

Documentation of the audio and electroglottographic materials accompanying the article
**“Reassociated tones and coalescent syllables
in Naxi (Tibeto-Burman)”**

published in: *Journal of the International Phonetic Association*, 2007

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The research article “Floating tones and coalescent syllables: Field experiments on tonal contours and syllable reduction in Naxi (Tibeto-Burman)”, published in the *Journal of the International Phonetic Association* in 2007, is accompanied by audio and electroglottographic recordings of the most part of the data on which this research is based. They correspond to examples 4 to 8 and 10 to 13 in the text.

These recordings are available from the following address:

<http://hal.archives-ouvertes.fr/hal-00144485>

The reader is referred to the text of the article for the transcription of the sentences.

The audio and electroglottographic (EGG) signals were simultaneously recorded into stereo files (audio in one channel, EGG in the other); as this format may not be convenient for all users, each stereo file was later split into two: one audio file (name ending in *_AUD.wav*), one EGG file (name ending in *_EGG.wav*). There is no EGG recording for examples 7a and 7b.

The file names are as follows: ‘Naxi_tones_’ + number of sentence in main text + AUD for audio, EGG for electroglottographic files, e.g. *Naxi_tones_4_AUD.wav* is the audio file for example 4.

The list of items recorded in carrier sentences (5), (6), (11) and (12) is as follows (in the order of recording):

number of item	phonemic transcription	English translation	Chinese translation
1	ndə̌	to call out loud	喊
2	tʂ ^h ū	to read aloud	读
3	ndý	to graze (cattle)	放牧
4	ndzù	to sit	坐
5	tʂ ^h ú	to insert, to pierce	插
6	ʂù	to look for	寻找
7	p ^h ý	to vomit	吐
8	ndū	to come	来
9	ndə̌	to measure	量
10	ù	to grind	磨
11	mé	to teach	教
12	ndzū	to eat	吃

13	k ^h á	to shoot (an arrow...)	射
14	ndǎ̄	to hit (the mark)	中 (射中)
15	ndó	to fall	跌倒
16	ndù	to plow	犁
17	p ^h ū	to open	开
18	ts ^h ý	to compensate for	赔偿
19	ʂū	to get back, to collect back	收(收回来)
20	p ^h ù	to scamper off	逃跑
21	ndzú	to fell	(用斧子) 砍
22	tʂ ^h ù	rapid; of knife: sharp	快
23	ū	good, skilled	好(技术好)
24	bē	to do	做, 干
25	hū	to go (<i>past tense</i>)	去
26	t ^h á	apt, good	可以
27	ts ^h ù	to arrive	到达

Doublets were removed from the sound files. Item 17 is missing from the recordings in frame 5, items 24 to 26 from the recordings in frame 6, and items 8, 24 and 25 from the recordings in frames 11 and 12.

The list of items recorded in carrier sentence (13) is as follows (in the order of recording):

number of item	phonemic transcription	English translation	Chinese translation
1	lá	thick	厚
2	ndzā	dark	阴
3	pà	broad	宽
4	gṽ	good (e.g. good-hearted)	好
5	pṽ	dry	干
6	mí	ripe, cooked	熟
7	sī	poor	穷
8	mbì	thin, watery	稀
9	ʂ ^w á	full	满
10	dǎ̄	tender, soft	嫩
11	ʂǎ̄	long	长
12	mú	old	老
13	mbū	bright	亮
14	tʂ ^h ù	rapid; of knife: sharp	快
15	ʂú	new	新
16	ɳdʒú	beautiful	美
17	ʂù	yellow	黄
18	bṽ	coarse	粗

19	ỳ	light (not heavy)	轻
20	ts ^h ā	hot	热
21	ndzà	annoying; <i>homophone:</i> colourful	讨厌(同音词: 花)
22	hó	deep	深
23	ndò	stupid	愚蠢
24	mbē	shallow	浅
25	ŋgj̃̀	difficult	困难

Due to restrictions of the vocabulary list available, this set is not phonemically or tonally balanced (10 L tones, 8 M tones, 7 H tones).

In order to illustrate the difference between final discourse particles with and without a floating M tone, two series are provided as an illustration to this article: one with final particle /mē/ (conveying *obviousness*), which carries a floating Mid tone that attaches to the syllable to its left; one with final particle /sj̃̀/ (used when the speaker was an eye witness to what (s)he reports), which does not have such a floating tone. One single repetition is provided for each item.

