1	thlaa
tlak	fall	2	E1	thlaak
tlaa	settle (to live)	1	E1	
tlak	settle (to live)	2	E1	
tlii	run	1	E1	
tluuk	run	2	E1	

tluu	fall over	1	E1	thluu
tluuk	fall over	2	E1	thluuk
tshaa	spit	1	E1	
tshaak	spit	2	E1	
tshia	bad, be	1	E1	
tshiat	bad, be	2	E1	
tsoo	buy	1	E1	
tsook	buy	2	E1	
thii	marry (of a man)	1	E1	
thiit	marry (of a man)	2	E1	
thii	sew	1	E1	
thiit	sew	2	E1	
vaa	marry (of a woman)	1	E1	
vaat	marry (of a woman)	2	E1	
zaa	enough, be / mature, be	1	E1	
zaat	enough, be / mature, be	2	E1	
zaa	titkle	1	E1	
zaat	titkle	2	E1	
zoo	ill, be / hurt, be	1	E1	
zoot	ill, be / hurt, be	2	E1	
zuu	smoke	1	E1	
zuuk	smoke	2	E1	
?ee	defecate	1	E1	
?eek	defecate	2	E1	
baa	owe	1	E2	
bat	owe	2	E2	
puu	hold / bring (w/ hand)	1	E2	
put	hold / bring (w/ hand)	2	E2	
raa	come	1	E2	
rat	come	2	E2	
saa	build	1	E2	
sak	build	2	E2	
saa	hot, be (not severe)	1	E2	
sat	hot, be (not severe)	2	E2	
tuu	swat / strike	1	E2	
tuk	swat / strike	2	E2	
thaa	good, be	1	E2	
that	good, be	2	E2	
thuu	sit down	1	E2	
thut	sit down	2	E2	
hmuu	see	1	E3	
hmu?	see	2	E3	
nii	laugh	1	E3	
ni?	laugh	2	E3	
thii	die	1	E3	
thi?	die	2	E3	
tshia	put	1	E3	

tshia?	put	2	E3	
ṭii	fear	1	E3	
ti?	fear	2	E3	
kuay	twisty, make	1	F1	koy
ko?y	twisty, make	2	F1	koy
luan	pass / surpass / cross a limit	1	F1	
lo?n	pass / surpass / cross a limit	2	F1	
nuam	feel good / happy, be (R)	1	F1	
no?m	feel good / happy, be (R)	2	F1	
nuar	slow, be	1	F1	
no?r	slow, be	2	F1	
tuam	wrap / bandage	1	F1	
to?m	wrap / bandage	2	F1	
tuan	early, be	1	F1	
to?n	early, be	2	F1	
tuar	endure / suffer	1	F1	
to?r	endure / suffer	2	F1	
vuan	float	1	F1	
vo?n	float	2	F1	
zuar	sell	1	F1	
zo?r	sell	2	F1	
khaw	can / able, be	1	F2	
kho?	can / able, be	2	F2	
law	resemble	1	F2	
lo?	resemble	2	F2	
thlaw	clear (a field) / weed	1	F2	
thlo?	clear (a field) / weed	2	F2	
tsaw	dig	1	F2	
tso?	dig	2	F2	

SPECTROGRAMS AND CAPTIONS (pp. 125- 162)

Captions for Roengpitya, “Glottal stop and glottalization in Lai” ..	115-123
Spectrograms for Melnik, “The sound system of Lai”	125-127
Spectrograms for Roengpitya	128-162

Figure captions for Roengpitya, "Glottal stop and glottalization"**Figure 1: Lai ("ruul lee hye?r-tee" story, l. 1) (p. 128).****Spectrogram readings:**

No. 1 shows the location of /?an/ in the spectrogram.

No. 2 indicates the stop bar where a glottal stop in the word /?an/ occurs.

No. 3 shows the word /tii/.

Contents:

ruul	lee	hje?r-tee	?an rak ?um	?an	tii.
snake	and	ant	3PL.S-PAST-exist	3PL.S	say

Figure 2: Lai ("ruul lee hye?r-tee" story, l. 8) (p. 129).**Spectrogram readings:**

No. 1 shows the location of /naŋ-ma?/.

No. 2 indicates the glottal stop of the morpheme /ma?/. In this case, we can see the creakiness (shown by glottal pulses) on the vowel instead of only a stop burst (see the arrows).

Contents:

Khaa	hii	hii	paj	na	sii
Look!	DEM	DEM	(CONTRASTIVE)	2SG.S	COP
kaw	tsuu	naŋ-ma?	tham	tsuu	?an
AFFIRM	TOP	2SG.S	DIMIN	TOP	3PL.S

Figure 3: Lai ("?uj-tsaw lee me-he?" story, l. 4) (p. 130).**Spectrogram readings:**

No. 1 shows the location of /?a?/ 'LOCATIVE'.

No. 2 indicates the initial glottal stop. At this place, a stop bar is not clearly seen. However, a sharp line after the silence before the word is the cue for a glottal stop.

No. 3 and No. 4—No. 3 shows a sharp line before a voicing bar (No. 4). From the transcription, the sharp line should represent a glottal stop but, in the real connected speech, the sharp line indicates a kind of a stop which shares the same place of articulation (alveolar) as the initial consonant of the next word /tsun/. The sound of this stop was heard as an alveolar voiced stop /d/. In my opinion, articulatorily, the vocal cords cannot fully tighten themselves to form a glottal stop because they have to prepare to widen themselves for a voiceless affricate /ts/ which is the initial consonant of the next word. Then, the best way for the vocal cords is not to tighten themselves nor to widely open themselves but to slightly open and to vibrate. That makes the voiced stop /d/ as seen from the voicing bar in No. 4.

Contents:

tsuu	?a	va	za?w	?a? tsun	mii-nuu	ni?	tsun
DEM	3SG.S	DIR	see	'when'	person-female	ERG	DEM

Figure 4: Lai ("ruul lee hye?r-tee" story, l. 1) (p. 131).
Spectrogram readings:

No. 1 shows the location of /hye?r/.

No. 2 shows the preglottalization of /r/. A clear glottal stop bar before /r/ represents the glottalization.

No. 3 shows the final consonant /r/.

No. 4 shows the location of /tee/.

Contents:

ruul	lee	h<small>ye</small>?r-tee	?an rak ?um	?an	ti.
snake	and	ant	3PL.S-PAST-exist	3PL.S	say

Figure 5: Lai (special recordings) (p. 132).

Spectrogram readings:

No. 1 shows the location of /hngal/.

No. 2 shows the damping of the amplitude and the glottal pulses which go through till the end of the sonorant /l/. These glottal pulses show the postglottalization of /hngal/.

Contents: /hngal/ 'to know'

Figure 6: Lai ("ruul lee hye?r-tee" story, l. 4) (p. 133).

Spectrogram readings:

No. 1 shows the location of the first /zaw/.

No. 2 shows the location of the second /zaw/.

No. 3 shows the medial glottalization of the first /zaw/. This can be seen from the wider gaps and the pulses which show the creaky state of the glottis.

No. 4 shows the medial glottalization of the second /zaw/. This glottalization is not seen as clearly as in the first /zaw/. Madelaine Plauché (in personal conversation) suggested that unclear glottalization can be seen from the damping of its amplitude. No. 4, then, points to the damping amplitude of the second /zaw/.

Contents: ?a zaw ?a? zaw ?a ? hin
 3SG.S-look-3SG.S-look when

Figure 7: Lai ("uj-tsaw lee me-he?" story, l. 4) (p. 134).

Spectrogram readings:

No. 1 shows the location of /phom/.

No. 2 indicates that the two adjacent stop bars are the cue to present the medial glottalization of /phom/.

No. 3 shows the location of the final nasal /m/.

Contents:

sa phe?r	?a rak pho?m	?ii	?a	sa phe?r	phom	mii	tsuu
dried.meat	3SG.S-DIR-pound	and	3SG.S	dried.meat	pound	REL	DEM

Figure 8: Lai (“ruul lee hye?r-tee” story) (p. 135).**Spectrogram readings:**

No. 1 shows the location of /hma?n/.

No. 2 shows the postglottalization of /hma?n/. The glottalization can be seen from the series of glottal pulses as indicated.

Contents: zaj hma?n ‘anything’**Figure 9: Lai (“?uj-tsaw lee me-he?” story, l. 7) (p. 136).****Spectrogram readings:**

No. 1 shows the location of /pho?ŋ/.

No. 2 shows the postglottalization of /pho?ŋ/. The glottalization can be seen from two glottal pulses as indicated.

Contents: ?aa pho?ŋ ?ii me-he? tsuu
 REFL unloose and goat DEM**Figure 10: Lai (“?uj-tsaw lee me-he?” story, l. 8) (p. 137).****Spectrogram readings:**

No. 1 shows the location of /da?j/.

No. 2 shows the glottalization of /da?j/. This can be seen from the series of glottal pulses, as indicated.

Contents:

?a	luu	?a?	?a	rak	?ii	bu?n	da?j
3SG.POSS	head	LOC	3SG.S	DIR	REFL	put	away

Figure 11: Lai (“ruul lee hye?r-tee” story, l. 1) (p. 138).**Spectrogram readings:**

No. 1 shows the location of /hje?r/.

No. 2 indicates a stop bar which represents a preglottalization of the sonorant /r/.

No. 3 shows the location of the sonorant /r/.

Contents:

ruul	lee	hje?r-tee	?an rak ?um	?an	tii.
snake	and	ant	3PL.S-PAST-exist	3PL.S	say

Figure 12: Lai (“ruul lee hye?r-tee” story, l. 7) (p. 139).**Spectrogram readings:**

No. 1 shows the location of /hjer/.

No. 2 shows a stop bar which represents a medial glottalization of the sonorant /r/.

No. 3 presents the location of the sonorant /r/.

Contents:

hjer-tee	lee	ruul	tsuu	?an	?ii sual
ant	and	snake	DEM	3PL.S	REFL-struggle

Figure 13: Lai ("ruul lee hye?r-tee" story, l. 5) (p. 140).*Spectrogram readings:*

No. 1 shows the location of /hma?n/.

No. 2 indicates glottal pulses which go through the whole sonorant /n/.

This case is considered as a postglottalization.

No. 3 shows the location of the sonorant /n/.

Contents: zaj hma?n 'anything'**Figure 14: Thai (special recordings) (p. 141).***Spectrogram readings:*

No. 1 shows the location of the first word /?à:t/ (in isolation).

No. 2 shows the glottal stop as the initial consonant of the first word /?à:t/.

In this case, the glottal stop is not clearly seen. However, the (dark) stop bar still can be seen to present the glottal stop.

No. 3 shows the location of the second /?à:t/ (in connected speech).

No. 4 shows the location of the glottal stop of the second /?à:t/. This can be seen from a gap with two pulses in between the gap, as indicated.

Contents:

?à:t	—	tshán	mâj	?à:t	paj	roonrian
may / can	—	I	not	can	go	school
'I cannot go to school.'						

Figure 15: Thai (special recordings) (p. 142).*Spectrogram readings:*

No. 1 shows the location of the first word /tsà?/ (in isolation).

No. 2 shows the location of the glottal stop in the first /tsà?/. The glottal stop can be seen from the series of glottal pulses which indicate the creaky glottal state, as indicated.

No. 3 shows the location of the second word /tsà?/ (in connected speech).

No. 4 shows that, for the second /tsà?/ in connected speech, the glottal stop drops out.

Contents:

tsà?	—	tshán	kamlaj	tsà?	paj	roonrian
will	—	I	PROG	will	go	school
'I am going to go to school.'						

Figure 16: Thai (special recordings) (p. 143).*Spectrogram readings:*

No. 1 shows the location of the first /sà? baaj/ (in isolation).

No. 2 shows the glottal stop of the first /sà? baaj/. This can be seen from the sharp cut at the end of the word, as indicated.

No. 3 shows the location of the second /sà? baaj/ (in connected speech: reduplication).

No. 4 shows no sign of the glottal stop in /sà? baaj/. In other words, the glottal stop is deleted in connected speech.

No. 5 shows the location of the third /sà? baaj/ (in connected speech: reduplication).

No. 6 shows no sign of the glottal stop in /sà? baaj/. In other words, the glottal stop is deleted in connected speech.

Contents:

sà? baaj	—	nâŋ	hâj	sà? baaj	sà? baaj
	—	sit	give		comfortably
‘Sit comfortably!’					

Figure 17: Thai (special recordings) (p. 144).

Spectrogram readings:

No. 1 indicates the location of the first /ná? khá?/ (in isolation).

No. 2 shows the glottal stop of /ná?/ (in isolation). The glottal stop can be seen from three glottal pulses, as indicated.

No. 3 shows the glottal stop of /khá?/ (in isolation). The glottal stop can be seen from two glottal pulses, as indicated.

No. 4 indicates the location of the second /ná? khá?/ (in connected speech).

No. 5 shows no sign of the glottal stop in /ná?/ (in connected speech).

No. 6 shows no sign of the glottal stop in /khá?/ (in connected speech).

Contents:

ná? khá?	—	kin	khâaw	nój	ná? khá?
	—	eat	rice	little	POLITE PARTICLES (for women)
‘Please eat some rice.’					

Figure 18: Lai (“?uj-tsaw lee me-he?” story, l. 9) (p. 145).

Spectrogram readings:

No. 1 shows the location of /?aa!/.

No. 2 shows the presence of the glottal stop of /?aa!/. The stop bars can be clearly seen as indicated.

Contents:

naa	bu?n	tia?	?a	hal	tik ?a?	?aa!
2SG.REFL	put	QUOT	3SG.S	ask	when	INTERJECTION (‘Ah!’)

Figure 19: Lai (“ruul lee hye?r-tee” story, l. 9) (p. 146).

Spectrogram readings:

No. 1 shows where the deleted word /?a/ should be.

Contents:

na	tum	law	?a	sii	?a? tsun	naŋ-ma?
2SG.S	descend	NEG	3SG.S	COP	if	2SG.S
zon						na thii laaj.
also						2SG.S-die-FUT

Figure 20: Lai ("ruul lee hje?r-tee" story, l. 2) (p. 147).*Spectrogram readings:*

No. 1 shows the location of /?ii/ 'and'.

