#### 13th ARLE Conference

June 15-17, 2022 | Virtual with synchronous interaction & University of Cyprus, Nicosia

## Misspellings in Portuguese typically developing writers: a pilot-study

Adelina Castelo

Universidade Aberta – Depart. Humanidades Grupo EL@N, LE@D-Laboratório de Educação a Distância e eLearning (UID 4372/FCT) Centro de Linguística da Universidade de Lisboa (UIDB/00214/2020/FCT) – Lisbon, Portugal



#### Outline

- Introduction
- Method
- Results
- Discussion
- Further research

#### 1. Introduction

- Social and professional consequences of spelling correction (e.g. Baptista, Viana & Barbeiro, 2011)
- Distinction of different types of misspellings in typically developing writers
   → to understand spelling development and identify instructional targets (e.g. Bahr et al., 2012)
- Analysis of longitudinal data using a specific categorisation system
   to identify possible development patterns among typically developing
- → to identify possible development patterns among typically developing writers & contrast with other writers
- $\rightarrow$  to compare with teachers' viewpoints

Castelo, A. (2022, June). Misspellings in Portuguese typically developing writers: a pilot-study (13th ARLE Conference - virtual with synchronous interaction & University of Cyprus, Nicosia).

#### **1. Introduction**

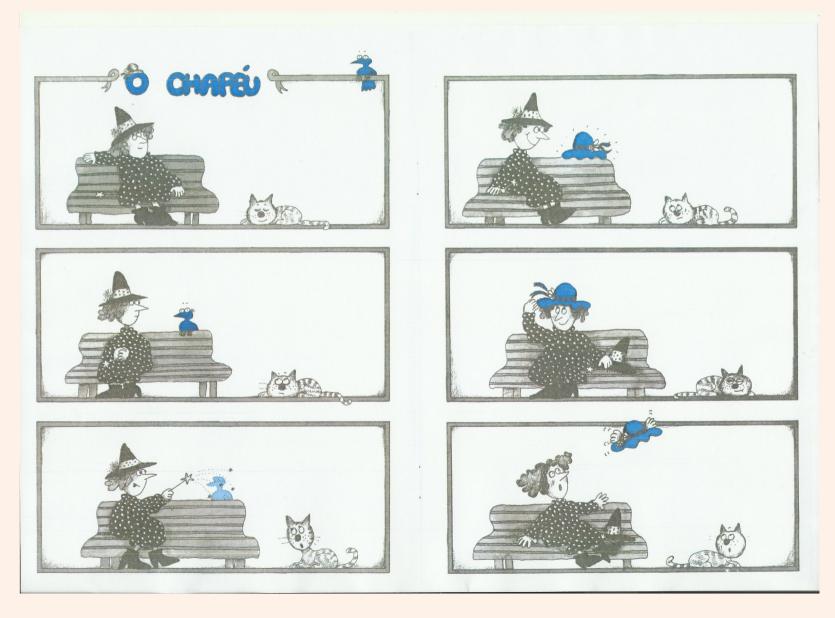
#### **Research questions**

- What are the most common misspellings in grades 2 and 4?
- Why are those errors predominant?
- What are the spelling development patterns in students with high and low performance?

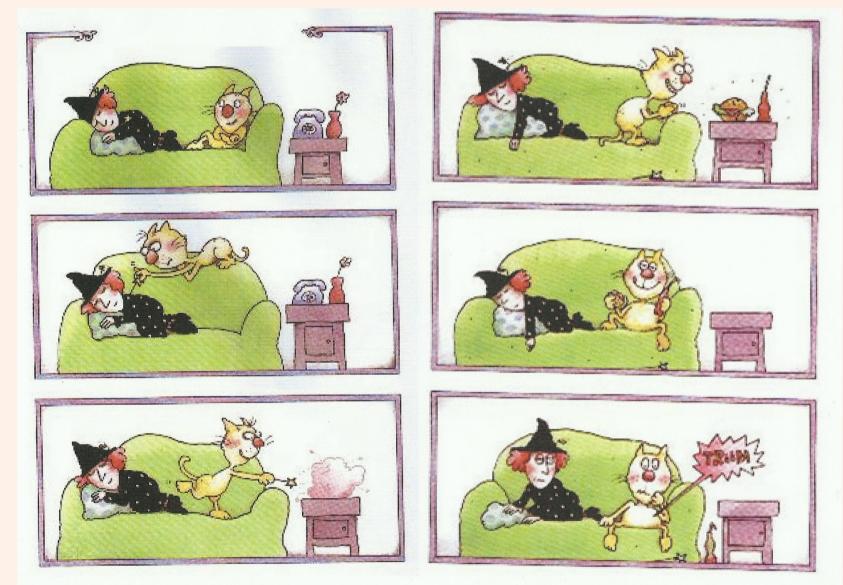
EFFE-On corpus (Rodrigues et al., 2015)
[EFFE = Escreves como Falas - Falas como Escreves?
'Do you write as you speak – Do you speak as you write?']

