Kerewe Tone Derivations

a. 'to throw at'

```
   H
   |
ku la sa                 Underlying

(NA)                     Rightward Spread (RS)        target is not followed by another
                                                                         vowel

[kulása]                 (surface form)
```
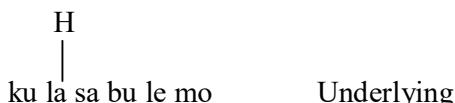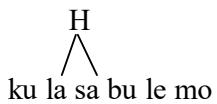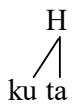
b. 'to throw at Bulemo'

```
   H
   |
ku la sa bu le mo        Underlying

      H
      /\
ku la sa bu le mo        RS

[kulásá bulemo]          (surface form)
```

c. to release

```
   H
   |
ku ta                    Underlying

   H
   /|
ku ta                    Leftward Spread (LS)

[kútá]                   (surface form)
```

d. to release Bulemo
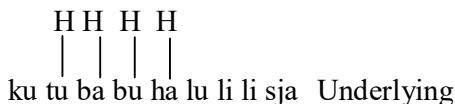
```
   H
   |
ku ta bu le mo           Underlying

   H
   /\
ku ta bu le mo           RS                           (LS only affects prepausal H)

[kutá búlemo]            (surface form)
```

e. to make us scrape it for them

```
   H H  H  H
   | |  |  |
ku tu ba bu ha lu li li sja  Underlying
```

```
    H
    |
ku tu ba bu ha lu li li sja   H deletion (HD)              starts at the right then deletes all of
                                                           the Hs preceded by H in the
                                                           previous syllable

      H
      /\
ku tu ba bu ha lu li li sja   RS
```
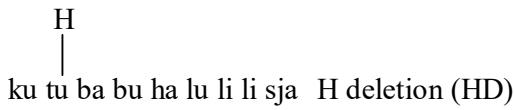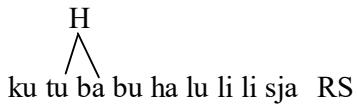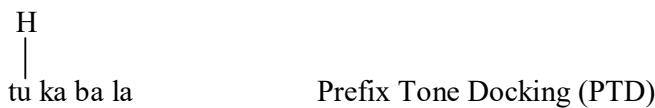
[kutúbábuhalulilisja]   (surface form)

f. if we count
```
H

tu ka ba la                   Underlying

 H
 |
tu ka ba la                   Prefix Tone Docking (PTD)

  H
  /\
tukabala                      RS
```

[tukábála]   (surface form)

Now we encounter the problem of downsteps and L insertion. Derivations will be lightly interrupted by discussion. Representing downstep as a floating L tone is traditional, but not entirely problem-free. We started with the assumption that only H tones are specified, then insert L by a default rule, in order to represent downstep. But this is not entirely problem-free.

g. if we throw at
```
H    H
|    |
tu ka la sa                   Underlying

 H    H
 |    |
tu ka la sa                   PTD

 H L H L
 | | | |
tu ka la sa                   Default L                    we're not done yet…
```
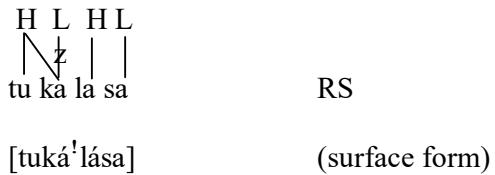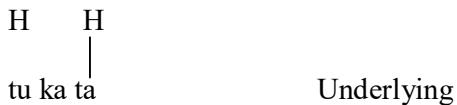
Next, we want to spread from *tú* to the following vowel. If you just spread, you end up with *túkâlásà*, where adding an association to the already L-toned vowel gives a falling tone. Possible solutions: (1) leave the problem to phonetics – there are no phonological short contour tones in Kerewe; (2) fix the problem in the phonology – after RS, dissociate the L on the vowel which has multiple tones, leaving the L as a floating tone which functions as a downstep

operator; (3) build the solution into the Rightward Spreading rule. Include "and delete any existing association line from the target vowel".
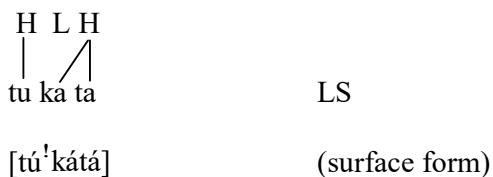
This author does not approve of solution (1), because it dumps a phonological problem into the phonetics, without any suggestion as to what kind of phonetic theory allows this. The choice between "spread then fix" versus "build the fix into the spread rule" is a pretty theoretical one. As an exercise to the reader, try to determine why I prefer "spread then fix", which mean we need another rule. What happens then is that we would get:

```
H L H L
|\↗| |
tu ka la sa          RS
```