No. 2 presents the final glottal stop which can be seen from the sharp cut of the token before a pause.

Contents:

?ii	ruul	lee	hje?r-tee	tsuu	?an	?ii kom	ŋai
and	snake	and	ant	DEM	3PL.S	REFL-be.friend	very
?ii	tsuu	tii	tsun		?an	?um	tii
and	DEM-say-DEM	(= 'thus')		3PL.S	exist	together	water

Figure 21: Lai ("ruul lee hje?r-tee" story, l. 7) (p. 148).*Spectrogram readings:*

No. 1 shows the location of /?ii/ at the final.

No. 2 presents the creakiness of /?ii/. This can be seen by many glottal pulses which occur until the end of the word, as indicated.

Contents:

?ii	tsuu di? tsun		?an	?ii	veel
and	DEM-finish-DEM (= 'after that')		3PL.S	REFL-quarrel	and

Figure 22: Lai ("?uj-tsaw lee me-he?" story, l. 6) (p. 149).*Spectrogram readings:*

No. 1 shows the location of /khaa/ 'DEMONSTRATIVE'.

No. 2 shows the unexpected glottal stop at the end of /khaa/. The glottal stop can be seen from the stop bar, as indicated.

Contents:

me-he?	khaa	?a-fial	?an	tii.
goat	DEM	3SG.S-request	3PL.S	say

Figure 23: Lai ("?uj-tsaw lee me-he?" story, l. 4) (p. 150).*Spectrogram readings:*

No. 1 shows the location of /tsuu/ 'DEMONSTRATIVE'.

No. 2 shows a small bar, indicating the location of the unexpected glottal stop in /tsuu/.

Contents:

sa phe?r	?a rak pho?m	?ii	?a sa phe?r	pho?m	mii	tsuu
dried.meat	3SG/S-DIR-pound	and	dried.meat	pound	REL	DEM

Figure 24: Lai ("ruul lee hje?r-tee" story, l. 4) (p. 151).*Spectrogram readings:*

No. 1 shows the location of the final /hii/.

No. 2 indicates the creakiness in /hi/. The creakiness can be seen from the multiple glottal pulses, as indicated.

Contents:

hi,	ruul	saaw zeenj zuan	hi
DEM	snake	long-IDEO	DEM

Figure 25: Lai (“?uj-tsaw lee me-he?” story, l. 11) (p. 152).

Spectrogram readings:

No. 1 shows the location of /kii/.

No. 2 indicates the unexpected glottal stop in /kii/. The glottal stop can be seen from a stop bar, as indicated.

No. 3 shows the location of /tsuu/.

No. 4 indicates the unexpected creakiness in /tsuu/. The creakiness can be seen from the damping of the amplitude, as indicated.

Contents:

ka	kii	tsuu	ka-n
1SG.POSS	horn	DEM	1SG.S-2SG.O

Figure 26: Lai (“?uj-tsaw lee me-he?” story, l. 4) (p. 153).

Spectrogram readings:

No. 1 shows the location of /?aj/.

No. 2 indicates the unexpected glottal stop at the end of the word /?aj/.

Contents:

?a	hmuj	tuk	?ii	?uj-tsaw	ni?	tsun	?aj
3SG.S	be.fragrant	very	and	dog	ERG	DEM	eat
?a	du?	tuk	?an	tii.			
3SG.S	eat	very	3SG.S	say			

Figure 27: Lai (“ruul lee hye?r-tee” story, l. 11) (p. 154).

Spectrogram readings:

No. 1 shows the location of the word /?a?/ which is adjacent to the word /khan/.

No. 2 indicates that the glottal stop assimilates its place of articulation to the initial of the adjacent word /khan/. We heard the words /?a? khan/ as /?ak khan/. The stop bar presents the velar final stop of the word /?a?/, as indicated.

Contents:

tsoo-leenj	kal	naak	?a?	khan	?a	luu
cow-cart	go	NOM	LOC	DEM	3SG.S	head
?a va ta?r		?an	tii.			
3SG.S-DIR-place		3PL.S	say			

Figure 28: Lai ("ruul lee hye?r-tee" story, l. 2) (p. 155).
Spectrogram readings:

No. 1 shows the location of the words /tsuu ?an/. These words were heard as /tsuan/ and the glottal stop of the word /?an/ was deleted.

Contents:

?ii and	ruul snake	lee and	hje?r-tee ant	tsuu DEM	?an 3PL.S	?ii kom REFL-be.friend	nai very	
?ii and	tsuu tii tsun DEM-say-DEM (= 'thus')				?an 3PL.S	?um exist	tii together	?ii and

Figure 29: Thai (special recordings) (p. 156).

Spectrogram readings:

No. 1 shows a glottal stop bar at the initial of /?à:t/.

No. 2 shows a gap after a stop bar.

No. 3 shows no voicing bar in a glottal stop.

No. 4 shows multiple glottal pulses, presenting the occurrence of creakiness.

Contents:

?à:t may	—	tshán I	?à:t might	tsà? FUT	paj go	hăa visit	mǒo doctor
'I might go to see a doctor.'							

Figure 30: Thai (special recordings) (p. 157).

Spectrogram readings:

No. 1 shows the sharp beginning of the word /?à?/. The beginning looks like a stop bar but there is no gap after it.

Contents:

?à:t *	—	naaj Mr.	?à?-phí?-sàk Apisak
-----------	---	-------------	------------------------

Figure 31: Lai ("ruul lee hye?r-tee" story, l. 11) (p. 158).

Spectrogram readings:

No. 1 shows the location of /?ii/.

No. 2 shows two glottal pulses at the end of /?ii/. These glottal pulses represent the presence of an unexpected glottal stop at the end of the word.

Contents:

ruul snake	tsuu DEM	khua ?a ruat cosmos-3SG.S-think	?a ruat 3SG.S-think	?ii and
---------------	-------------	------------------------------------	------------------------	------------

* The sound /?à?/ itself is not a phoneme in Thai and it does not occur alone as a word. However, some words in Thai borrowed the prefix /?à?/ from Pali as a negative morpheme. In this case, the name "Apisak" came from /?à-phí?/ 'great' and /sàk/ 'honor'.

Figure 32: Lai ("ruul lee hye?r-tee" story, l. 11) (p. 159).**Spectrogram readings:**

No. 1 shows the location of /?ii/ in a reversed position.

No. 2 shows the two glottal pulses, presenting a glottal stop. These pulses used to be at the end of the word but since the word /?ii/ was reversed, the pulses, then, appear at the beginning of the word. The reversing process, auditorily, is used to detect the uncertainty of whether there is a glottal stop at the final of the word or not.

Contents:

ruul	tsuu	khua ?a ruat	?a ruat	?ii
snake	DEM	cosmos-3SG.S-think	3SG.S-think	and

Figure 33: Lai ("ruul lee hye?r-tee" story) (p. 160).**Spectrogram readings:**

No. 1 shows the location of /hje?r/ in the spectrogram.

No. 2 indicates the drop of the fundamental frequency.

Contents: **hje?r-tee** 'ant'**Figure 34: Lai ("ruul lee hye?r-tee" story) (p. 161).****Spectrogram readings:**

No. 1 shows the location of /hje?r/ in the spectrogram.

No. 2 indicates the drop of the amplitude.

Contents: **hje?r-tee** 'ant'**Figure 35: Lai ("ruul lee hye?r-tee" story) (p. 162).****Spectrogram readings:**

No. 1 shows the location of /hje?r/ in the spectrogram.

No. 2 indicates spectral tilt.

Contents: **hje?r-tee** 'ant'

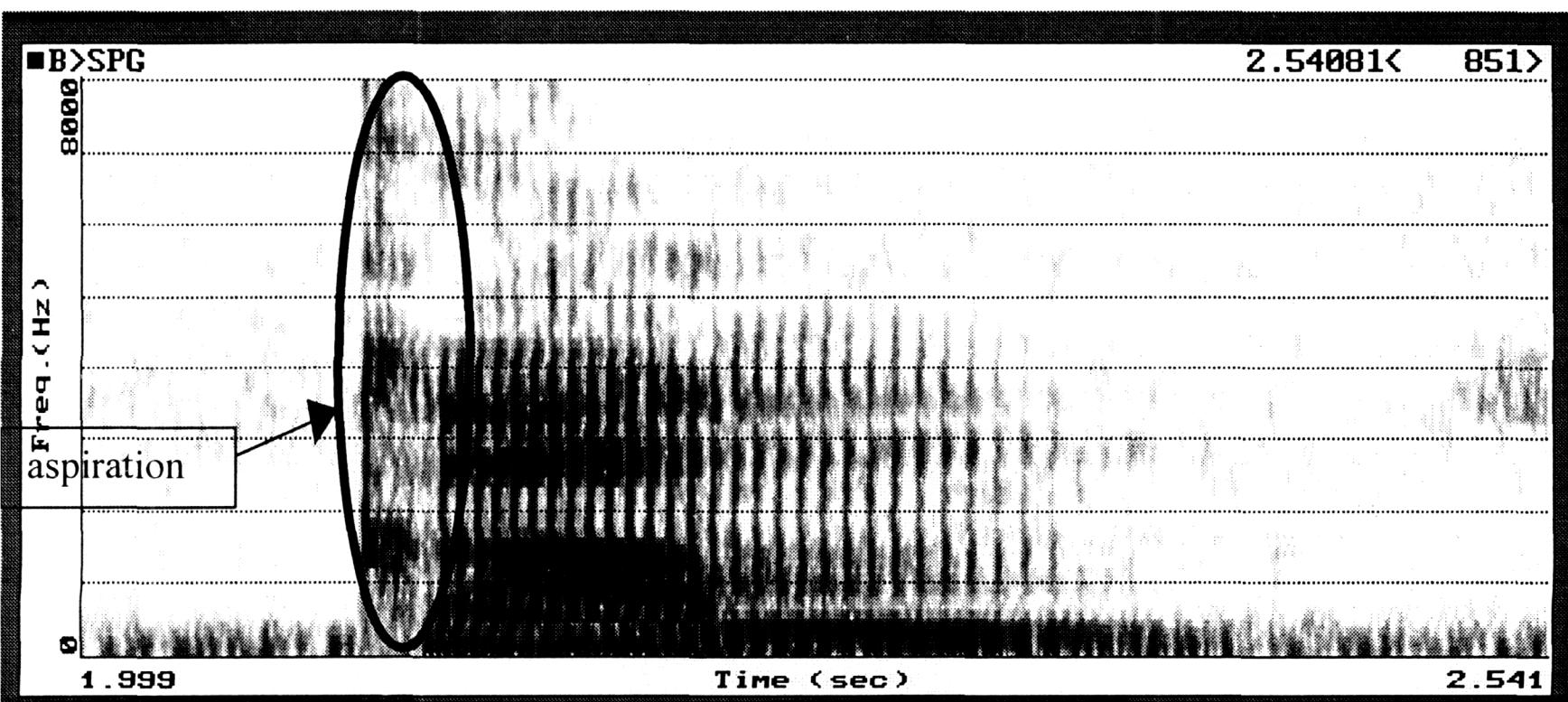


Figure 1 (Melnik) [kam].

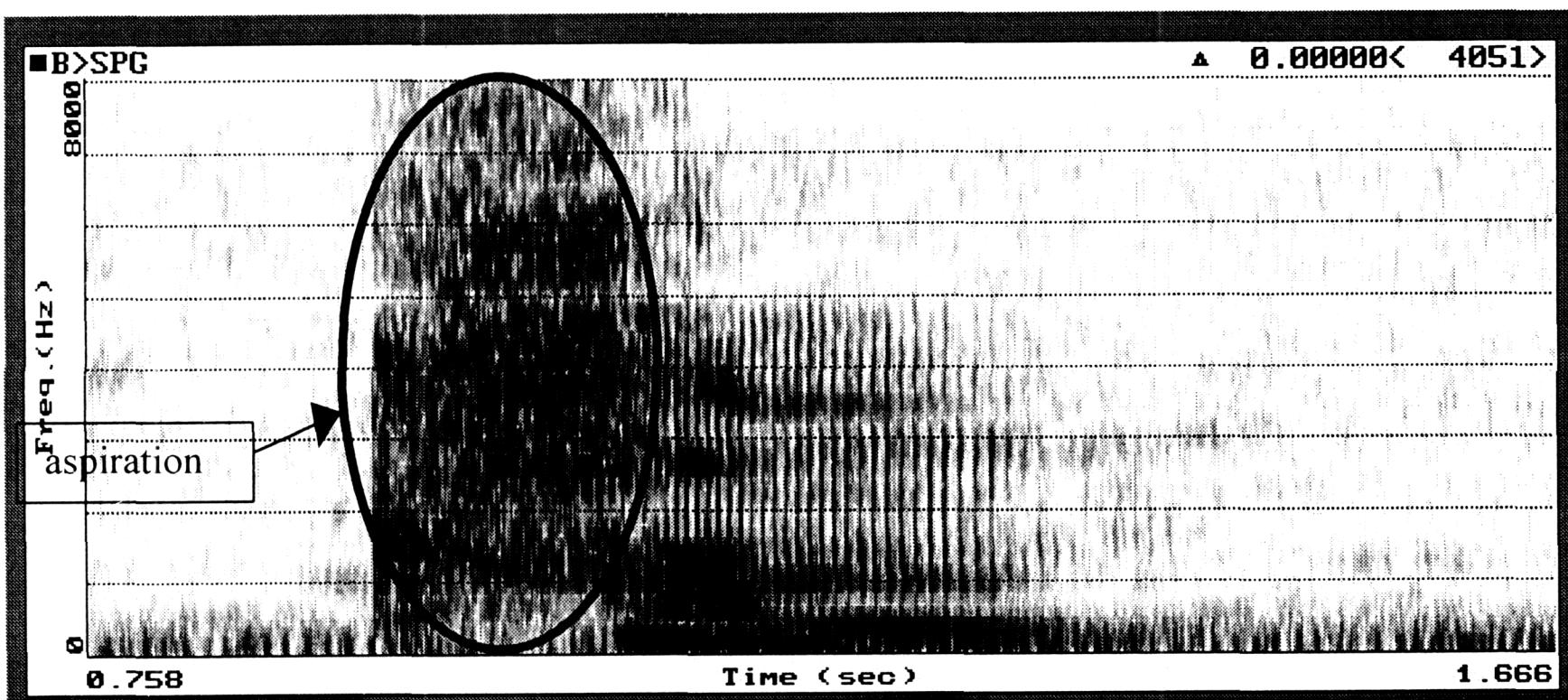


Figure 2 (Melnik). [kh'am].