- Created in a research project of CLUL and available online: <u>http://teitok.clul.ul.pt/effe/pt/index.php?action=home</u>
- Written and oral productions of children from different regions of Portugal, in the early years of schooling, collected over time [now 1074 written texts online; some with oral version]
- Texts based on controlled stimuli (images for descriptions and narrative texts)

#### Narrative text based on this illustration with total creative freedom; Grade 2 (Eva Furnari, 1993)



Narrative text based on this illustration with total creative freedom; Grade 4 (Eva Furnari, 1993)



Descriptive text based on this illustration

(originally created by Yavas, Hernandorena & Lamprecht, 1991; adapted for European Portuguese by Guerreiro, 2007)



Descriptive text based on this illustration

(originally created by Yavas, Hernandorena & Lamprecht, 1991; adapted for European Portuguese by Guerreiro, 2007)



SALA

#### **Participants**

	Grade 2 (collected in 2012)	Grade 4 (collected in 2014)			
<b>10 subjects</b> (native speakers of EP, Lisbon, no health issues, both parents with BA degree)	2 texts (narrative + descriptive)	2 texts (narrative + descriptive)			
Totals	20	20			
	40 texts				

#### System for misspellings' categorisation

(adapted from Baptista, Viana & Barbeiro, 2011; other proposals by Pinto, 1997; Lopes, 1999; Castro & Gomes, 2000; Horta & Martins, 2004; Morais, 2007)

- 1. Incorrect oral production e.g. \* dromir for dormir 'to sleep'
- Word boundary e.g. \*derrepente for de repente 'suddenly', \*a proximar for aproximar 'to approximate'
- 3. Capitalisation e.g. \*Julho for julho 'July', \*lisboa for Lisboa 'Lisbon'
- 4. Graphic accent e.g. \**clinica* for *clínica* 'clinic', \**perú* for *peru* 'turkey'
- 5. Hyphenation (between lines) e.g. \*ma-ssa for mas-sa 'pasta'
- 6. Basic spelling rule e.g. \*brato for prato 'dish'
- 7. Contextual spelling rule e.g. \*sonbra for sombra 'shadow'
- 8. Morphological spelling rule e.g. \*iram for irão 'they will go'
- 9. Irregular spelling e.g. \* jente for gente 'people'

## Categorisation of each misspelling & database creation

#### Some criteria:

- 3x same misspelling in one text  $\rightarrow$  3 entries
- One word with 2 different misspellings  $\rightarrow$  2 entries
- Total number of words in the text  $\rightarrow$  ratios of misspellings per number of words

#### **Types of misspellings** (ratio of errors to total number of **errors**, in %)

	Oral production	Word boundary	Capitalisation	Accent	Basic	Contextual	Morphological	Irregular	Total
Grade 2	5%	8%	2%	23%	12%	16%	8%	26%	100%
Grade 4	4%	10%	5%	30%	9%	8%	4%	30%	100%

#### **Types of misspellings** (ratio of errors to total number of **words**, in %)

	Oral production	Word boundary	Capitalisation	Accent	Basic	Contextual	Morphological	Irregular	Total
Grade 2	1%	2%	0%	6%	3%	4%	2%	7%	25%
Grade 4	0,2%	0,5%	0,3%	1,5%	0,5%	0,4%	0,2%	1,4%	5%

#### **5 higher level performers**

(ratio of errors to total number of **words**, in %)

Stud		Accent	Context.	Basic	Irregular	Bound.	Oral	Capital.	Morphol.	Total
16	G2	1%	0%	0%	2%	0%	0%	0%	0%	3%
	G4	1%	0%	1%	0%	2%	0%	0%	0%	5%
9	G2	2%	0%	0%	3%	1%	0%	0%	0%	7%
	G4	0%	0%	0%	0%	0%	0%	0%	0%	0%
26	G2	5%	0%	0%	0%	1%	0%	0%	0%	8%
	G4	1%	0%	1%	0%	0%	0%	0%	0%	3%
8	G2	3%	2%	1%	4%	1%	1%	0%	1%	13%
	G4	1%	0%	0%	0%	1%	0%	1%	0%	3%
18	G2	10%	0%	0%	3%	0%	1%	0%	1%	15%
	G4	1%	3%	1%	3%	0%	0%	3%	0%	11%
All	G2	4%	1%	0%	2%	1%	1%	0%	1%	9%
(me)	G4	1%	1%	1%	1%	1%	0%	1%	0%	4%