The longer files (those which contain several items, each said within the same carrier sentence) were annotated using the SoundForge™ software, defining a Region for each target syllable; more specifically, the Region corresponds to the rhyme of the syllable at issue. For users who do not have this software, the beginning, end and duration of each Region is shown below, as a list for each of the files.

For examples 5, 6 and 13, the annotation is exactly the same for the audio files and the electroglottographic files.

For examples 11-12, the Regions correspond to the entire carrier sentence.

Regions List: Naxi_tones_5_AUD.wav

Name	In	Out	Duration
1	00:00:04,411	00:00:04,601	00:00:00,190
2	00:00:10,993	00:00:11,184	00:00:00,191
3	00:00:17,758	00:00:17,992	00:00:00,233
5	00:00:24,664	00:00:24,862	00:00:00,198
6	00:00:31,888	00:00:32,124	00:00:00,236
7	00:00:37,384	00:00:37,633	00:00:00,249
8	00:00:46,155	00:00:46,365	00:00:00,210
9	00:00:52,121	00:00:52,378	00:00:00,256
10	00:00:58,440	00:00:58,637	00:00:00,196
11	00:01:06,320	00:01:06,529	00:00:00,209
12	00:01:15,424	00:01:15,646	00:00:00,222
13	00:01:21,333	00:01:21,589	00:00:00,255

14	00:01:30,663	00:01:30,895	00:00:00,232
15	00:01:38,176	00:01:38,423	00:00:00,247
16	00:01:45,615	00:01:45,885	00:00:00,269
18	00:01:53,581	00:01:53,780	00:00:00,198
19	00:01:59,507	00:01:59,711	00:00:00,204
20	00:02:05,826	00:02:06,061	00:00:00,235
21	00:02:12,525	00:02:12,757	00:00:00,231
22	00:02:17,244	00:02:17,478	00:00:00,233
23	00:02:23,348	00:02:23,616	00:00:00,268
24	00:02:31,564	00:02:31,778	00:00:00,214
25	00:02:40,320	00:02:40,560	00:00:00,239
26	00:02:48,042	00:02:48,279	00:00:00,236

Regions List: Naxi_tones_6_AUD.wav

Name	In	Out	Duration
1	00:00:05,546	00:00:05,839	00:00:00,293
2	00:00:10,721	00:00:10,963	00:00:00,242
3	00:00:15,878	00:00:16,149	00:00:00,271
4	00:00:20,275	00:00:20,552	00:00:00,277
5	00:00:25,173	00:00:25,407	00:00:00,233
6	00:00:29,712	00:00:29,974	00:00:00,261
7	00:00:34,272	00:00:34,568	00:00:00,296
8	00:00:40,849	00:00:41,131	00:00:00,281
9	00:00:46,505	00:00:46,804	00:00:00,298
10	00:00:51,282	00:00:51,521	00:00:00,238
11	00:00:56,396	00:00:56,672	00:00:00,275
12	00:01:01,782	00:01:02,036	00:00:00,253
13	00:01:04,371	00:01:04,679	00:00:00,307
14	00:01:09,880	00:01:10,244	00:00:00,364
15	00:01:17,489	00:01:17,775	00:00:00,286
16	00:01:23,648	00:01:23,937	00:00:00,288
17	00:01:29,191	00:01:29,428	00:00:00,237
18	00:01:36,186	00:01:36,417	00:00:00,231
19	00:01:41,261	00:01:41,565	00:00:00,304
20	00:01:48,129	00:01:48,431	00:00:00,301
21	00:01:53,264	00:01:53,522	00:00:00,257
22	00:01:58,575	00:01:58,871	00:00:00,296
23	00:02:04,949	00:02:05,296	00:00:00,346
27	00:02:11,635	00:02:11,987	00:00:00,352