[tuká˺lása]   (surface form)

h. if we release
```
H      H
       |
tu ka ta             Underlying
```

```
 H      H
 |      |
tu ka ta             PTD
```

```
 H  L H
 |  | |
tu ka ta             Default
```

The next step should be Leftward Spreading, dislodging L from the penult, which functions as a downstep operator. Again, simply spreading H to the left would generate *túkătá* with a rising tone, which does not exist. Somehow, after prepausal H spreads left, the rising tone simplifies by dissociating the L, and we get the pronounced form.

```
 H  L H
 |  ╱╱|
tu ka ta             LS
```

[tú˺kátá]   (surface form)

We now have two promissory notes: figuring out how LS dislodges the L from the vowel to which it spreads, and how RS likewise dislodges the L on the vowel to which it spreads.

i. if we release Bulemo
```
H      H
       |
tu ka ta bulemo      Underlying
```

```
 H      H
 |      |
tu ka ta bulemo      PTD
```

```
 H  L H  L L  L
 |  | |  | |  |
tu ka ta bulemo          Default
```

```
  H L   H  L L
  /\    /\ | |
tu ka ta bulemo          RS
```

[túká!tá búlemo]   (surface form)

j. if you count for

```
 H
o ka ba li la            Underlying
```

```
 H
 |
o ka ba li la            PTD
```

```
    H
    |
o ka ba li la            Onsetless Tone Shift (OTS)
```

```
L  H  L  L L
|  |  |  | |
o ka ba li la            Default
```

```
L     H LL L
|     /\ | |
o ka ba li la            RS
```

[okábálila]   (surface form)

k. if you throw at for

```
H     H
      |
o ka la si la            Underlying
```

```
H     H
|     |
o ka la si la            PTD
```

```
   H H
   | |
o ka la si la            OTS
```

```
L  H  H L L
|  |  | | |
o ka la si la            Default
```

```
L  H  HL L
|  |  /\ |
o ka la si la              RS
```

[okálásíla]   (surface form)

The problem which we skated around above is that spreading of L to the right or left to a L toned syllable doesn't leave you with a short rising or falling tone, instead the syllable simply has H. The "fix" required here is to detach a L from a vowel that also has a H tone – either before or after.

```
        L   H          Decontouring (mirror image)
         \  /
         x /
          V
```

Let us re-consider the last steps of the derivation /H+tukatá bulemo/ → túká ꜜtá búlemo, this time separating the spreading and de-linking steps of Rightward Spreading.

```
 H  L H  L L  L
 |  | |  | |  |
 tu ka ta bulemo           Default

 H L  HL L  L
 \N  /\ | |  |
 tu ka ta bulemo           RS

 H L  HL L  L
 /\  /\ | |  |
 tu ka ta bulemo           Decontouring
```

If the language had short rise or fall, this would not work, but Kerewe doesn't, so the solution does work. The rule has to be ordered after RS and LS which are the two rules prompting positing such a rule, and would also apply after Default which provides the specified L that can be delinked.

  Whenever two underlyingly adjacent syllables have H tones, the second H deletes, but one of those syllables can regain H by one of the two spreading rules. A floating tone is not associated to a vowel, so it will not cause deletion of the "following" tone (all tones follow a floating tone, given the meaning of "floating" and "follow"). Once the prefixal floating H is associated by PTD and perhaps shifted to the right, it could theoretically trigger H Deletion – but it does not, as we saw in [okálása] and similar forms. By ordering Default to apply after Onsetless Tone Shift and before Rightward and Leftward Spread, we correctly predict that /v́cvcv́/ always generated a downstep because the vowel in the middle receives default L which is then dislodged.