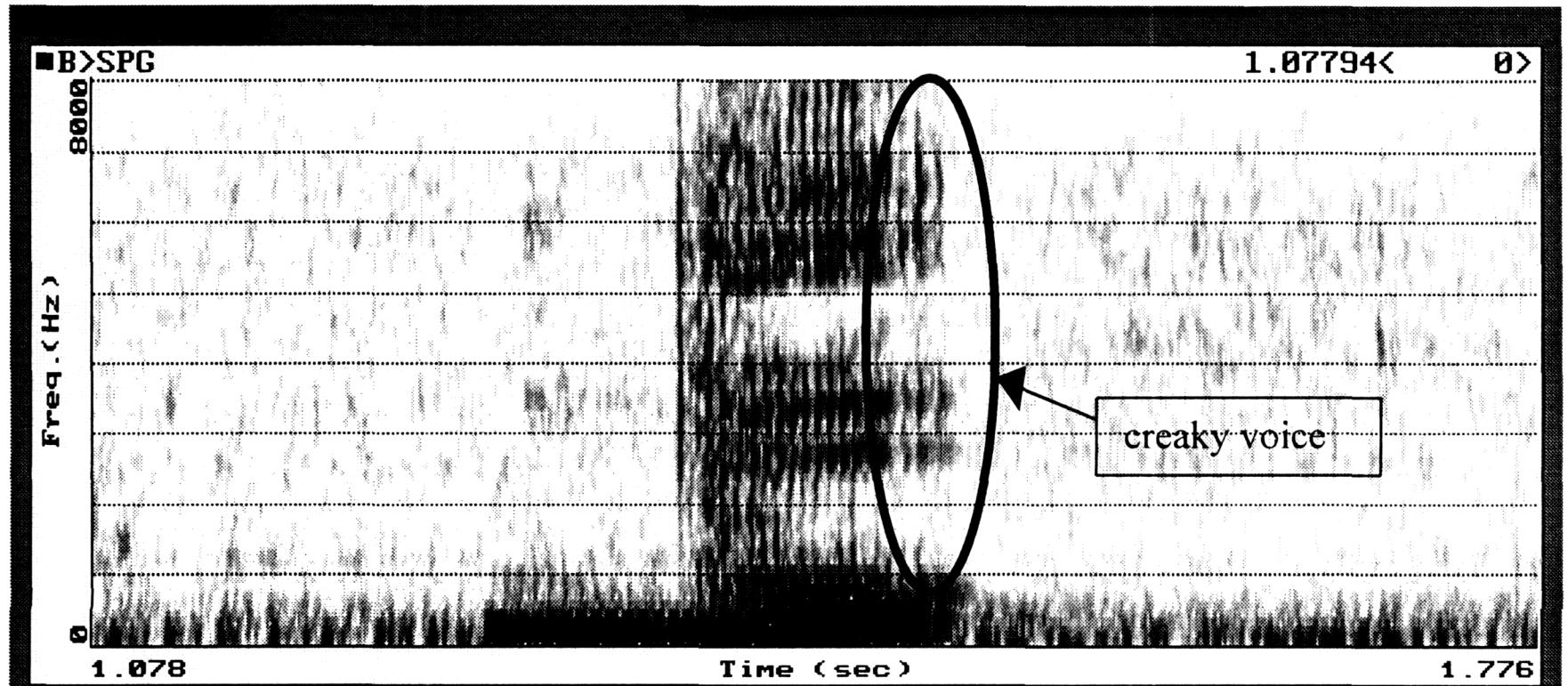


Figure 3 (Melnik). [buʔ].

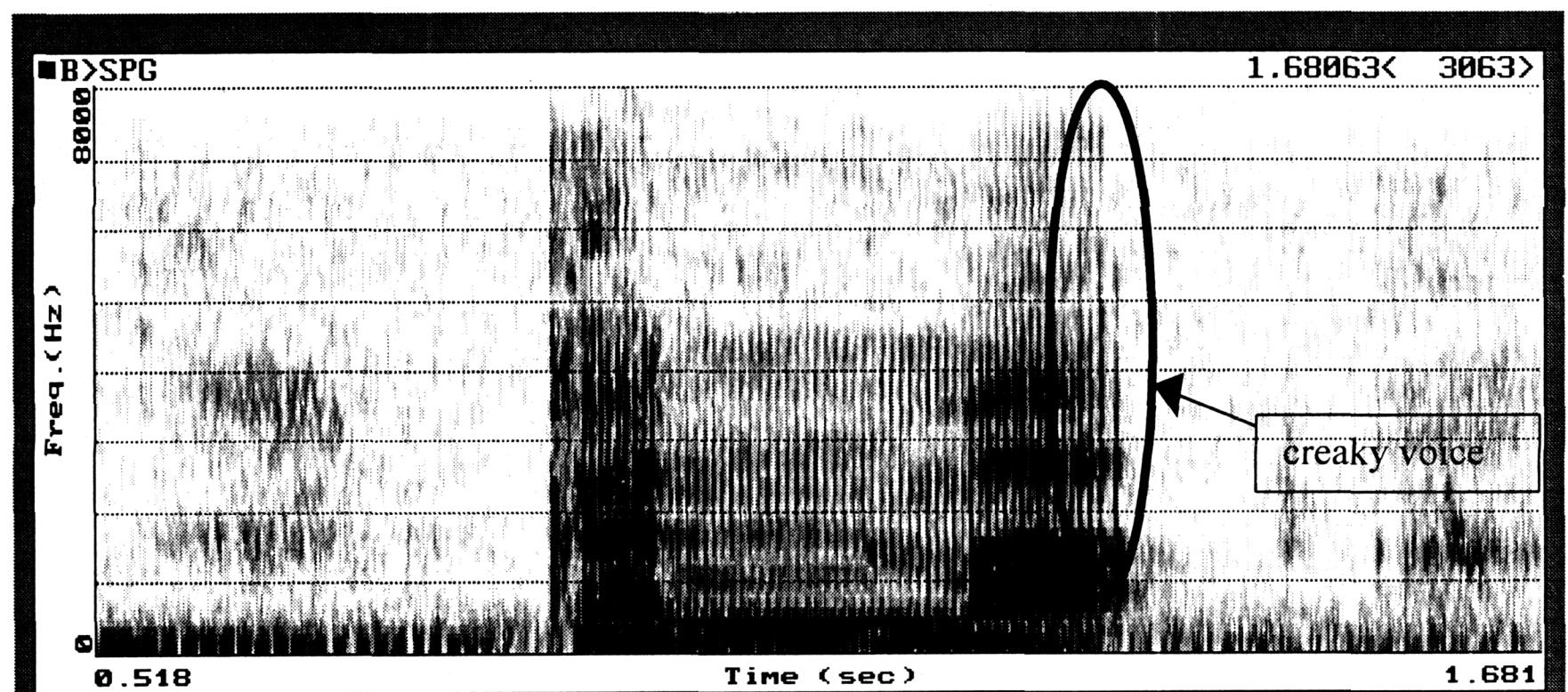


Figure 4 (Melnik). [kan maʔ].

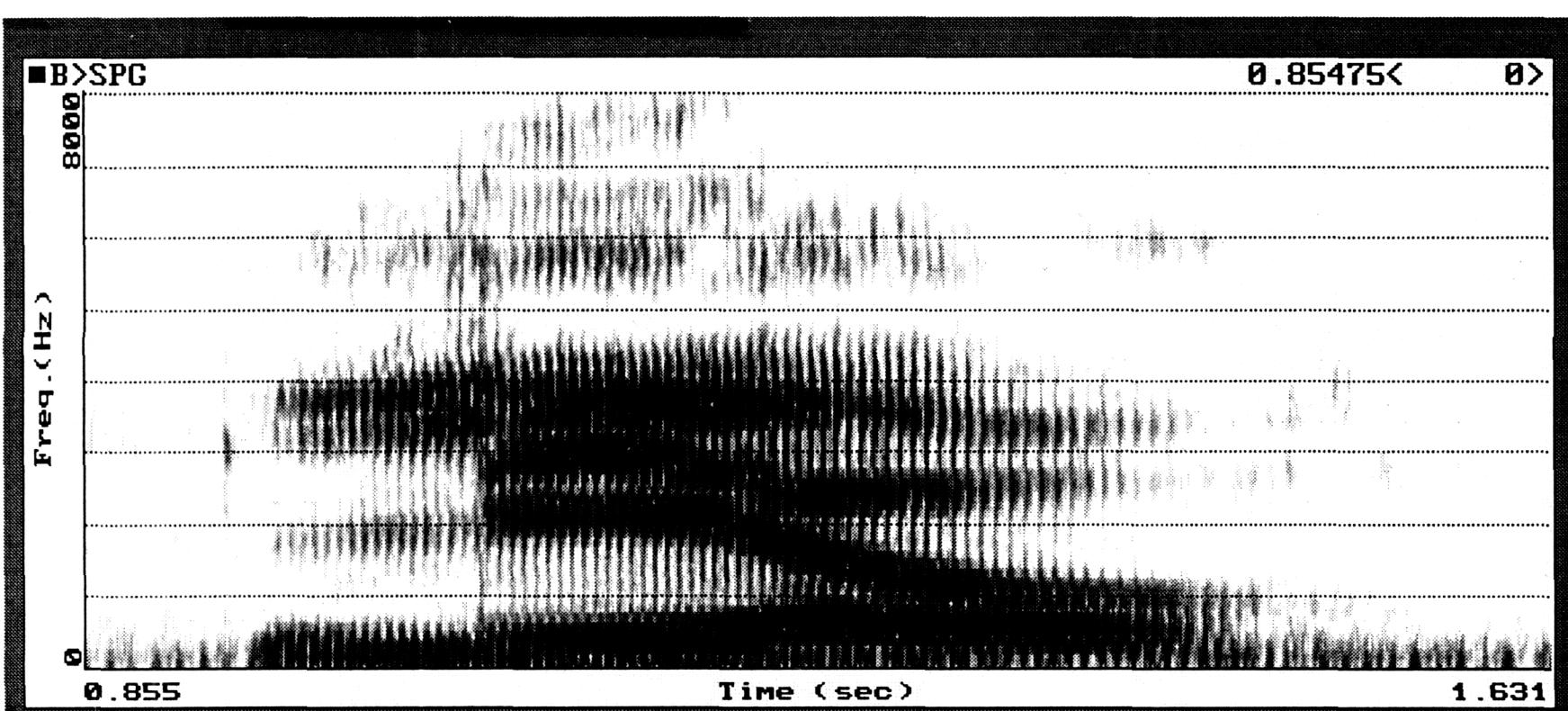
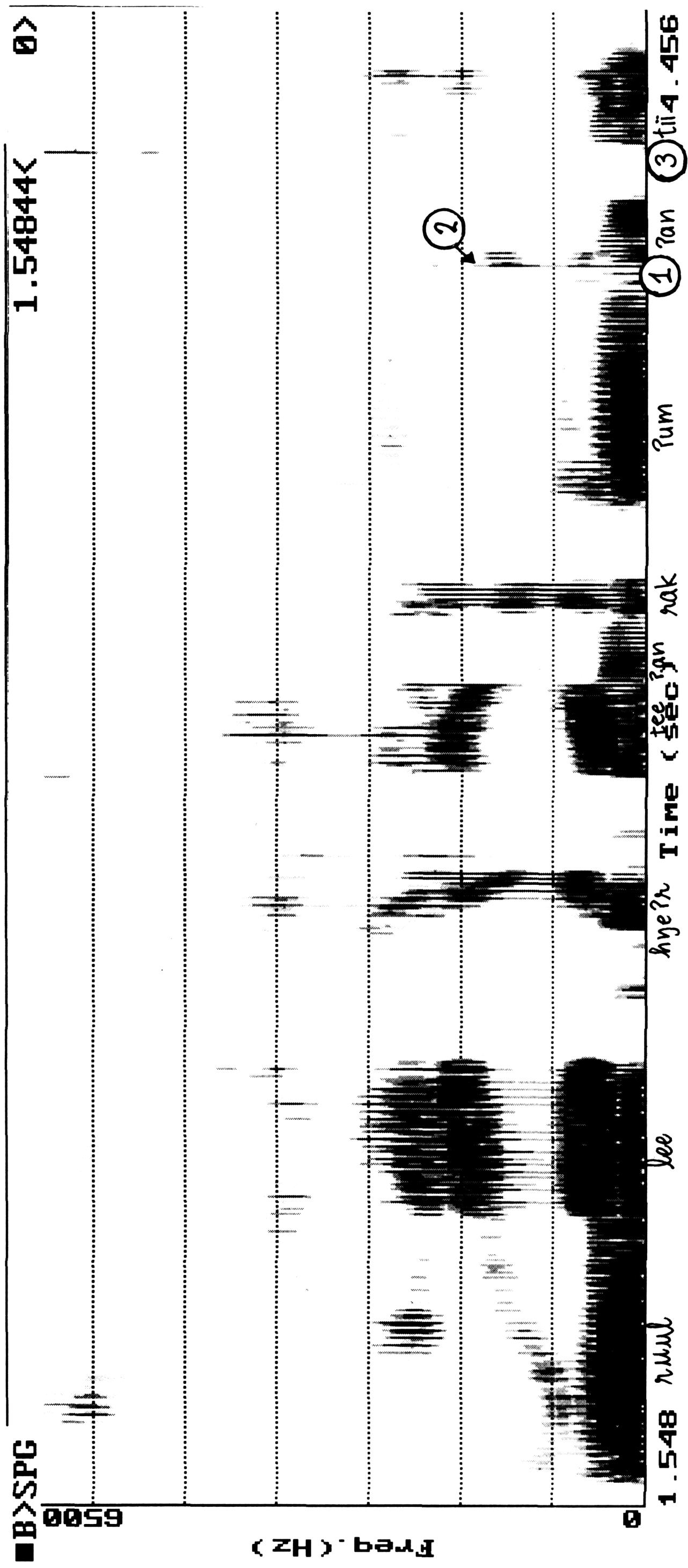


Figure 5 (Melnik). [liau].



