Goodale Consult

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- Here are some initial plots and tables that I hope are a good start. I took some notes
- 6 from the excel sheet and applied them as I understood them to the data. This html format
- <sub>7</sub> is one of the best for copy-pasting, but I can also provide a pdf or word document.

### 8 What Pitch Accents tend to mark focus?

I first created tables to try an answer this question. Each table and figure are comparing pitch accents for the positions "N" and "N1" in either Broad of Narrow focus in each city (Montevideo or Durazno). I looked back at the spread sheet and may be misunderstanding what is supposed to be focused. If I have chosen the wrong word in the sentence, please just let me know which position and sentence I should make similar visualizations for.

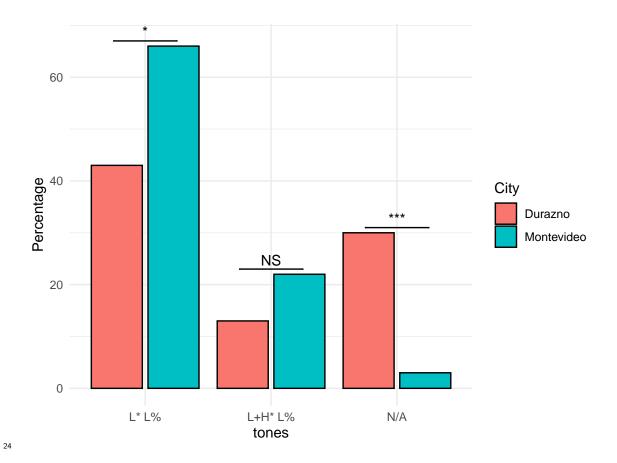
# Broad Focus Declaratives

15

23

I started with Broad focus declaratives (position is "N"). The table shows the occurance of each pitch accent in the data without cleaning up the very rare cases (under 5 occurrences in the data). Table 2 shows the same information, but does omit the rare cases. Figure 1 is a visualization of the filtered data (Table 2). For each comparison, a poisson regression was run, predicting total number (count) of utterances given the city. The line above the bars in the graph shows the result of the regression. NS means the result was not significant, one asterisk means it was significant at p<.05, two mean p < .005, and three mean p < .0005.

## Figure 1: Broad Focus Declaratives in position N filtered



In BFD we could mostly ignore boundary tones (e.g., L- and L%)"

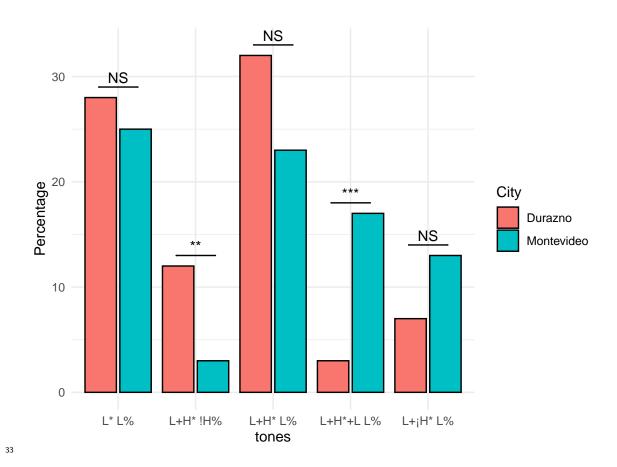
We can integrate these if you prefer, but there does not look like there would be a
major shift in the trend. If we need to recode things, it would be easiest for me with a list in
an excel format, where one column is the original coding and the other is the simplified
version. If I get one comprehensive list I can apply it to all data points and even tweak the
recoding if it's needed later on.

# Narrow Focus Declaratives

25

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Figure 2: Narrow Focus Declaratives in position N1 filtered



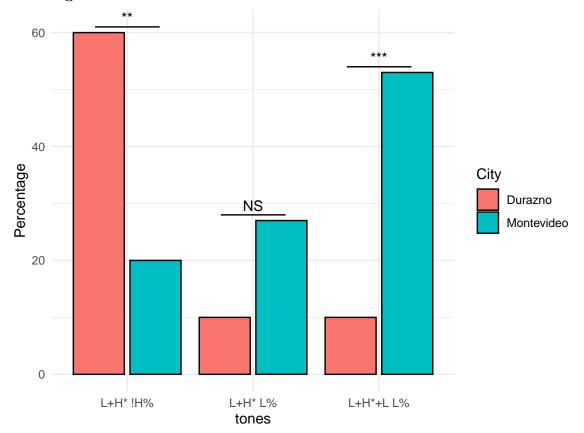
- In the NFD it becomes clear that the !H% IP boundary tone is a clear difference
- $^{35}$  between DZ (which has it) and MV (that mostly doesnt)."
- There is a significant difference here (p < .005).
- At the same time we see that the tritonal  $L+H^*+L$  is more common in MV than DZ.
- This is descriptively true (the count for MV is higher), but the poisson regression was not significant in this case (p > .05). This does not mean the difference is not real, but more likely that there just isn't enough data for the model to return a significant effect.

