Tone

Assumptions:

1-Contour tones (rising and falling) are combinations of high and low tones.

High tone  \( \hat{\nu} \)  H
           \( \downarrow \)
            \( \uparrow \)

Low tone  \( \dot{\nu} \)  L
           \( \downarrow \)
            \( \uparrow \)

Falling tone  \( \hat{\alpha} \)  H L
                \( \uparrow / \)
                \( \uparrow / \)
            \( \downarrow \)

Rising tone  \( \hat{\alpha} \)  L H
                \( \uparrow / \)
                \( \uparrow / \)
            \( \downarrow \)

Mid tone  \( \bar{e} \)  M
           \( \downarrow \)

2-Adjacent vowels with the same tone must be linked to one tone on the tonal tier.

Not permitted:  L  L  H
                \( \uparrow \)  \( \uparrow \)  \( \uparrow \)
                \( \downarrow \)  \( \downarrow \)  \( \downarrow \)

Permitted:  L  H
                \( \\backslash / \)  \( \\backslash / \)  \( \backslash / \)
                \( \downarrow \)  \( \downarrow \)  \( \downarrow \)
                \( \downarrow \)  \( \downarrow \)  \( \downarrow \)
3-Tones are separate from the vowels that bear them.

In Margi when a vowel is deleted the tone remains are reassigned to the closest vowel.

```
L   H     L   H
 |
```

\[ tla + wa \rightarrow tlwa \]

**Tones can be contrastive** (Chinese)

- **mother**: H
  ```
  H
  |
  m a
  ```

- **hemp**: L H
  ```
  \ |
  m a
  ```

- **scold**: H L
  ```
  \ |
  m a
  ```

- **horse**: H L H
  ```
  \ | / \\
  \ | / \\
  m a
  ```

How would you represent these words autosegmentally?

- mípáfélò
- kánô
- lǎnibé
Tones can be grammatical
Present tense in marked by a high tone on the first syllable in Mixtec.

<table>
<thead>
<tr>
<th>Future</th>
<th>Present</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ndùkú</td>
<td>ndúkú</td>
<td>look for</td>
</tr>
<tr>
<td>kùnù</td>
<td>kùnù</td>
<td>weave</td>
</tr>
<tr>
<td>kící</td>
<td>kící</td>
<td>enter</td>
</tr>
</tbody>
</table>

What is the morpheme “in” in Mende? What tone does it have?
in ...

1. kó        kóhú        war
2. mbú        mbúhù       owl
3. mbú        mbúhú       rice
4. pelé       péléhú      house
5. bèlé       bèléhù      trousers
6. ngílà      ngílhù      dog
7. njàhâ      njàhahù     woman
Margi (‘y’ = [j])

(5) a. sál            sál-ári            ‘man’
    kùm            kùm-ári            ‘meat’
    b. ?ími        ?ímy-ári        ‘water’
    kú       kw-ári            ‘goat’
    tágú       tágw-ári       ‘horse’
    c. ti        ty-ári            ‘morning’
    hù        hw-ári            ‘grave’
    ú?ù       ú?w-ári           ‘fire’
<table>
<thead>
<tr>
<th>Subject</th>
<th>Object</th>
<th>Root</th>
<th>Tense</th>
</tr>
</thead>
<tbody>
<tr>
<td>to ‘we’</td>
<td>mo ‘him’</td>
<td>rɔr ‘look at’</td>
<td></td>
</tr>
<tr>
<td>ma ‘they’</td>
<td>ma ‘them’</td>
<td>tom ‘send’</td>
<td>iʁe</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Subject ‘to’</th>
<th>Subject ‘ma’</th>
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<tr>
<td>rɔr</td>
<td></td>
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<tr>
<td>tɔ̀ rɔ̀ rɛ̀</td>
<td>mɑ̀ rɔ̀ rɛ̀</td>
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<td>tom</td>
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Assume the following underlying representation for these words:

**UR**

**tonal tier**

| L | H | H | L | L | H |

**melodic tier**

to ma toma tomo tomi

Assume that on the surface there are no identical adjacent tones.

What happens when the morphemes are strung into sentences?

**UR**

**tonal tier**

| L | L | H | H | L | H | L | H |

**melodic tier**

to ror ire to ror ire to ror ire

**Surface**

**tonal tier**

| L | H | H | L | H | H | L | H |

**melodic tier**

to ror ire to ror ire to ror ire
UR

1 tones shift right

tonal tier
L L H      H L H      H L H     H     H
melodic tier to ror ire  ma ror ire  ma mo tom ire

2 tones spread to the left to pick up a toneless vowel

tonal tier
L LH      H L H      H L HH
melodic tier to ror ire  ma ror ire  ma mo tom ire

3 identical adjacent tones coalesce

Surface

tonal tier
L H      H LH      H LH
melodic tier to ror ire  ma ror ire  ma mo tom ire
What will happen here?

**UR**

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<th>L</th>
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<td>ma</td>
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1 tones shift right

2 tones spread to the left to pick up a toneless vowel

3 identical adjacent tones coalesce
**Answer**

**UR**

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