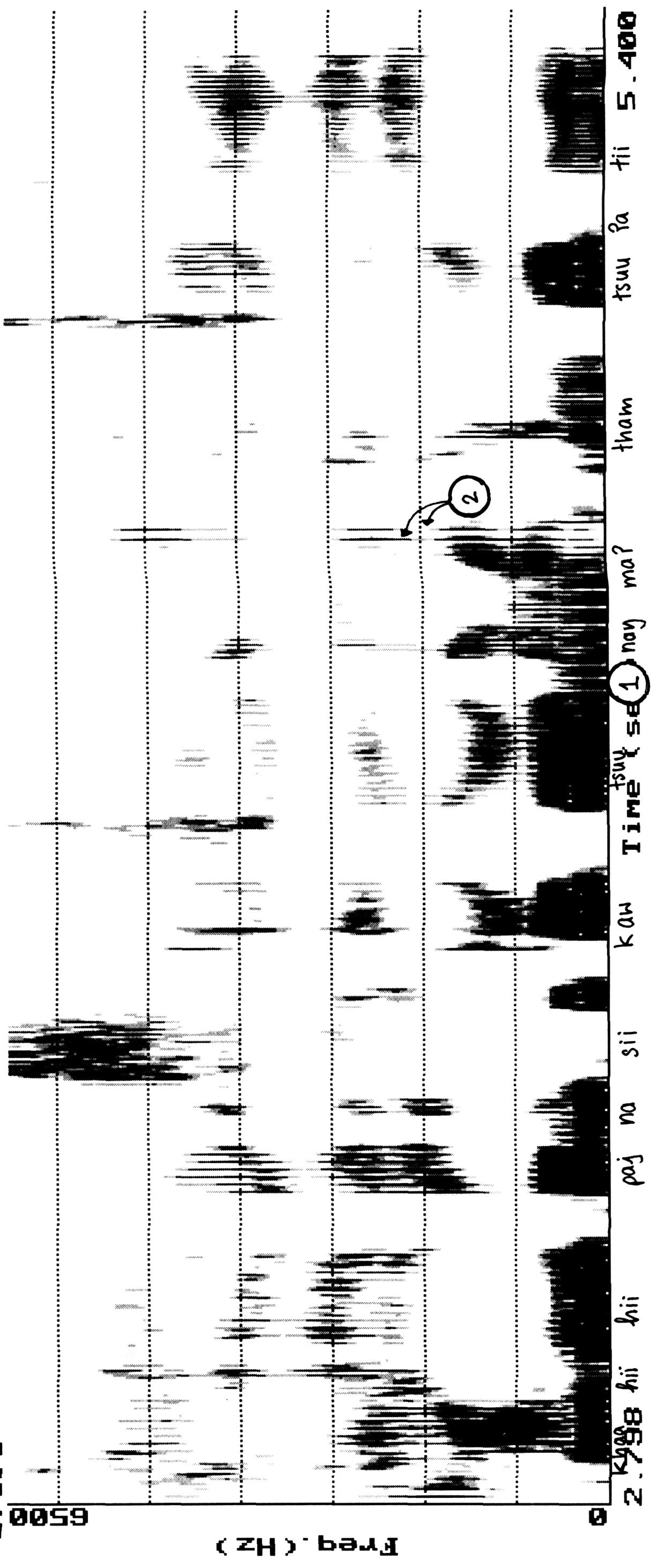
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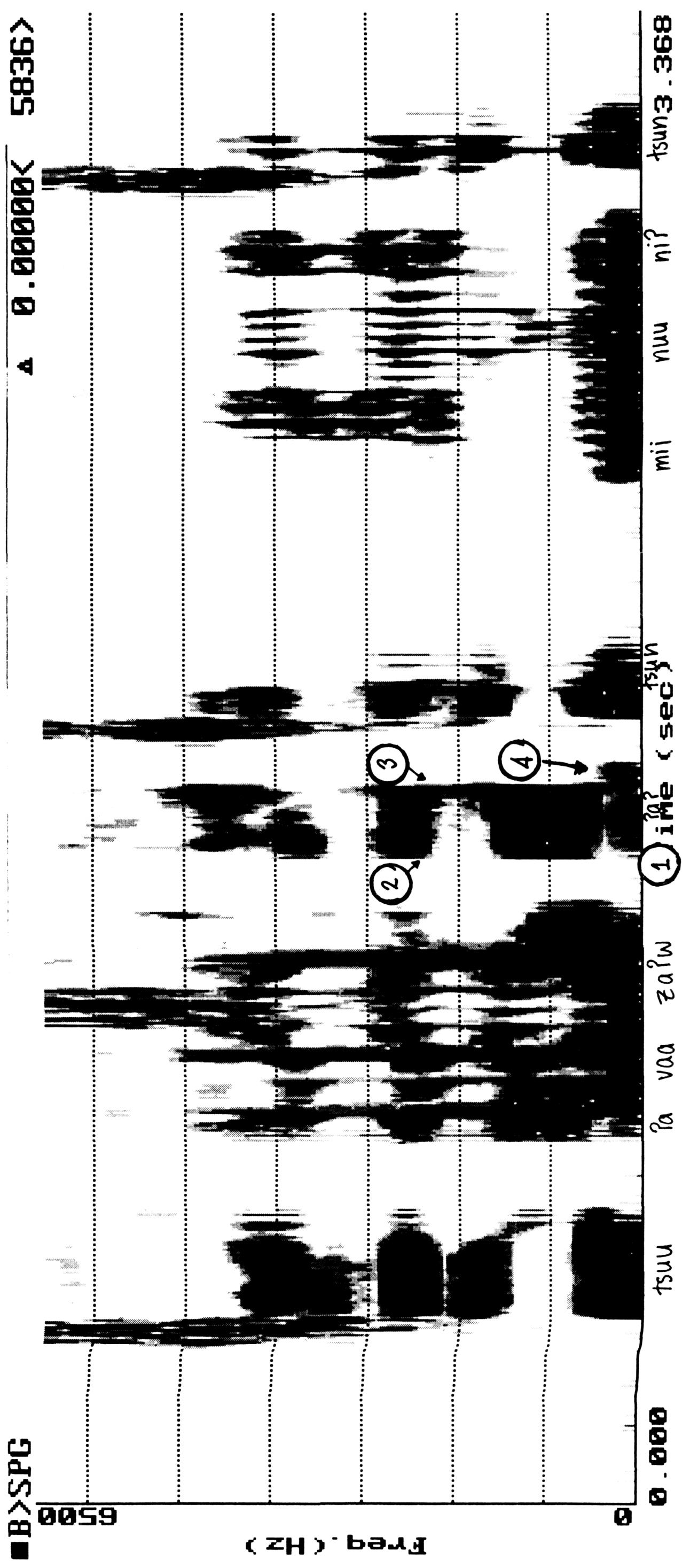
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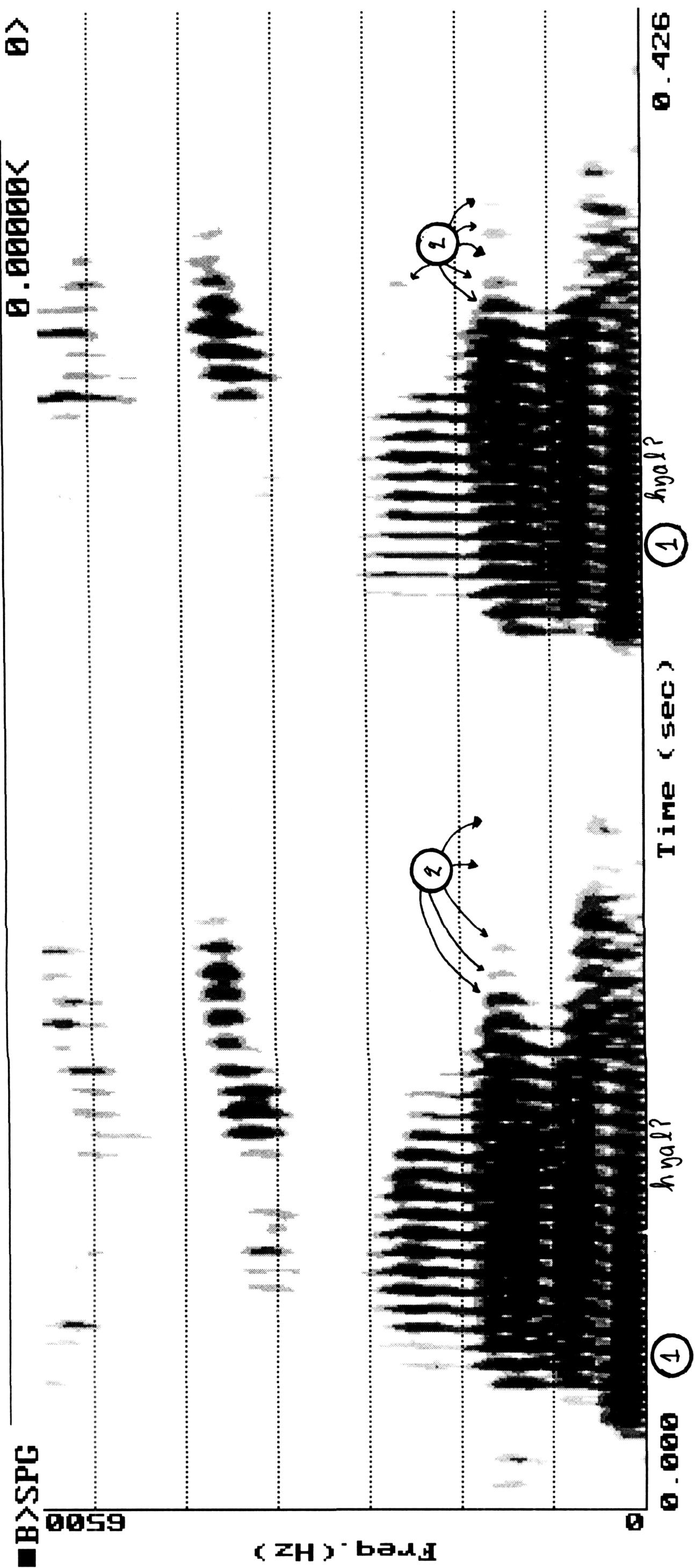
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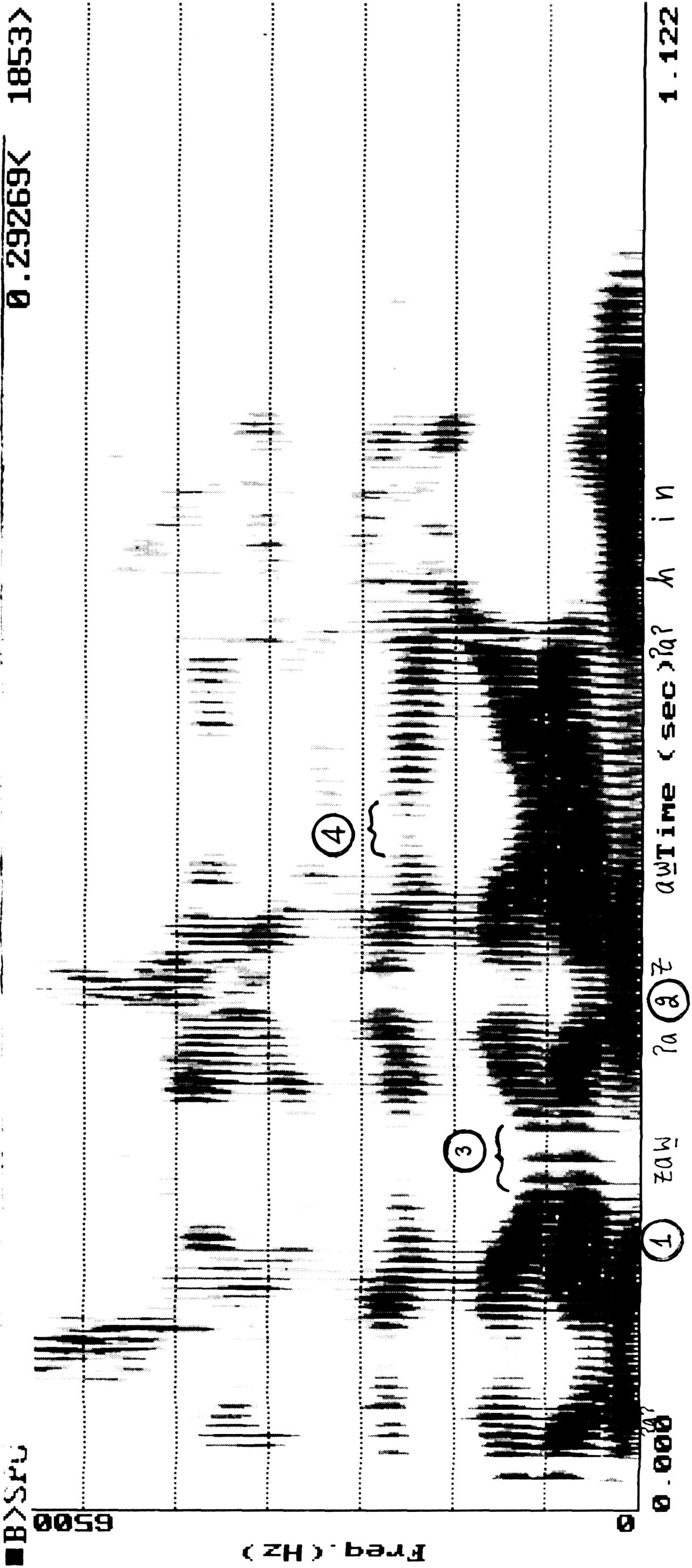
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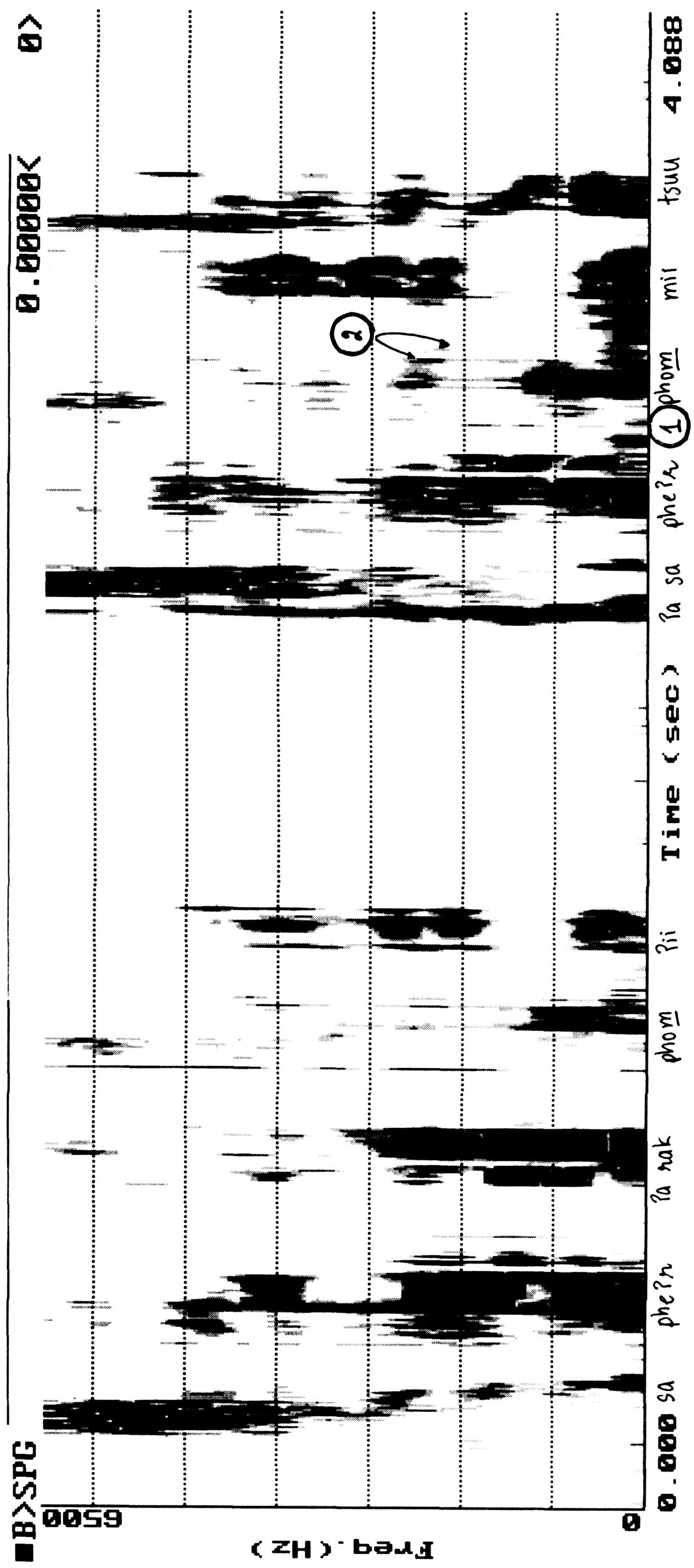
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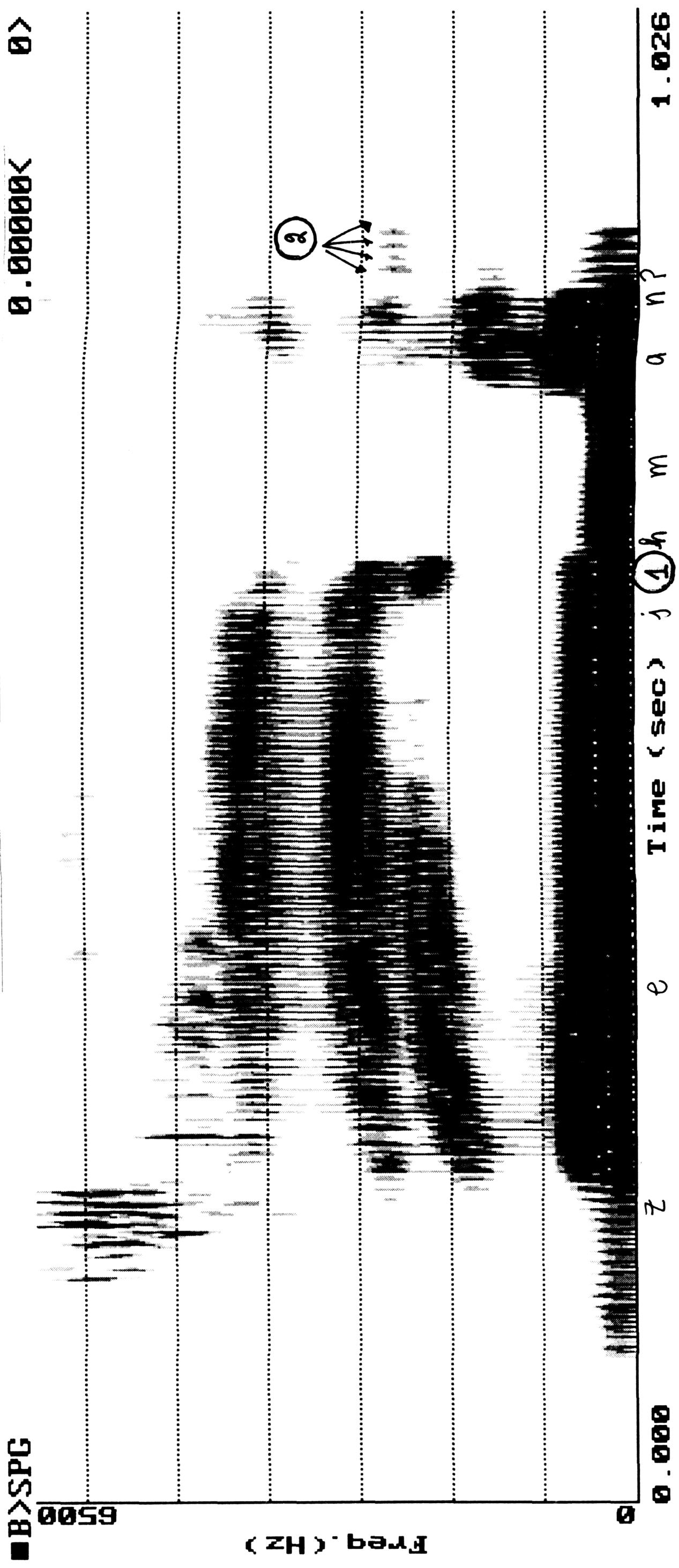
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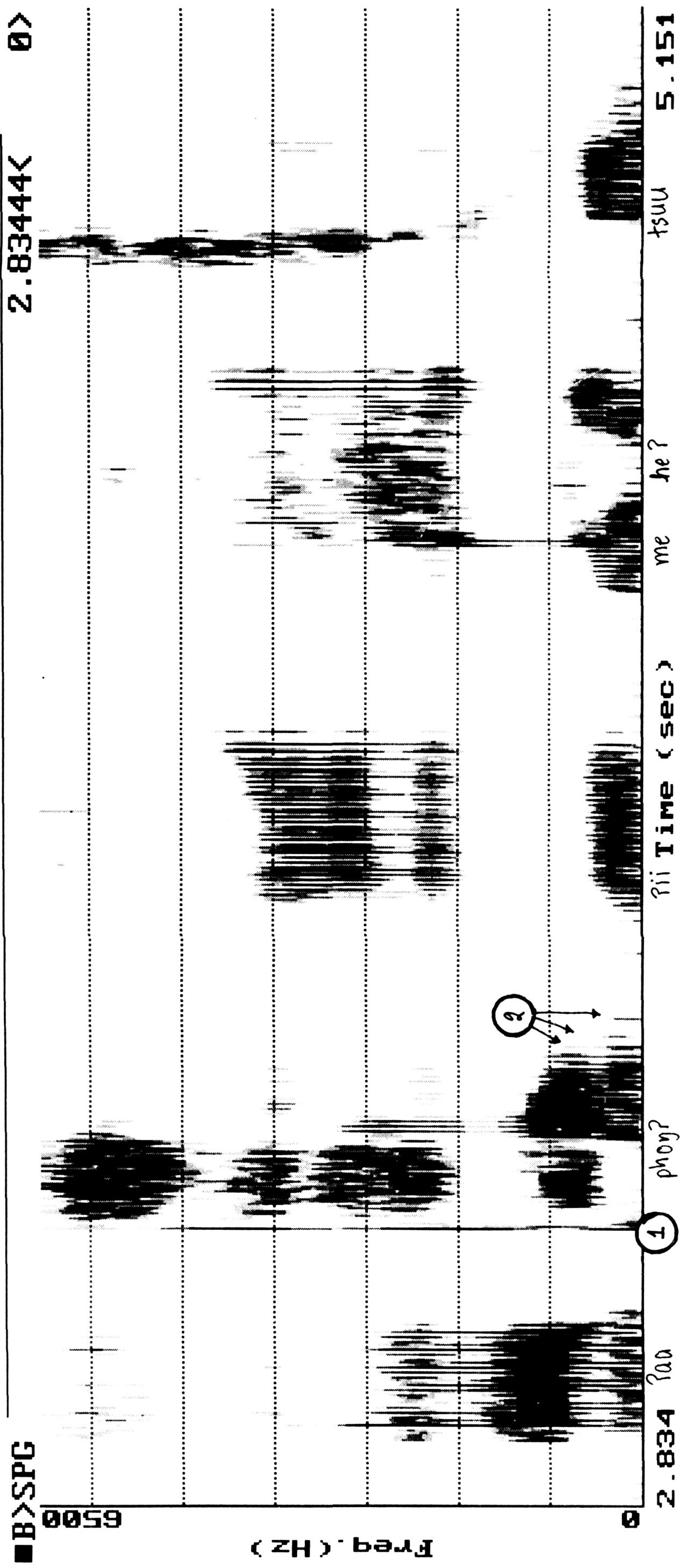