Regions List: Naxi_tones_11_12_AUD.wav

Name	In	Out	Duration
1	00:00:04,551	00:00:12,192	00:00:07,641
2	00:00:17,857	00:00:23,244	00:00:05,387
3	00:00:25,790	00:00:31,084	00:00:05,294
4	00:00:34,722	00:00:41,038	00:00:06,315
5	00:00:43,665	00:00:47,394	00:00:03,729
6	00:00:50,552	00:00:55,382	00:00:04,829
7	00:00:58,447	00:01:02,858	00:00:04,411
9	00:01:06,437	00:01:11,638	00:00:05,201
10	00:01:13,287	00:01:17,327	00:00:04,040
11	00:01:20,439	00:01:24,293	00:00:03,854
12	00:01:25,849	00:01:29,936	00:00:04,086
13	00:01:31,654	00:01:35,183	00:00:03,529
14	00:01:37,180	00:01:41,081	00:00:03,900
15	00:01:45,121	00:01:48,790	00:00:03,668
16	00:01:50,880	00:01:54,502	00:00:03,622
17	00:01:58,310	00:02:01,747	00:00:03,436
18	00:02:04,440	00:02:07,970	00:00:03,529
19	00:02:10,408	00:02:14,773	00:00:04,365
20	00:02:17,142	00:02:21,972	00:00:04,829
21	00:02:24,781	00:02:28,729	00:00:03,947
22	00:02:31,051	00:02:34,998	00:00:03,947
23	00:02:37,125	00:02:40,376	00:00:03,250
26	00:02:43,822	00:02:47,444	00:00:03,622
27	00:02:49,041	00:02:54,764	00:00:05,722

Regions List: Naxi_tones_13_floating_M_AUD.wav

Name	In	Out	Duration
1	00:00:02,083	00:00:02,348	00:00:00,264
2	00:00:04,866	00:00:05,141	00:00:00,275
3	00:00:07,893	00:00:08,272	00:00:00,378
4	00:00:11,036	00:00:11,325	00:00:00,288
5	00:00:13,476	00:00:13,859	00:00:00,383
6	00:00:16,590	00:00:16,820	00:00:00,230
7	00:00:19,832	00:00:20,308	00:00:00,476

8	00:00:22,807	00:00:23,103	00:00:00,296
9	00:00:25,971	00:00:26,415	00:00:00,444
10	00:00:29,000	00:00:29,291	00:00:00,291
11	00:00:31,695	00:00:32,156	00:00:00,461
12	00:00:34,967	00:00:35,214	00:00:00,246
13	00:00:37,979	00:00:38,215	00:00:00,236
14	00:00:40,604	00:00:41,023	00:00:00,418
15	00:00:43,945	00:00:44,422	00:00:00,477
16	00:00:47,106	00:00:47,378	00:00:00,272
17	00:00:49,966	00:00:50,446	00:00:00,480
18	00:00:53,860	00:00:54,152	00:00:00,291
19	00:00:56,746	00:00:57,168	00:00:00,422
20	00:01:00,371	00:01:00,807	00:00:00,436
21	00:01:03,905	00:01:04,216	00:00:00,310
22	00:01:07,036	00:01:07,314	00:00:00,278
23	00:01:10,090	00:01:10,434	00:00:00,343
24	00:01:13,856	00:01:14,177	00:00:00,320
25	00:01:17,038	00:01:17,432	00:00:00,394

Regions List: Naxi_tones_13_no_floating_M_AUD.wav

Name	In	Out	Duration
1	00:00:01,561	00:00:01,785	00:00:00,223
2	00:00:04,445	00:00:04,677	00:00:00,231
3	00:00:07,595	00:00:07,923	00:00:00,327
4	00:00:11,061	00:00:11,303	00:00:00,242
5	00:00:15,127	00:00:15,464	00:00:00,336
6	00:00:18,768	00:00:18,977	00:00:00,209
7	00:00:21,350	00:00:21,807	00:00:00,457
8	00:00:24,414	00:00:24,692	00:00:00,278
9	00:00:27,237	00:00:27,678	00:00:00,441
10	00:00:30,583	00:00:30,881	00:00:00,298
11	00:00:33,076	00:00:33,547	00:00:00,471
12	00:00:36,523	00:00:36,767	00:00:00,243
13	00:00:39,238	00:00:39,542	00:00:00,304
14	00:00:41,920	00:00:42,248	00:00:00,327
15	00:00:45,025	00:00:45,430	00:00:00,404
16	00:00:48,420	00:00:48,684	00:00:00,264
17	00:00:51,026	00:00:51,496	00:00:00,470
18	00:00:54,332	00:00:54,640	00:00:00,307
19	00:00:57,126	00:00:57,440	00:00:00,313
20	00:01:00,619	00:01:00,975	00:00:00,356
21	00:01:03,952	00:01:04,225	00:00:00,272

22	00:01:06,784	00:01:07,153	00:00:00,369
23	00:01:10,019	00:01:10,335	00:00:00,315
24	00:01:13,144	00:01:13,454	00:00:00,310
25	00:01:16,454	00:01:16,775	00:00:00,320