



Phonetic Transcription of Tone in the IPA

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1 The IPA provides five tone levels for transcription.

TONES AND WORD ACCENTS	
LEVEL	CONTOUR
ě or ǀ Extra high	ě or ǀ Rising
é ǂ High	ê ǃ Falling
ē ǁ Mid	ě ǁ High rising
è ǁ Low	ě ǁ Low rising
ẽ ǂ Extra low	ẽ ǂ Rising-falling
↓ Downstep	↗ Global rise
↑ Upstep	↘ Global fall



Other contours are not explicitly accounted for in the IPA.

Ligatures are used to create contours rather than actual Unicode characters.

Tone letters and diacritics are not equivalent.
[IPA Handbook p.14]

Should we have one Unicode character per symbol?

2 Phonological or phonetic transcription?

The tone letter system presumes that there are only five pitch heights within the human production spectrum.

Are *tonal contrasts* contrasting with *segments*, or with other *pitches* in the prosodic unit?

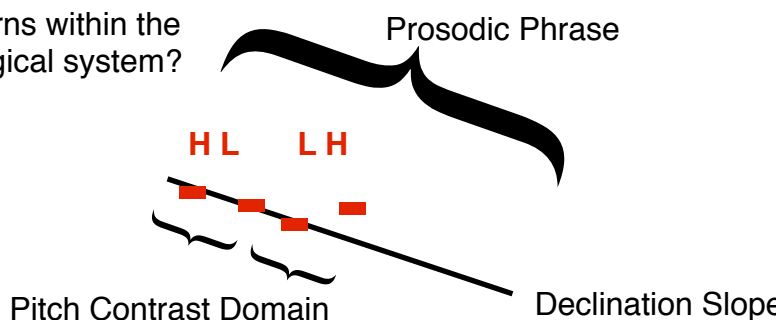
Do these predefined categories presume phonological analysis before phonetic description can be transcribed?

<[]> or <///> can apply to transcriptions, but does our choice of representative symbol already presume an analysis?

Does a phonetic pitch height determine a phonological category?

What is the background point of comparison when we evaluate pitch?

- Other tones in the phrase?
- Absolute pitch?
- Tone patterns within the phonological system?



4 Pitch heights.

Do these work? are there enough?

5 Bar notation.

Where and how has it been used. Why is it more fitting?
22 Authors have used the notation, in a variety of contexts (professional publications).

Chart Goes in this section

When to Use it...

(A) $\left[\begin{array}{ccccc} - & - & - & - & - \\ yiká & bē & mītē & \rightarrow & yika & be & mite & \text{'to press against'} \\ & 1 & 2 & 3 & 4 & 5 \end{array} \right]$

(B) $\left[\begin{array}{ccccc} - & - & - & - & - \\ /d & gbò & vò/ & \rightarrow & [d^i & gbò^i & vò^i] \\ 2SG & cut(PERF) & finish \\ \text{'You already cut.'} \end{array} \right]$

(C) $\left[\begin{array}{ccccc} j\bar{o}-\bar{o} & pēē-\bar{n}- & \text{'white man'} \\ man-NC & white-NC-BT \\ [j\bar{o} & pēēn] \end{array} \right]$

3 Are five levels enough?

Six levels of pitch

Languages with six levels of *level pitch*

Chori	[cry]	- Africa
Benč ⁴ non ⁴ (Gimira)	[bcq]	- Africa

Languages with *contours* establishing six levels of pitch

Cantonese	[yue]	- Asia
San Juan Quiahije Chatino	[cpt]	- Mexico
Itunyoso Trique	[urh]	- Mexico

Languages with *Upstep* or *Downstep* creating six levels of pitch

Southern Puebla Mixtec (Upstep)	[mit]	- Mexico
Engenni (Upstep)	[enn]	- Africa
Coatzacoapan Mixtec (Downstep)	[cpt]	- Mexico

Some languages are claimed to have six pitch levels.

Limited contours in the IPA

Languages with three or more *rising* contours

San Juan Quiahije Chatino	[cpt]	- Mexico
Western Highland Chatino	[ctp]	- Mexico
San Juan Copala Trique	[trc]	- Mexico

Languages with three or more *falling* contours

Western Highland Chatino	[ctp]	- Mexico
Itunyoso Trique	[urh]	- Mexico
连云港 Lian-Yun-Gang Dialect	[und]	- Asia
Jalapa Mazatec	[maj]	- Mexico

How are we to describe the pitch contours in languages with more than three contours?

The IPA diacritic system has insufficient distinctions to cover the demonstrated need for describing contours across the world's languages.

Which diacritics are we to use when we need to indicate more than three pitch contours in a single direction?

7 Interact and comment!

Read the paper! Extensive References and citations in the paper.

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