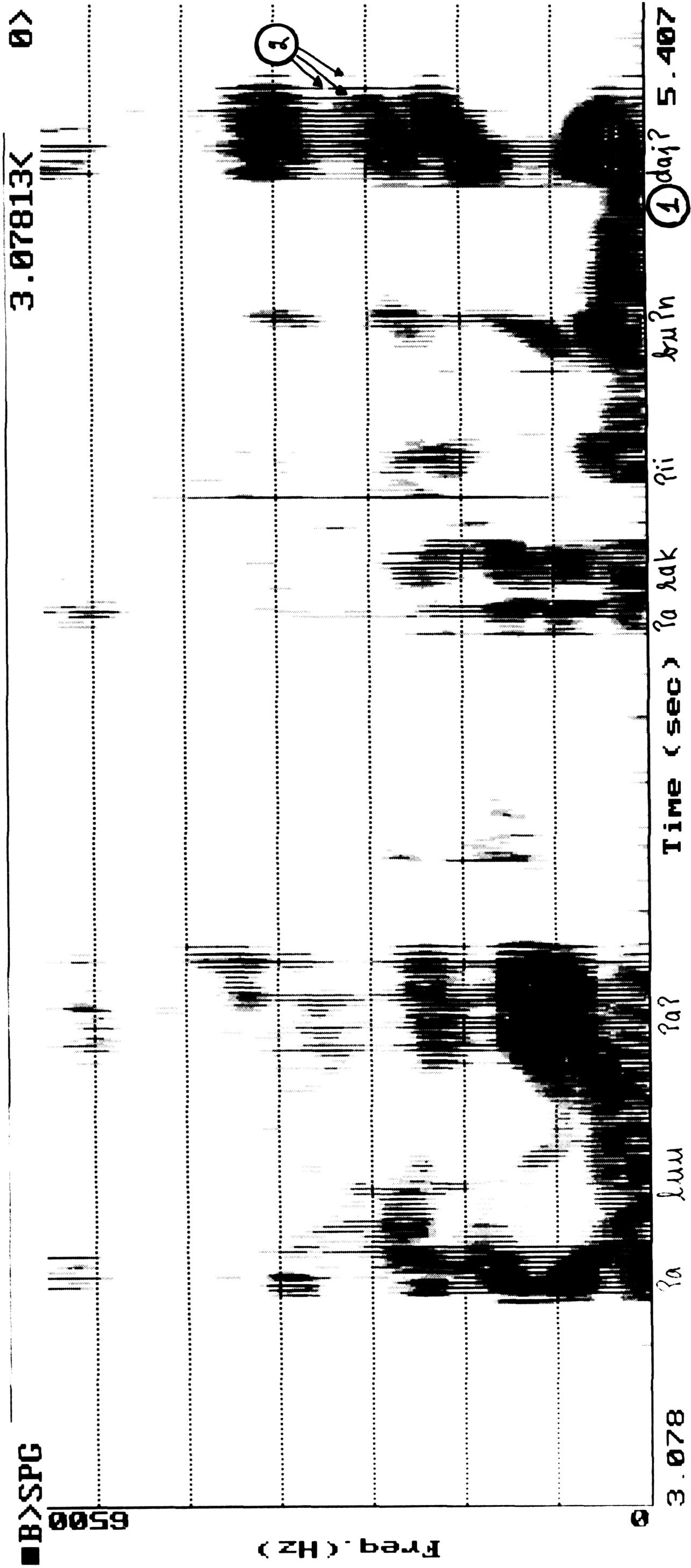
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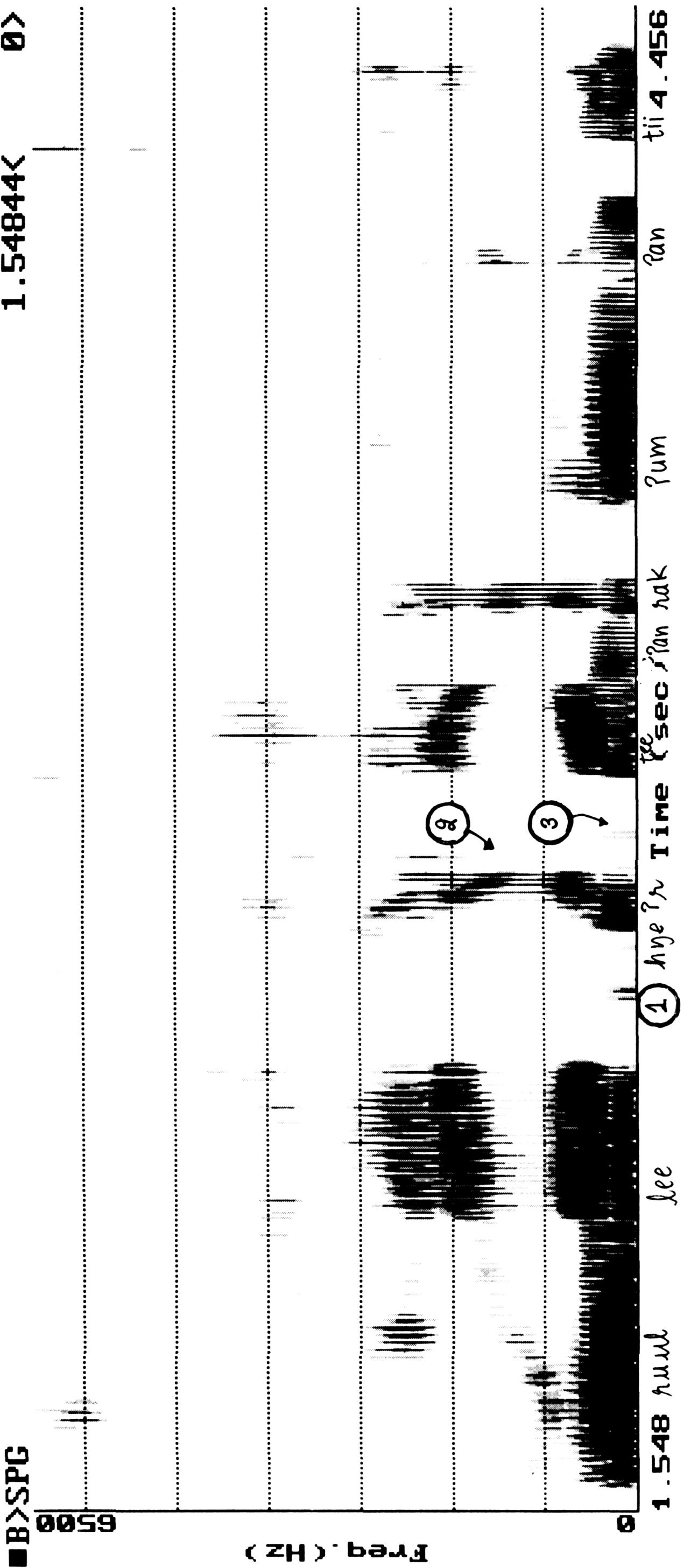
133

