High pre-tonic falls in Northeastern Brazilian varieties: may a prenuclear high target spreading rightward re-categorize as a nuclear leading tone?

ProVar – Workshop on Prosodic Variation
July 9, 2015, University of Lisbon
PRESENTATION STRUCTURE

1. INTRODUCTION

2. MOTIVATION

3. THE STUDY
   • Results
   • Discussion
   • Final considerations

4. FUTURE RESEARCH
INTRODUCTION

Hat contour (high plateau) in Pescara
High-pretonic fall in Pescara

Documentation of Pescara Italian (Eastern Italy) and Pescarese (Vernacular language of Pescara)

Main elicitation methodology:
Discourse completion Task
(Blum-Kulka et al. 1989)

Participants are introduced to a situation and explicitly asked to react to it by saying something. A “target sentence” is expected, corresponding to a certain pragmatic type.

Target sentence type considered in this study:

*Broad focus statements* (out-of-the-blue statements, answer to generic wh-questions, such has “what is happening?”,” “what is the girl doing?” with no specific element being interrogated)
Context: “Look at the picture and tell me what the girl in the picture is doing.”

Target sentence: Broad focus statement
*Beve una bibita.* ‘She is having a drink.’
High-pretonic fall in Pescara

Context: “Look at the picture and tell me what the girl in the picture is doing.”

Target sentence: Broad focus statement
Beve una bibita. ‘She is having a drink.’

The postverbal PWG (una bibita) must be “prosodically” (but not necessarily informationally!) focused by this salient mark.
INTRODUCTION

Hat contour (high plateau) in Pescara
High plateau

Phonological consideration about (HP)H+L*:

It is not an extra-high target which is reached by linear interpolation. The rising movement is mostly entirely performed within the pre-tonic syllable, or it suddenly becomes steeper in it. How can this syllable be accented, since it is not even stressed at a word level?

The answer was found in broad/default focussed sentences with a compound postverbal word group, that is, an object formed by more than one tone bearing units units.

Simple postverbal PWG (only 1 TBU):
“Maria beve [una bibita]”

Compound postverbal PWG (2 or more TBU, in red):
“Maria beve [una tazza di latte]” (Maria is having a cup of milk)
“Ho perso [il porta-documenti]” (I lost my card case)
“Ho visto [la figlia del cognato di suo marito]” (“I saw the daughter of her husband’s brother-in-law”)
While simple postverbal PWG show a pretonic rise, compound PWG show a hat contour:

\[ \text{Sta a chiudere [l’ALTRO COMPUTER.]} \]

“She is shutting down [the other computer.]”
High plateau

While simple postverbal PWG show a pretonic rise, compound PWG show a hat contour:

Sta a chiudere [l’ALTRO COMPuter.]
“She is shutting down [the other computer.]”
Other examples: PWG containing an embedded clause

Voglio [la scATOLA CHE STA SOPRA ALLA SCARPIera.]
“I want [the box that is on the shoe rack.]”
Voglio [la scATOLA CHE STA SOPRA ALLA SCARPIera.]
“I want [the box that is on the shoe rack.]”
Pretonic rise-fall vs high plateau in Pescara:
Two phonologically equivalent implementations

‘Sto lavoro è [sull’intonAZIone]
“This work is [on intonation]”

Questo è un [lavORO SULL’INTONAZIone]
“This is [a work on intonation]”

L’ho messo [sulla Sedia]
“I put it [on the chair]”

L’ho messo [sOPRA ALLA Sedia]
“I put it [over the chair]”

Lo fA [Bene]
“(S)he does it [well]”

Ti ci vorrebbe [un “pORTA-PORTRAFogli”]
“You would need [a <<wallet-holder>>]”

M’è cascato [il portAFOgli]
“My wallet [fell down]”

Ti perdi [sEMPRE IL PORTAFOgli]
“You [always lose your wallet]”
There is a rise (L+H* pitch accent) on the first tonic syllable (or TBU) of the postverbal PWG.

• There is a fall (H+L* pitch accent) on the last TBU of the postverbal PWG.

