

Four-part barbershop music

188

T.  when I've found the day to bid fare - well out there. So

L.  So

Bar.  when I've found the day to bid fare - well out there. So

B.  tale. Out there. So

Human tagger

Input in .txt

```
En7(en3c, bn4 , en4c, bn4 ) 240
Anm(en3t, cn4 , en4t, an4 ) 240
Anm(en3 , cn4 , en4t, an4 ) 1920
Cn7(a#3t, , en4t, ) 480
Cn7(a#3t, cn4t, en4t, ) 480
Cn7(a#3 , cn4 , en4t, f#4 ) 960
EnM(bn3 , g#4t, en4t, bn4t) 1920
EnM(en3 , g#4 , en4 , bn4 ) 960
An7(en3 , c#4 , an3 , gn4 ) 960
```

Parser

Internal data
structure

G4	
F4 <i>root</i>	E4
	C4 <i>root</i>
	Bb4
A3	
Chord	Chord

a) input: tagged chords

Main algorithm

Tuned internal data structure

Vertical step

G4 +4c	G4 +2c
F4 +0c	F4 -14c
	C4 +0c
A3 -14c	Bb4 -31c
Chord	Chord

b) computed individual bend

Horizontal step

G4 +4c	G4 +6c
F4 +0c	F4 -10c
	C4 +4c
A3 -14c	Bb4 -27c
Chord +0c	Chord +3c

c) computed master bend

within 3c
within 10c
14c
closest possible to 0

DryWetMidi integration

Tuned MIDI