## $L^*+H$ is more common in DZ than MV.

I don't actually see this in the data.

- What seems clear in both DZ and MV is that upstepping (;) is a big part of
- marking focus, thus in an utterance full of L+H, focus is rightly marked with
- 46 L+iH, in cases such as NFD5 Con Manuel, these are all high peaks but due to
- 47 the lack of an earlier comparative peak they are not classified as upstepped.
- Here's a plot showing both cities productions for NFD5. It looks like the two groups are a little different than you've described above: Durazno speakers prefer L+H\*!H%. The
- Montevideo group, on the other hand, produce L+H\*+L L% the most.

Figure 3: Total percentage of each pitch accent in NFD5 'con Manuel'
occuring at least 5 total times



Thus if in the count for focalized items L+H\* rather than L+;H\* it should be undestood that these are, in such a case not different and can be grouped, whereas in sentences with PN peaks these are different. As above, a full list of these cases would be ideal if we need to re-code some things. 57 Socially, (at least before the current updated data) women tended to use the tritonal L+H\*+L as well as the upstep; more than men, this again is a key distinction as it once again provided evidence for the theory of females making greater contrasts and therfore greater clarity in speaking. Here's some visualizations of sex, if these look good, I can also run inferential statistics 62 for the comparisons of interest.

Figure 4: Total percentage of each pitch accent by sex in each city in narrow focus declaratives and the N1 position

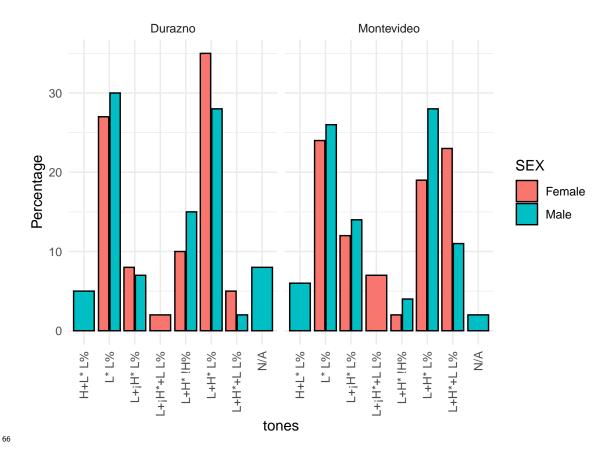
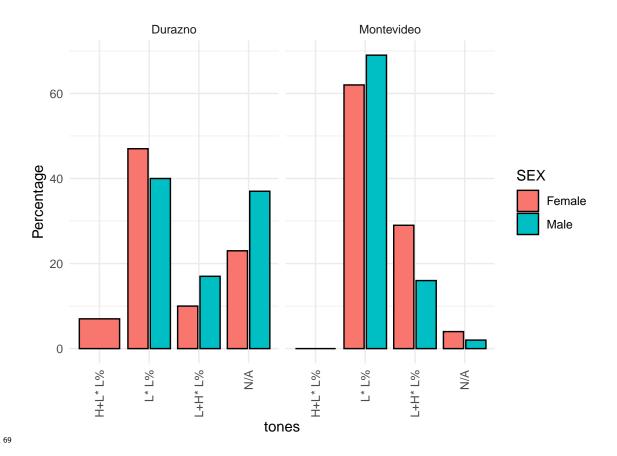


Figure 5: Total percentage of each pitch accent by sex in each city in broad focus declaratives and the N position



- Also if you find that certain utterance tend to prefer unique forms, such as
- $^{71}$  NFD5 "a statement of the obvious" where tritonals may be more common or
- $_{72}$  where the mid-boundary tone !H% is more frequent this is also of note.
- These tables and figures show the percentage of each pitch accent in each item for both broad and narrow focus declaratives. Again, everything is "N" or "N1" in terms of position.
- Figure 6: Total percentage of each pitch accent for narrow focus
  declaratives in each item per city