• If the first and last TBU coincide (ONLY ONE TBU), both the rise and the fall should go on this (nuclear) TBU but then, in order to avoid crowding, the rise is anticipated to the preceding syllable, independently of syntactic boundaries.

<table>
<thead>
<tr>
<th>Beve una tazza di latte “She is drinking [a cup of milk]”</th>
<th>High pretonic peak H+L* on a complex PWG</th>
<th>BE</th>
<th>VE-U</th>
<th>NA</th>
<th>TAZ</th>
<th>ZA</th>
<th>DI</th>
<th>LAT</th>
<th>TE</th>
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TWO PHONETIC IMPLEMENTATIONS OF THE SAME PHONOLOGIC PATTERN
The rule for implementation of (HP)H+L*

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LABEL ACCOUNTING FOR BOTH CASES: (HP)H+L*
LABEL USED ON PICTURES: (L+H*)H+L*
The rule for implementation of (HP)H+L*

• There is a rise (L+H* pitch accent) on the first tonic syllable (or TBU) of the postverbal PGW.

• There is a fall (H+L* pitch accent) on the last TBU of the postverbal PGW.

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<td>BE VE-U NA TAZ ZA DI LAT TE</td>
<td></td>
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<td>BE VE-IL LAT TE</td>
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LABEL ACCOUNTING FOR BOTH CASES: (HP)H+L*
LABEL USED ON PICTURES: (L+H*)H+L*
MOTIVATION

Upstep and high plateau in Recife vs Pescara
The same contours (high plateau on compound PWG and pretonic rise on simple PWG) were found in Recife (Northeastern Brazil).

Marco vive [a rECife]  
“Marco lives in Recife”

Rapaz, faz frio aqui no interior,  
acho que eu vou [pra rECife]  
“It’s cold here in the inland, man. I think I’m going to Recife”

Sta [a rIO DE JANeiro]  
“He is (lives) in Rio de Janeiro”

Esse ano to liso demais pra sair do Brasil:  
acho que eu vou [pro rIO DE JANeiro]  
“This year I am too broke to get out of Brazil: I think I’m going to Rio de Janeiro”
However another contour appears in Recife!

Esse ano to lisa demais pra sair do Brasil: 
acho que eu vou [pro rio de jANeiro]

“This year I am too broke to get out of Brazil: I think I’m going to Rio de Janeiro”
This year I am too broke to get out of Brazil: I think I’m going to Rio de Janeiro.

“Esse ano to lisa demais pra sair do Brasil: acho que eu vou [pro rio de Janeiro].”
This year I am too broke to get out of Brazil: I think I’m going to Rio de Janeiro.

We chose compound with noncompositional meanings so we can discard narrow focus on a part of the PWG.

“Which Rio are you going to?” is not an option.

"Esse ano to lisa demais pra sair do Brasil: acho que eu vou pro rio [de Janeiro]."

“This year I am too broke to get out of Brazil: I think I’m going to Rio de Janeiro.”
“This year I am too broke to get out of Brazil. I think I’m going to Rio de Janeiro.”
# Pescara vs Recife

A synthesis of the possible strategies.

<table>
<thead>
<tr>
<th>PESCARA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Allowed</strong></td>
</tr>
<tr>
<td>Beve il latte — She is drinking [[milk]:n]</td>
</tr>
<tr>
<td>Beve una tazza di latte — She is drinking [a cup of milk]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RECIFE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Allowed</strong></td>
</tr>
<tr>
<td>Acho que eu vou pra Recife — I think I am going [[to Recife]:n]</td>
</tr>
<tr>
<td>Acho que eu vou pro Rio de Janeiro — I think I am going [to Rio [de Janeiro]:n]</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>PESCARA</th>
<th>RECIFE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALLOWED</td>
<td>ALLOWED</td>
</tr>
<tr>
<td>BE VE-U NA TAZ ZA DI LAT TE</td>
<td>PRA RE CI FE</td>
</tr>
<tr>
<td>ALLOWED</td>
<td>ALLOWED</td>
</tr>
<tr>
<td>..BE VE-U NA TAZ ZA DI LAT TE</td>
<td>PRO RIO DE JA NEI RO</td>
</tr>
<tr>
<td>ALLOWED</td>
<td>ALLOWED</td>
</tr>
<tr>
<td>..BE VE-U NA TAZ ZA DI LAT TE</td>
<td>PRO RIO DE JA NEI RO</td>
</tr>
</tbody>
</table>
“Postponed” rise in Recife