#### **5 lower level performers**

(ratio of errors to total number of **words**, in %)

Stud		Accent	Context.	Basic	Irregular	Bound.	Oral	Capital.	Morphol.	Total
38	G2	5%	4%	1%	5%	0%	1%	0%	2%	19%
	G4	1%	0%	0%	3%	0%	1%	0%	0%	6%
25	G2	5%	3%	4%	5%	1%	1%	1%	1%	21%
	G4	5%	1%	1%	1%	0%	0%	0%	0%	10%
49	G2	5%	5%	5%	4%	3%	2%	0%	0%	24%
	G4	2%	2%	3%	3%	0%	1%	0%	1%	12%
39	G2	7%	5%	3%	19%	2%	1%	0%	3%	41%
	G4	2%	1%	2%	5%	1%	1%	1%	0%	13%
50	G2	9%	16%	11%	15%	8%	2%	2%	11%	74%
	G4	2%	1%	1%	19%	5%	1%	0%	1%	31%
All	G2	6%	7%	5%	10%	3%	2%	1%	3%	36%
(me)	G4	2%	1%	1%	6%	1%	1%	0%	1%	14%

#### 4. Discussion

#### (Possible) development patterns

Grade 2 Accent & irregular Basic & contextual Boundary Morphological Other cases



Grade 4 (esp lower-level performers) Accent & irregular Boundary Basic & contextual Morphological Other cases

#### 4. Discussion

#### Motivations for the most predominant errors

**Irregular** – lack of reading & writing experience (word orthographical form); increase in grade 4 due to lower use of avoiding strategy & expansion of expression needs

**Accent** – lack of explicit knowledge on the system & phonological awareness; devaluation; same results as in Castelo & Sousa (2017)

**Basic & contextual** (grade 2) – part of normal learning of explicit knowledge

**Word boundary** – (greatly) lack of reading & writing experience (word orthographical form)

#### 4. Discussion

## (Preliminary) educational implications

- Continue to teach and practice the explicit rules of the spelling system
- Promote phonological awareness
- Foster the explicit knowledge on the stress/accent system
- More practice with irregular spelling forms (coloured/related lists, more texts with the target forms, especially for lowerlevel performers)

- Enlarge the sample
- Use inferential statistics
- Compare typically developing students with diverse students
- Compare these results to the teachers' viewpoint (experience of different error categories, teaching practices for different types of misspellings, intervention strategies, challenges faced by the teachers in teaching spelling...)
- Study the results of different intervention strategies for various types of misspellings

#### References

- Bahr R. H., Silliman E. R., Berninger V. W., Dow M. (2012). Linguistic pattern analysis of misspellings of typically developing writers in grades 1-9. *Journal of Speech, Language, and Hearing Research, 55*(6), 1587-1599.
- Baptista, A., Viana, F., Barbeiro, L. (2011). *O Ensino da Escrita: Dimensões Gráfica e Ortográfica* (Teaching Writing: Graphic and Ortographic Dimensions). Lisbon: ME.
- Castelo, A., & Sousa, O. (2017). Desempenho ortográfico em estudantes do ensino superior a acentuação gráfica. *Da Investigação às Práticas: Estudos de Natureza Educacional, 7*(3): 84-107.
- Castro, S.L. & I. Gomes (2000). *Dificuldades de Aprendizagem da Língua Materna*. Lisbon: Universidade Aberta.
- Horta, I.V. e M.A. Martins (2004). Desenvolvimento e aprendizagem da ortografia: Implicações educacionais. *Análise Psicológica*, 1 (XXII), pp. 213-223.
- Morais, A. (2007). A norma ortográfica do português: o que é? para que serve? como está organizada? In A. Silva, A. Morais, and K. Melo (Eds.), *Ortografia na sala de aula* (pp. 11-28), Belo Horizonte: Autêntica.
- Pinto, G. (1997). A ortografia e a escrita em crianças portuguesas nos primeiros anos de escolaridade. Até que ponto dependem estas habilidades de um bom domínio do oral e de métodos adequados de leitura? *Línguas e Literaturas (Revista da Faculdade de Letras do Porto)*, XIV, pp. 7-58.
- Rodrigues, C., Lourenço-Gomes, M. C., Alves, I., Janssen, M., Gomes, I. L. (2015). EFFE-On (Online corpus of writing and speech of children in the early years of schooling), Lisbon: CLUL. . <u>http://teitok.clul.ul.pt/effe</u>

Sousa, O. C. de (1999). Competência ortográfica e competências linguísticas. Lisbon: ISPA.

# Thank you!



adelina.castelo@uab.pt