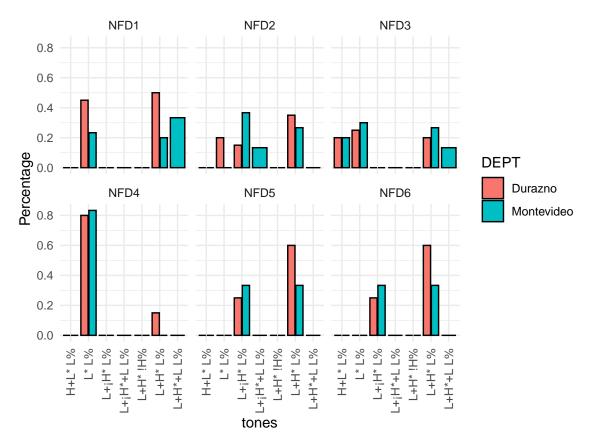


Figure 7: Total percentage of each pitch accent for broad focus declaratives
in each item per city

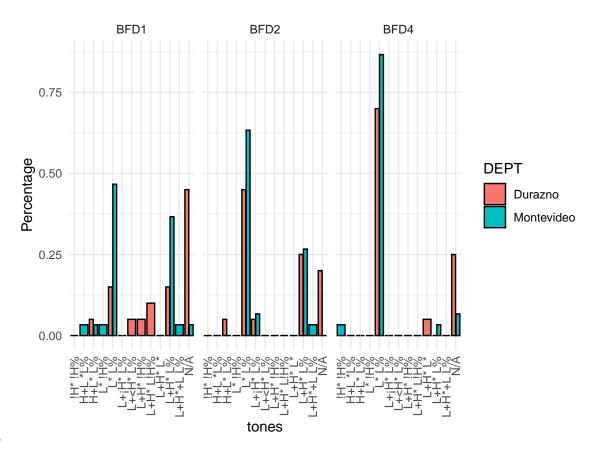


Table 1

Table 1: Total percentage of each pitch accent in nuclear position for Broad Focus

Decaratives.

tones	Montevideo	Durazno
!H* !H%	1	0
H+L *L%	1	0
H+L* L%	1	3
L* !H%	1	0
L* L%	66	43
L+ <h* l%<="" td=""><td>0</td><td>2</td></h*>	0	2
L+H*!H%	0	2
L+H* L!H%	0	3
L+H*L%	22	13
L+H*L*	0	2
L+H*+L L%	2	0
$L+_iH^*$ $L\%$	2	2
NA	3	30

Table 2: Total percentage of each pitch accent in nuclear position in which one group had produced it atleast 5 percent of the time in the data for Broad Focus Decaratives.

tones	Montevideo	Durazno
L* L%	66	43
L+H* L%	22	13
NA	3	30

Table 3: Total percentage of each pitch accent in nuclear position for Narrow Focus Decaratives.

tones	Montevideo	Durazno
!H* L%	1	0
H+L* L%	5	4
L $L%$	1	0
L* L%	25	28
L+!H* L%	1	1
L+!H*+L L%	2	2
L+H*	0	1
L+H* !H%	3	12
L+H*L%	23	32
L+H*L%	1	0
L+H*+L H%	1	0
L+H*+L L%	17	3
L+H*L%	0	1
$L+_iH\ L\%$	0	1
L+;H* !H%	1	1
L+iH*H%	0	1
L+iH*L%	13	7
L+¡H*+L L%	4	1
L+¡H*+L LH%	1	0
L+iH*L%	1	0
$_{\mathrm{iH+L*}}$ L%	1	0
NA	1	5

Table 4: Total percentage of each pitch accent in nuclear position in which one group had produced it atleast 5 percent of the time in the data for Narrow Focus Decaratives.

tones	Montevideo	Durazno
L* L%	25	28
L+H*!H%	3	12
L+H* L%	23	32
L+H*+L L%	17	3
$L+_iH^*$ $L\%$	13	7

Table 5

Table 5: Total percentage of each pitch accent in NFD5 'con Manuel'

tones	Durazno	Montevideo
H+L* L%	5	0
L+!H*+L L%	5	0
L+H*!H%	60	20
L+H*L%	10	27
L+H*+L L%	10	53
L+¡H* !H%	5	0
NA	5	0