Esse ano to lisa demais pra sair do Brasil:
acho que eu vou [pro rio de jANeiro]
“This year I am too broke to get out of Brazil:
I think I’m going to Rio de Janeiro”
Esse ano to lisa demais pra sair do Brasil:
acho que eu vou [pro rio de jANeiro]

“This year I am too broke to get out of Brazil: I think I’m going to Rio de Janeiro”
“Postponed” rise in Recife

Esse ano to lisa demais pra sair do Brasil:

acho que eu vou [pro rio de jANeiro]

“This year I am too broke to get out of Brazil:
I think I’m going to Rio de Janeiro”
"Postponed" rise in Recife

Two strategies in Recife for compound PWGs

THE HIGH PLATEAU
(2 PAs joined by a hat pattern)

L+H* ¡H+L* L%
ˈi ˈvʌ muʃ pɑs sɪ ˈɛi̯m ˈpox tʊ di ga ˈlĩ ɐʃ
e vamos passear em Porto de Galinhas

A PRETONIC RISE
(A salient pretonic rising movement)
THE STUDY

Pretonic rise and high plateau in Recife
Methodology

Participants:
7 native speakers (3M, 4F) 23-31 yo, high school education completed, from the metropolitan area of Recife.

Materials:
• 23 affirmative sentences (elicited as broad focus statements):
  ✓ 4 simple postverbal PWG;
  ✓ 19 compound postverbal PWG, with variable number of prosodic units (2-3) and variable distance between stressed syllables (0-5);
• 5 negative statements;
• 2 negative imperatives.
Procedure:
At each turn, the speaker was given a paper strip with the exact sentence that had to be uttered. The researcher and an assistant (from Recife) started acting a 30-second to 1-minute dialogue that would at some point naturally require the speaker to enter the conversation and perform the exact target sentence. By the time the sentence was “called for”, the speaker had learnt the sentence by heart and was no longer looking at the paper strip.

Example:
Researcher: Did you tell Fernanda about Kaline?
Assistant: Nooo, Fernanda, Kaline called up yesterday, she kept complaining just the whole freaking time, that she could not read the scores properly, and she had not be warned about the timetable change and this and that. She kept me more than one hour on the mobile, just complaining,... I mean, holy cow, what a bore, man!
Fernanda: Pois é, tu sabe que ela é [super-pesada]! ‘Well, you know she’s such a sadsack!’
• No significant variation is found with respect to the number of prosodic units of the nuclear phrase, nor to the distance between the first and last one, nor to the nature of the compound (morphological vs syntactic).

• However, a significant dependency of the realization of pretonic rise vs plateau on gender is noticed.
Most sentences were realized with a mark of saliency on the postverbal PWG.

If the PWG is simple, the only way to realize this marking is by means of a pretonic rise, both for male and female.

If the PWG is compound, unlike Pescara, in Recife there are two ways of realizing the prosodic marking: either by a plateau or by a pretonic rise. This is the datum we focus on. It is sensitive to gender.
## Results