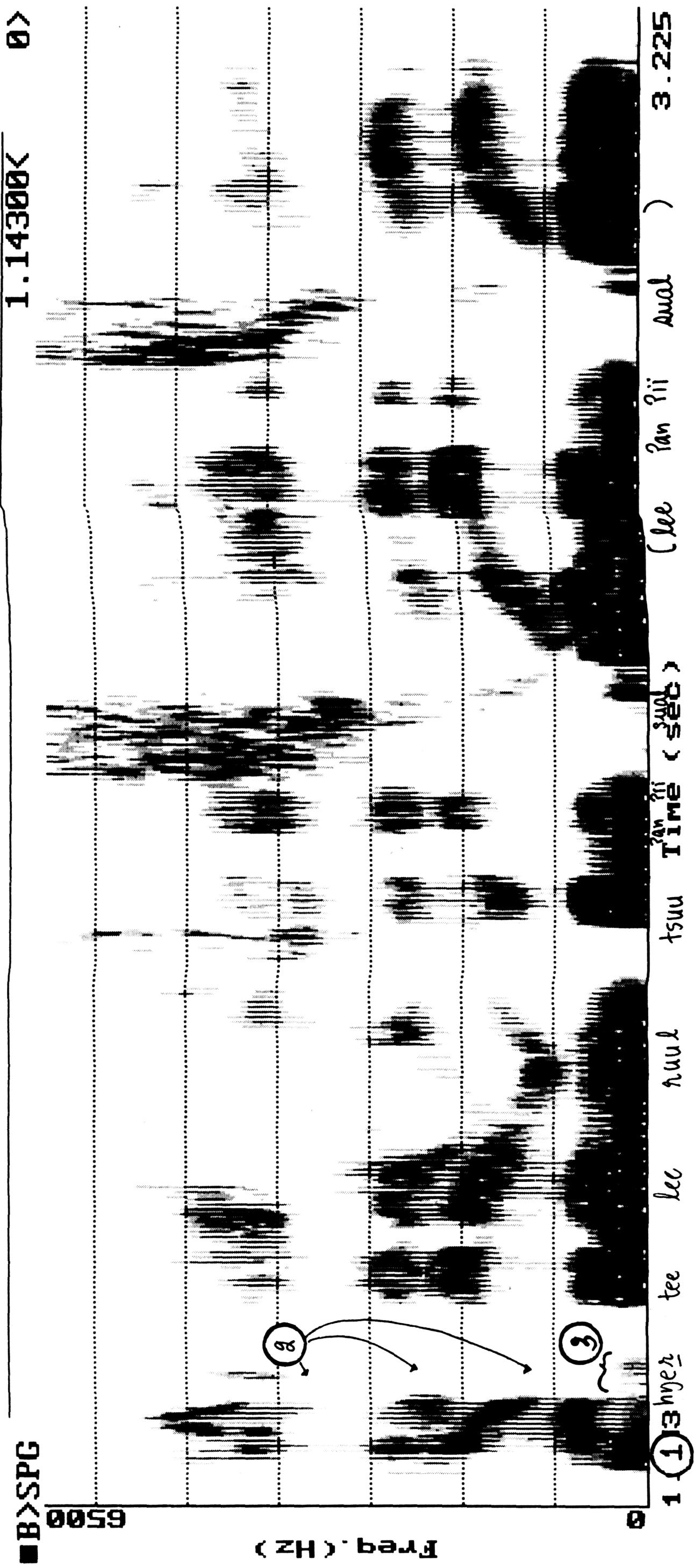


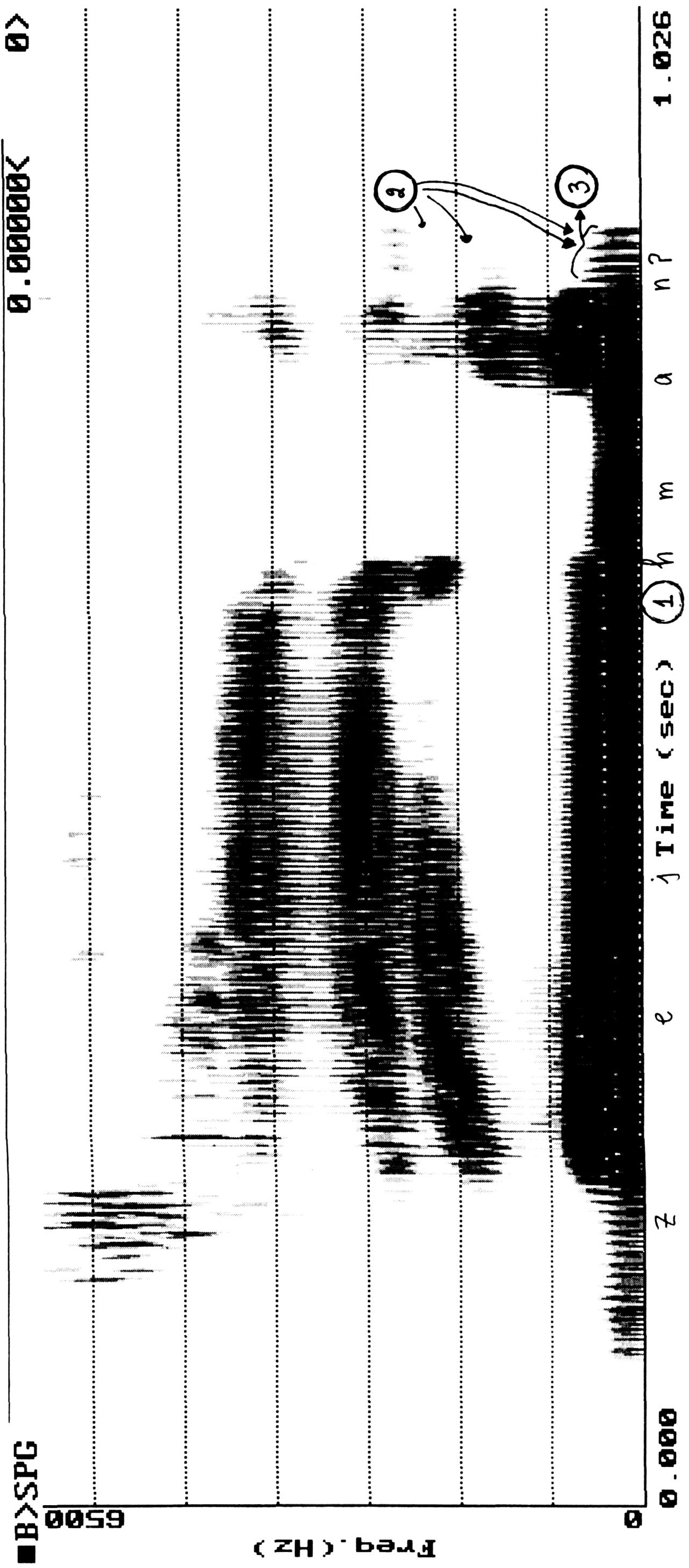




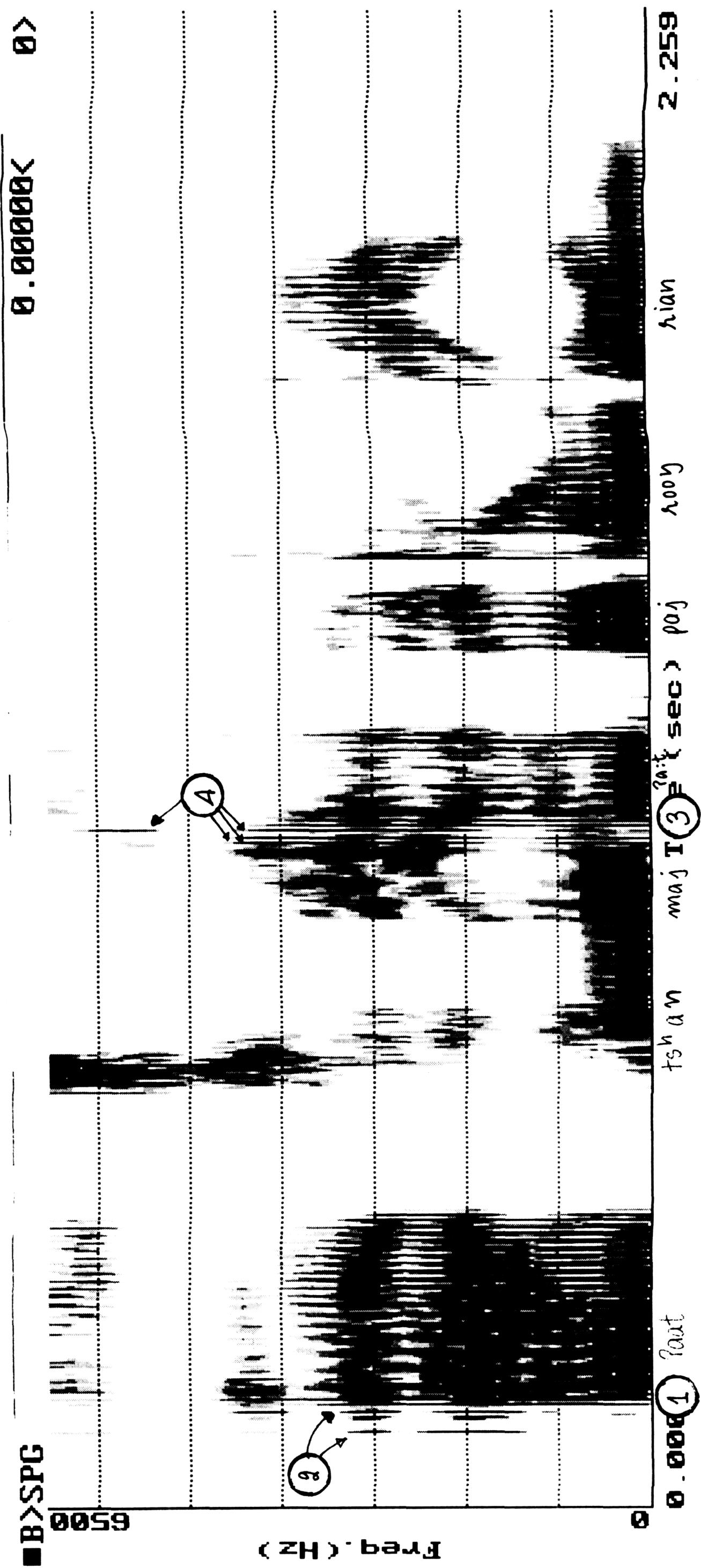


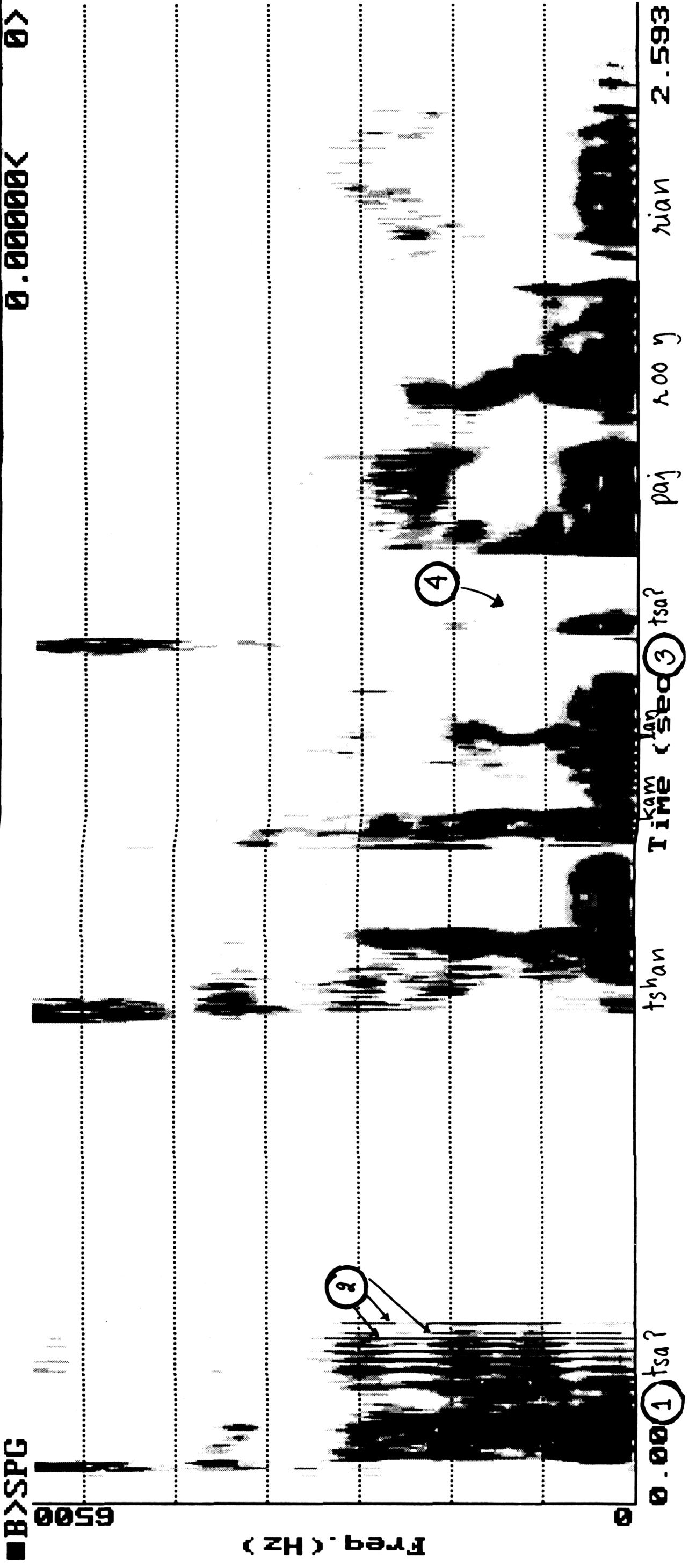


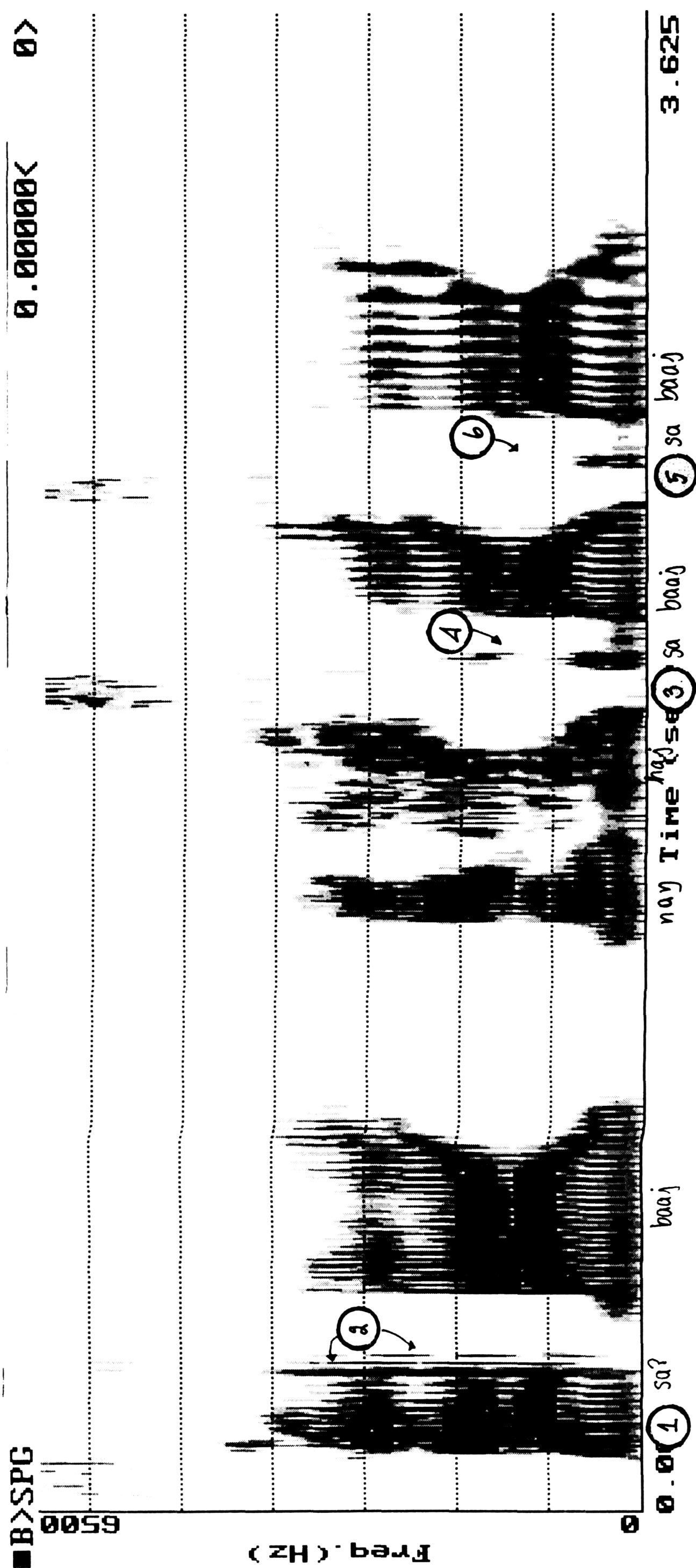


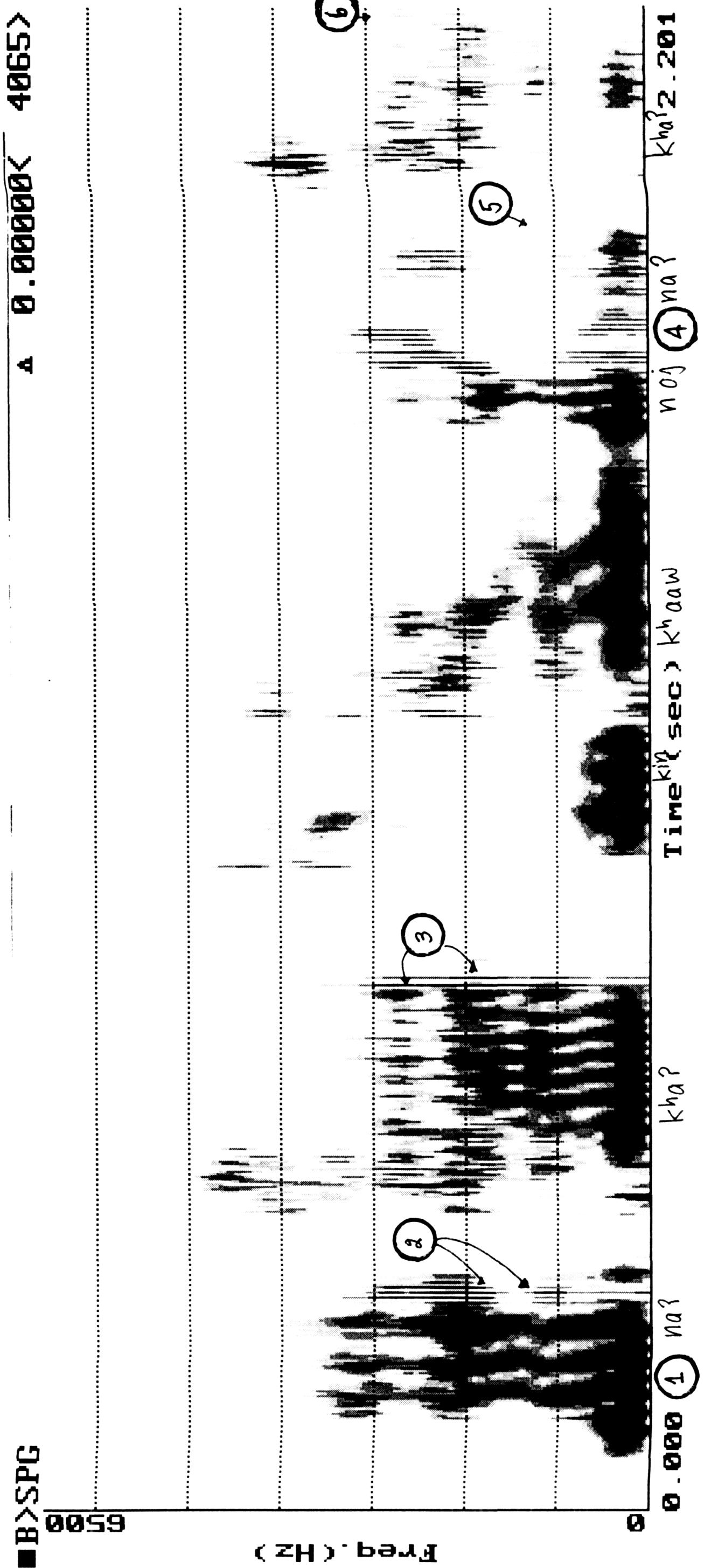


141



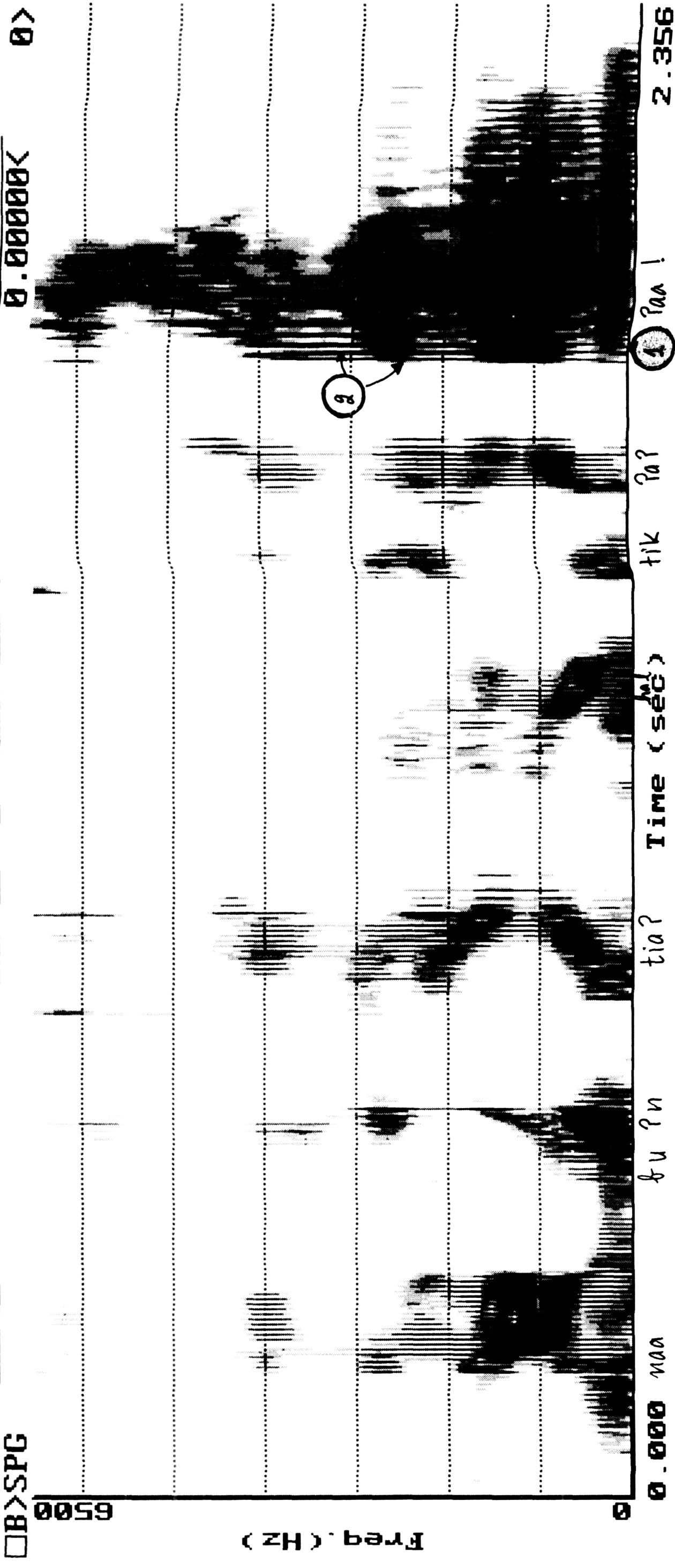