Table 6: Total percentage of each pitch accent in NFD5 'con Manuel' occuring at least 5 total times

tones	Durazno	Montevideo
L+H* !H%	60	20
L+H* L%	10	27
L+H*+L L%	10	53

Table 7: Total percentage of each pitch accent for narrow focus declaratives in each item per city

tones	DEPT	Sentence	Percentage
H+L* L%	Durazno	NFD3	0.2000000
H+L*L%	Durazno	NFD1	0.0000000
H+L* L%	Durazno	NFD2	0.0000000
H+L* L%	Durazno	NFD4	0.0000000
H+L* L%	Durazno	NFD5	0.0000000
H+L* L%	Durazno	NFD6	0.0000000
H+L* L%	Montevideo	NFD3	0.2000000
H+L* L%	Montevideo	NFD1	0.0000000
H+L* L%	Montevideo	NFD2	0.0000000
H+L* L%	Montevideo	NFD4	0.0000000
H+L* L%	Montevideo	NFD5	0.0000000
H+L* L%	Montevideo	NFD6	0.0000000
L* L%	Durazno	NFD3	0.2500000
L* L%	Durazno	NFD1	0.4500000
L* L%	Durazno	NFD2	0.2000000
L* L%	Durazno	NFD4	0.8000000
L* L%	Durazno	NFD5	0.0000000
L* L%	Durazno	NFD6	0.0000000
L* L%	Montevideo	NFD3	0.3000000
L* L%	Montevideo	NFD1	0.2333333
L* L%	Montevideo	NFD2	0.0000000
L* L%	Montevideo	NFD4	0.8333333

tones	DEPT	Sentence	Percentage
L* L%	Montevideo	NFD5	0.0000000
L* L%	Montevideo	NFD6	0.0000000
L+H* !H%	Durazno	NFD3	0.0000000
L+H* !H%	Durazno	NFD1	0.0000000
L+H* !H%	Durazno	NFD2	0.0000000
L+H* !H%	Durazno	NFD4	0.0000000
L+H* !H%	Durazno	NFD5	0.0000000
L+H* !H%	Durazno	NFD6	0.0000000
L+H* !H%	Montevideo	NFD3	0.0000000
L+H* !H%	Montevideo	NFD1	0.0000000
L+H* !H%	Montevideo	NFD2	0.0000000
L+H* !H%	Montevideo	NFD4	0.0000000
L+H* !H%	Montevideo	NFD5	0.0000000
L+H* !H%	Montevideo	NFD6	0.0000000
L+H*L%	Durazno	NFD3	0.2000000
L+H*L%	Durazno	NFD1	0.5000000
L+H* L%	Durazno	NFD2	0.3500000
L+H* L%	Durazno	NFD4	0.1500000
L+H*L%	Durazno	NFD5	0.6000000
L+H* L%	Durazno	NFD6	0.6000000
L+H*L%	Montevideo	NFD3	0.2666667
L+H* L%	Montevideo	NFD1	0.2000000
L+H* L%	Montevideo	NFD2	0.2666667
L+H* L%	Montevideo	NFD4	0.0000000
L+H* L%	Montevideo	NFD5	0.3333333

tones	DEPT	Sentence	Percentage
L+H* L%	Montevideo	NFD6	0.3333333
L+H*+L L%	Montevideo	NFD3	0.1333333
L+H*+L L%	Montevideo	NFD1	0.3333333
L+H*+L L%	Montevideo	NFD2	0.0000000
L+H*+L L%	Montevideo	NFD4	0.0000000
L+H*+L L%	Montevideo	NFD5	0.0000000
L+H*+L L%	Montevideo	NFD6	0.0000000
L+¡H* L%	Durazno	NFD3	0.0000000
$L+_iH^*$ $L\%$	Durazno	NFD1	0.0000000
$L+_iH^*$ $L\%$	Durazno	NFD2	0.1500000
L+¡H* L%	Durazno	NFD4	0.0000000
L+¡H* L%	Durazno	NFD5	0.2500000
$L+_iH^*$ $L\%$	Durazno	NFD6	0.2500000
$L+_iH^*$ $L\%$	Montevideo	NFD3	0.0000000
$L+_iH^*$ $L\%$	Montevideo	NFD1	0.0000000
$L+_iH^*$ $L\%$	Montevideo	NFD2	0.3666667
$L+_iH^*$ $L\%$	Montevideo	NFD4	0.0000000
$L+_iH^*$ $L\%$	Montevideo	NFD5	0.3333333
$L+_iH^*$ $L\%$	Montevideo	NFD6	0.3333333
L+¡H*+L L%	Montevideo	NFD3	0.0000000
L+¡H*+L L%	Montevideo	NFD1	0.0000000
L+¡H*+L L%	Montevideo	NFD2	0.1333333
L+¡H*+L L%	Montevideo	NFD4	0.0000000
$L+_iH^*+L$ $L\%$	Montevideo	NFD5	0.0000000
$L+iH^*+L$ $L\%$	Montevideo	NFD6	0.0000000