<table>
<thead>
<tr>
<th></th>
<th>Constituente simples</th>
<th>Constituente composto</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HOMENS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(iH+L^*) (único ou adiado)</td>
<td>10</td>
<td>34</td>
</tr>
<tr>
<td>(L+H^<em>\ H+L^</em>) (dois acentos separados)</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>(H+L^*) simples</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Outros</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Total marcados/Total ((H))</td>
<td>10/17 (59%)</td>
<td>91/106 (86%)</td>
</tr>
<tr>
<td>Total (iH+L^*)/Total marcados ((H))</td>
<td>10/10 (100%)</td>
<td>34/91 (37%)</td>
</tr>
<tr>
<td><strong>MULHERES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(iH+L^*) (único ou adiado)</td>
<td>23</td>
<td>94</td>
</tr>
<tr>
<td>(L+H^<em>\ H+L^</em>) (dois acentos separados)</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>(H+L^*) simples</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Outros</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Total marcados/Total ((M))</td>
<td>23/24 (96%)</td>
<td>119/142 (83%)</td>
</tr>
<tr>
<td>Total (iH+L^*)/Total marcados ((M))</td>
<td>23/23 (100%)</td>
<td>94/119 (79%)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(iH+L^*) (único ou adiado)</td>
<td>33</td>
<td>128</td>
</tr>
<tr>
<td>(L+H^<em>\ H+L^</em>) (dois acentos separados)</td>
<td>82</td>
<td></td>
</tr>
<tr>
<td>(H+L^*) simples</td>
<td>5</td>
<td>22</td>
</tr>
<tr>
<td>Outros</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>Total marcados/Total ((T))</td>
<td>33/41 (80%)</td>
<td>210/248 (85%)</td>
</tr>
<tr>
<td>Total (iH+L^*)/Total marcados ((T))</td>
<td>33/33 (100%)</td>
<td>128/210 (61%)</td>
</tr>
</tbody>
</table>
Gender difference

• Long constituent
  • Men: plateau (63%) and pretonic rise (37%)
  • Women: plateau (21%) and pretonic rise (79%)
For prosodic marking on a compound PWG, men prefer plateau (63%) whereas women prefer delaying the rise, in **analogy** with the case of simple PWG, and they perform a fall after a pretonic rise (79%), which has been labeled as an upstep fall (¡H+L*).

This suggests that, unlike men, women do not have (or **have lost/are losing**) the rule that is fully productive in Pescara:

> “If compound, make a plateau; if simple, make a pretonic rise”.

In other words, that they are overapplying the instruction

> “**If the nuclear phrase lacks a preceding unit**, the rise goes to the **nuclear pretonic syllable**”,

irrespective and even in absence of the conditioning context (in black).
### CONSERVATIVE SYSTEM: \((L+H^*)\)

<table>
<thead>
<tr>
<th></th>
<th>(L^*+H)</th>
<th>(L-L+H^*)</th>
<th>(L+H^*)</th>
<th>(H+L^*)</th>
<th>(L%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>pois</td>
<td>tu</td>
<td>sabe</td>
<td>que</td>
<td>ela</td>
<td>é</td>
</tr>
<tr>
<td>super</td>
<td>pe</td>
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1 1 3 1 1 1 1 0

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**Discussion**

- **L+H^***
- **(L+H^*)**
Discussion

CONSERVATIVE SYSTEM: (L+H*)

INNOVATIVE SYSTEM

(L+H*) ... H+L*

pois tu sabe que ela é super pesada.

1 1 3 1 1 1 1 0
Discussion

**CONSERVATIVE SYSTEM: (L+H*)**

**INNOVATIVE SYSTEM: ¡H+L***
On the syntax-prosody interface

If a change towards overuse of upstep proves to be a tendency of regional Northeastern Brazilian Portuguese, we will presence the loss of a type of prosodic constituency of many types of syntactic compound PWGs (new VN compounds, heads with embedded clauses, and other left-head constructions).
Future Research

Diachronic study of Recife intonation
In order to assess whether delayed rise is a tendency led by women, we must detect the direction of change and thus we need to perform a diachronic study of Recife intonation, looking at different age groups.

Current follow-up research:
Two female older speakers from Recife seems to confirm that the delayed rise is a recent feature.

A similar analysis is beginning in João Pessoa, where upstep fall was also found by younger women either in simple and compound PWGs.
References

Joelma Castelo is funded by Fundação CAPES - Coordenação de Aperfeiçoamento Pessoal de Nível Superior (Ministério da Educação do Brasil) (Processo: 094912-4).

THANK YOU!

OBRIGADA!

GRAZIE!