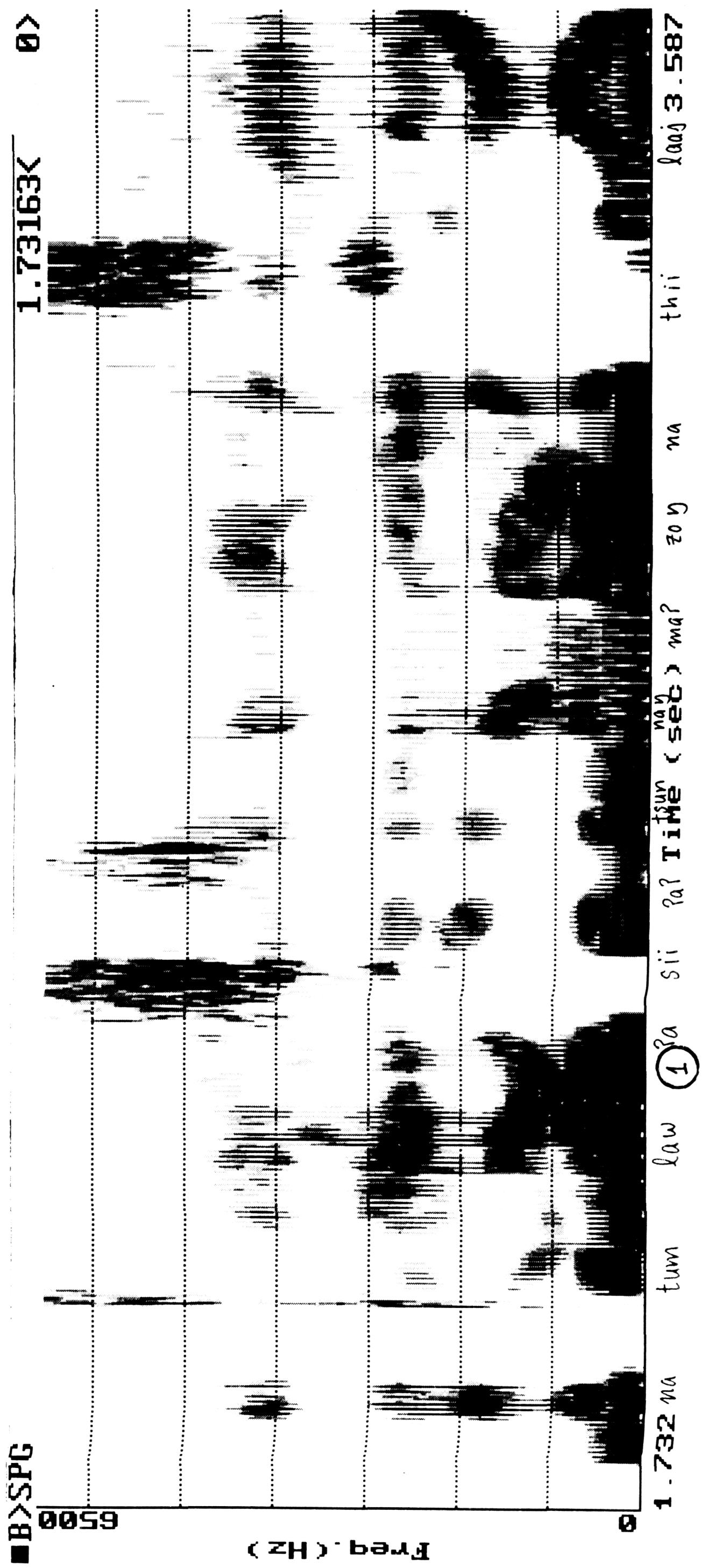




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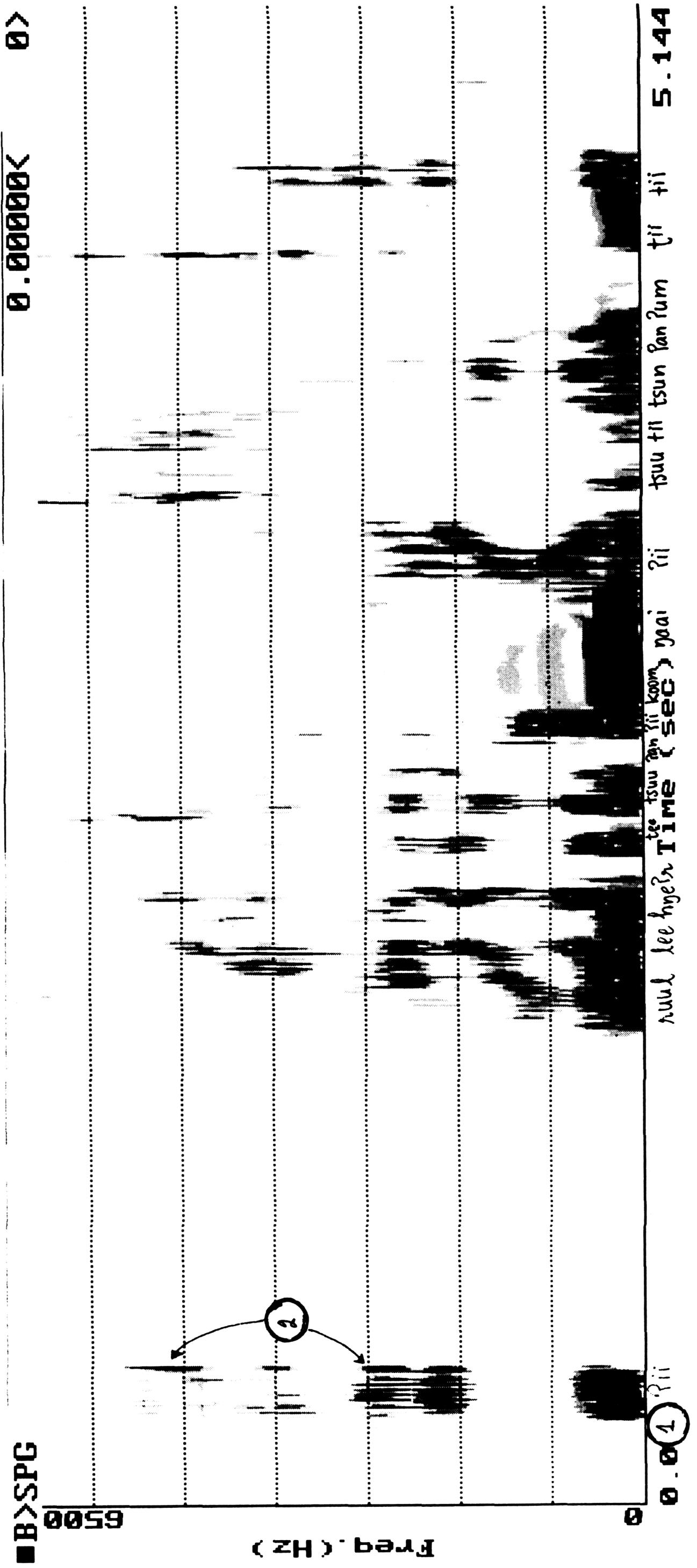
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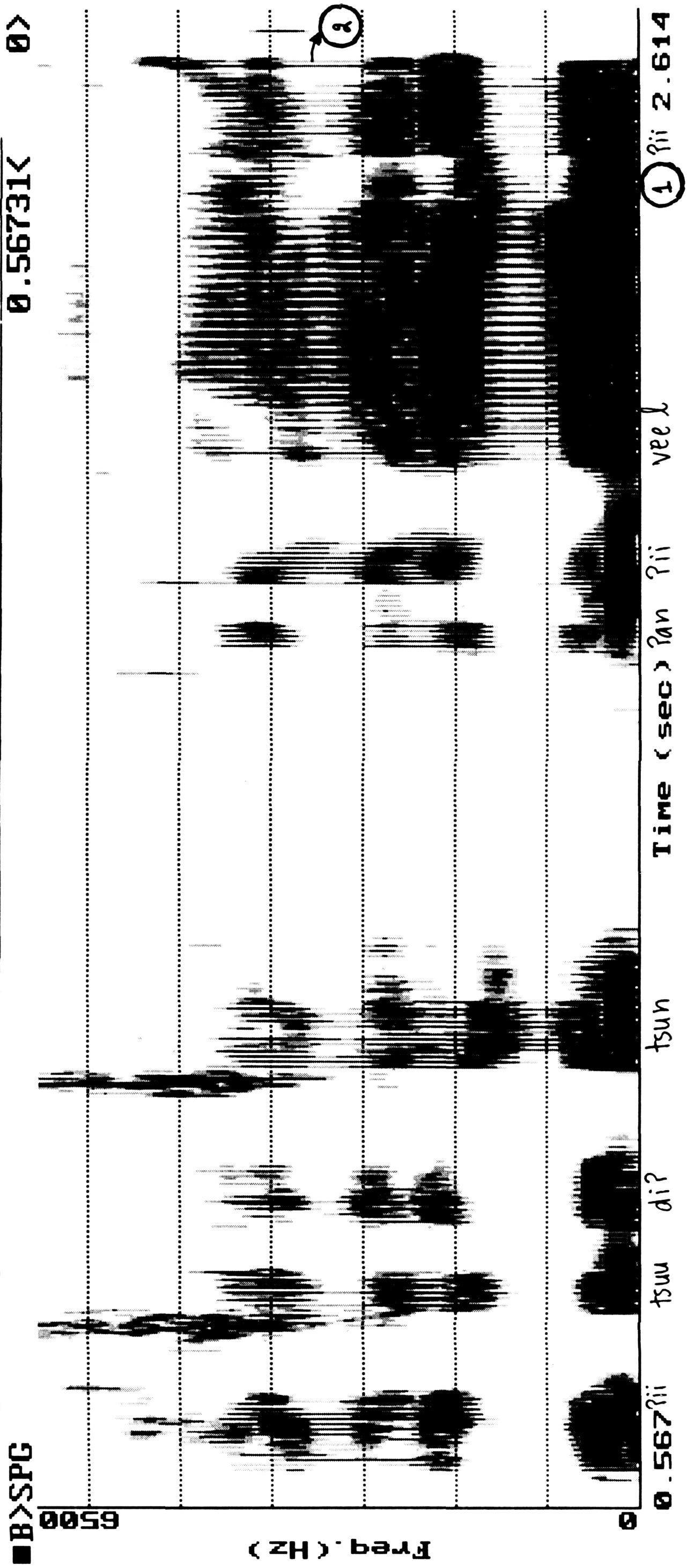




A decorative block containing two symbols: a stylized mountain or roof shape at the top, and