Alternations in the plural forms of words ended in –ão in Brazilian Portuguese.

Filomena Sandalo (PQ), Érick R. Silva (IC).

Abstract
This work belongs to the field of phonology and morphology studies of Brazilian Portuguese (BP), focusing on the study, analysis and understanding of morphophonological phenomena of asymmetry, changes and variations on the formation of irregular plurals, specifically in words ending in –ão. We investigate, through the use of invented words (wugs) compatible with the lexicon of BP, cases of words ending in –ão that have the same termination in the singular, but can have three different plural forms, ending in -ãos, -ões and -ães. Methodology of research is experimental, based on developed corpora. This research is linked to FAPESP thematic project “Borders and asymmetries in phonology and morphology” (process 2012 / 17869-7).

Keywords: morphophonological alternations, irregular plurals, Brazilian Portuguese.

Introduction
Within BP lexicon, there is a small group of words ending with the nasal diphthong –ão [ãw] in the singular like 'balão' (balloon), 'irmão' (brother) and 'pão' (bread) that when pluralized presents three different plural forms: 'balão'->'balães'; 'irmão'-> 'irmãos'; 'pão'->'pães'1. These plural forms were originally determined by etymological origins, making the choice of plural not easy for speakers today who end up not sure of the plural form for many words. The proposal is to study the phenomenon of irregular pluralization of –ão analyzing, through wugs, the choices of speakers among the three plural possibilities, checking the occurrence of each plural.

Results and Discussion
Experimental methodology: Experigen2 - Link for the experiment: http://sandalo.phonologist.org/eai

Corpus: 58 items (45 targets, 13 distractors)

Chart 1. Composition of Corpus (e.g.)

<table>
<thead>
<tr>
<th>Type</th>
<th>Item</th>
<th>Category</th>
<th>Sing</th>
<th>Faith</th>
<th>Alt1</th>
<th>Alt2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mono</td>
<td>kão</td>
<td>target</td>
<td>/klãw/</td>
<td>/klãws/</td>
<td>/klãja/</td>
<td>/klãja/</td>
</tr>
<tr>
<td>Disyll</td>
<td>iambic</td>
<td>surão</td>
<td>/surãw/</td>
<td>/surãws/</td>
<td>/surãjs/</td>
<td>/surãjs/</td>
</tr>
<tr>
<td>Disyll</td>
<td>troch</td>
<td>dobão</td>
<td>/dobãw/</td>
<td>/dobãws/</td>
<td>/dobãjs/</td>
<td>/dobãjs/</td>
</tr>
</tbody>
</table>

Target items were made to fulfill the corpus with the seven vowels of Portuguese and also to form combinations with many different BP consonants.

Chart 2. Frames for context (e.g.)

No início tinha só um
SINGULAR
depois chegaram mais cinco
PLURAL
Sua mãe viu meu novo
SINGULAR
e agora ela disse que vai
comprar pra ela alguns
PLURAL
No jardim a gente tem um
SINGULAR
No ano que vem, vamos ter mais
olho PLURAL

Frames: 5 sentences. Items inserted randomly.

Conclusions
The results can indicate a path on plural acquisition and formation in Brazilian Portuguese that reveals and justifies difficulties of native speakers on constructing plural forms that match patterns of standard written form of the language. Results also reflect on the educational field, clarifying some questions on language acquisition and the differences from scholar learning.

Acknowledgement
Thanks, first, to Prof. Dr. Filomena Sandalo, my mentor, for the encouragement and the knowledge provided. To CNPq, for being the sponsor on the development of this research. To all members of the FAPESP thematic project to which this work is affiliated, especially Prof. Dr. Michael Becker from University of New York at Stony Brook, who was instrumental in carrying out this work, in the development of the experimental website and also teaching computer programming and helping with the software necessary, we dedicate a special thanks.