Table 8: Total percentage of each pitch accent for broad focus declaratives in each item per city

tones	DEPT	Sentence	Percentage
!H* !H%	Montevideo	BFD4	0.0333333
!H* !H%	Montevideo	BFD1	0.0000000
!H* !H%	Montevideo	BFD2	0.0000000
H+L *L%	Montevideo	BFD4	0.0000000
H+L *L%	Montevideo	BFD1	0.0333333
H+L *L%	Montevideo	BFD2	0.0000000
H+L* L%	Durazno	BFD4	0.0000000
H+L* L%	Durazno	BFD1	0.0500000
H+L* L%	Durazno	BFD2	0.0500000
H+L* L%	Montevideo	BFD4	0.0000000
H+L* L%	Montevideo	BFD1	0.0333333
H+L* L%	Montevideo	BFD2	0.0000000
L* !H%	Montevideo	BFD4	0.0000000
L* !H%	Montevideo	BFD1	0.0333333
L* !H%	Montevideo	BFD2	0.0000000
L* L%	Durazno	BFD4	0.7000000
L* L%	Durazno	BFD1	0.1500000
L* L%	Durazno	BFD2	0.4500000
L* L%	Montevideo	BFD4	0.8666667
L* L%	Montevideo	BFD1	0.4666667
L* L%	Montevideo	BFD2	0.6333333
L+ <h* l%<="" td=""><td>Durazno</td><td>BFD4</td><td>0.0000000</td></h*>	Durazno	BFD4	0.0000000

tones	DEPT	Sentence	Percentage
L+ <h* l%<="" td=""><td>Durazno</td><td>BFD1</td><td>0.0500000</td></h*>	Durazno	BFD1	0.0500000
L+ <h* l%<="" td=""><td>Durazno</td><td>BFD2</td><td>0.0000000</td></h*>	Durazno	BFD2	0.0000000
L+H*!H%	Durazno	BFD4	0.0000000
L+H*!H%	Durazno	BFD1	0.0500000
L+H* !H%	Durazno	BFD2	0.0000000
L+H* L!H%	Durazno	BFD4	0.0000000
L+H* L!H%	Durazno	BFD1	0.1000000
L+H* L!H%	Durazno	BFD2	0.0000000
L+H* L%	Durazno	BFD4	0.0000000
L+H* L%	Durazno	BFD1	0.1500000
L+H* L%	Durazno	BFD2	0.2500000
L+H* L%	Montevideo	BFD4	0.0333333
L+H* L%	Montevideo	BFD1	0.3666667
L+H* L%	Montevideo	BFD2	0.2666667
L+H* L*	Durazno	BFD4	0.0500000
L+H* L*	Durazno	BFD1	0.0000000
L+H* L*	Durazno	BFD2	0.0000000
L+H*+L L%	Montevideo	BFD4	0.0000000
L+H*+L L%	Montevideo	BFD1	0.0333333
L+H*+L L%	Montevideo	BFD2	0.0333333
L+¡H* L%	Durazno	BFD4	0.0000000
L+¡H* L%	Durazno	BFD1	0.0000000
L+¡H* L%	Durazno	BFD2	0.0500000
L+¡H* L%	Montevideo	BFD4	0.0000000
$L+_iH^*$ $L\%$	Montevideo	BFD1	0.0000000

tones	DEPT	Sentence	Percentage
L+¡H* L%	Montevideo	BFD2	0.0666667
N/A	Durazno	BFD4	0.2500000
N/A	Durazno	BFD1	0.4500000
N/A	Durazno	BFD2	0.2000000
N/A	Montevideo	BFD4	0.0666667
N/A	Montevideo	BFD1	0.0333333
N/A	Montevideo	BFD2	0.0000000