a square frame with a diagonal cross below it.

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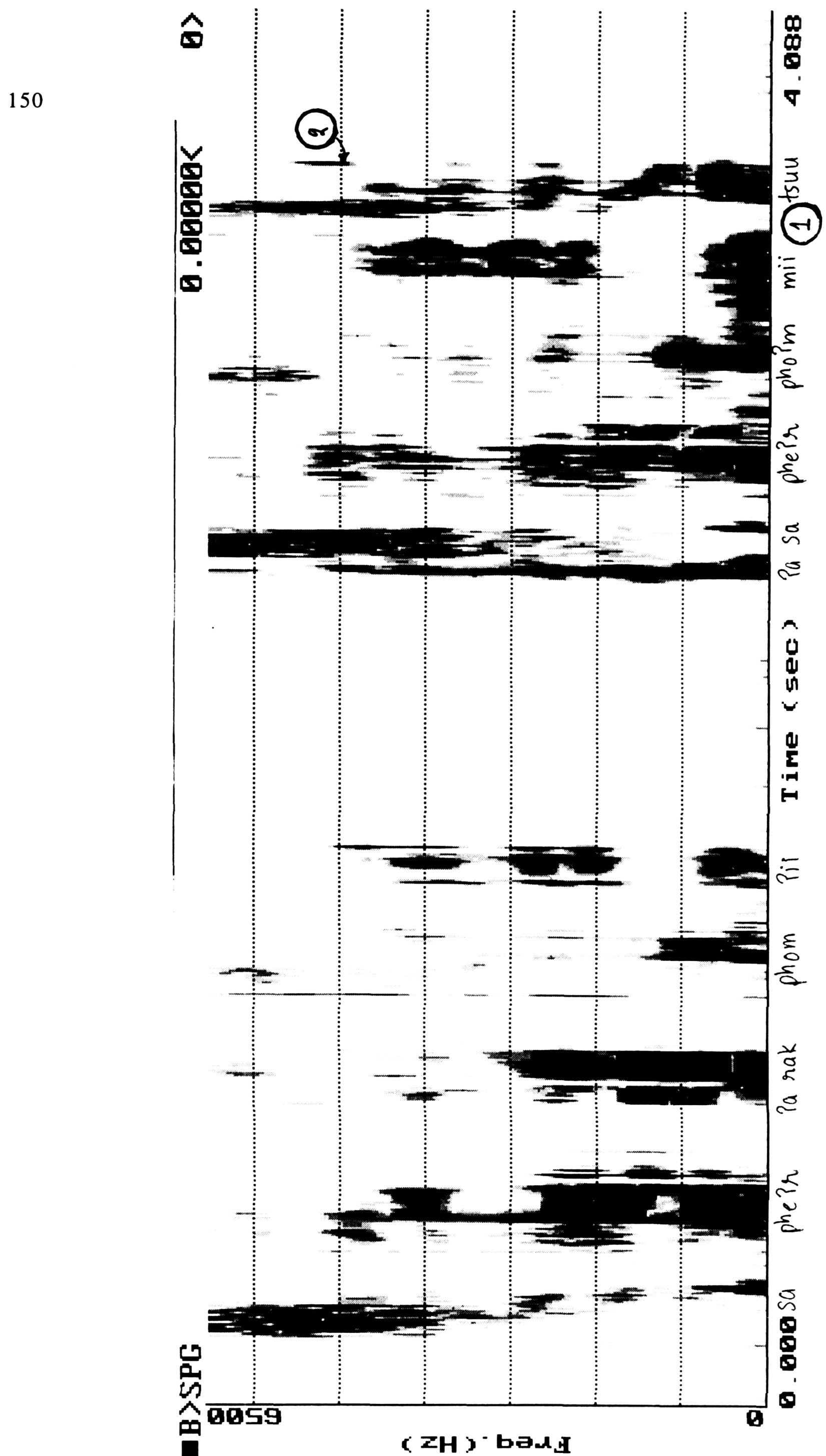
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149

②





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0 . 401 hii huu yuu aau gau zuu canz ① hii ② 1 . 975

152

