Portuguese Language Orthographic Agreement of 1990: Inconsistency and Homographs

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Abstract

The Portuguese Language Orthographic Agreement of 1990 (Acordo Ortográfico da Língua Portuguesa 1990) is an international spelling reform, which increases the number of homographs by deleting consonants with diacritic function and diacritic marks, such as acute accents, and decreases not only the degree of certainty in terms of pronunciation, but also semantic clarity and orthographic transparency. These consequences are clear if we take account of the implementation of bases IV and IX. Considering that homographs are laid out in a legally binding international treaty (AR, 1991), they have become part of a process not only of conception but also of prescription.

Since the orthographic depth of alphabetic orthographies relates to the consistency of grapheme-phoneme correspondences, the degree of transparency in Portuguese orthography has decreased, considering that several one-to-one correspondences have been shattered.

Although an account of the graphemic system of Portuguese cannot be reduced to the analysis of grapheme-phoneme and phoneme-grapheme correspondences, since it is a system that has a strong morphographemic component, base IV only spells out a peculiar ‘phonetic (or pronunciation) criterion’.

Key words: Graphemes; Homographs; Language Orthographic Agreement of 1990; Orthography; Transparency

Abbreviations: AO45 – Orthographic Agreement of 1945 (Acordo Ortográfico de 1945); AO90 – Portuguese Language Orthographic Agreement of 1990 (Acordo Ortográfico da Língua Portuguesa de 1990); OL – Orthographic Lexicon; EP – European Portuguese; BP – Brazilian Portuguese


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The core issue of this paper (sections 3 and 4) relates to the orthographic inconsistency created by AO90, with oblique references to the impossibility of coexistence between the political will for unification and the text of AO90, outlining the serious technical problems at stake. The fact that these problems have been pointed out in opinions since the 1980s does not staunch the political determination behind its implementation.

Base IV establishes the suppression of so-called silent letters by respecting an ad hoc ‘phonetic (or pronunciation) criterion’ and base IX establishes the suppression of acute accents. Both bases promote orthographic inconsistency and base IX may also give rise to problems in terms of syntax and semantics.

Section 5 is devoted to the issue of ambiguity, considering the examples given in section 4. The conclusion (section 6) points two solutions for the problems created by AO90. Since the deadline for full implementation is May 13th 2015, there is time to reassess all of the orthographic implications of a document that, although politically motivated, should focus on its main purpose: orthography.

1. Historical background

The AO90 is an international treaty containing a spelling reform for Portuguese whose signatories are the members of the community of Portuguese-speaking countries (Comunidade dos Países de Língua Portuguesa, CPLP). Despite several attempts and proposals that could have lead to standardization, there was never a serious official commitment towards the creation of standard rules for the Portuguese orthography until the first decade of the 20th century.

In 1911, a committee initially composed of Aniceto Gonçalves Viana, Francisco Adolfo Coelho, Carolina Michaëlis de Vasconcelos, Cândido de Figueiredo and José Leite de Vasconcelos was nominated to set up the rules for the orthography to be used in schools and official publications and to publish a lexicon (Castro et al., 1987: 207-8).

In 1943, a Convention between Portugal and Brazil was signed with the intention of ‘ensuring, defending, and expanding’ the prestige of the Portuguese language in the world, and regulating by mutual agreement its ‘orthographic system’ (Castro et al., 1987: 212). This Convention followed the work done in 1931, and it was convened that no legal or regulatory provisions on this issue would be adopted unilaterally and without the opinion of both academies.

Any spelling reform that tries to unify European Portuguese (EP) and Brazilian Portuguese (BP) on a purely phonological basis is ill-fated. There are several phonological differences in both standard EP and BP. For instance, vowel reduction (which in European colloquial styles, in some cases, can result in vowel suppression): trabalhar ‘to work’ is [trabaˈʃar] in BP, but [trebɾuˈʃar] in EP; desenhar ‘to draw’ is [dezɐˈɲar] in BP, but [diziɲar] in EP; colorido

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‘colourful’ is [koloˈɾidu] in BP, but [kuluˈɾidu] in EP. Already in the 1940s Rebelo Gonçalves, the main draftsman of AO45 was aware of this situation, not considering an arbitrary suppression of consonant letters with diacritic function. The consonant letters would be kept when: a) they were pronounced; b) had diacritic value; c) shared lexical affinity with words where a) or b) would apply (Gonçalves, 1947: 92).

In 1971 both academies reached an agreement, officially published in Brazil in that same year, and two years later in Portugal. It determined the suppression of accents in homographs (e.g. pôde/pode ‘he could/he can’) and the suppression of the secondary stress grave accents on words ending in –mente (e.g. praticamente instead of prácticamente ‘practically’), and on words with suffixes starting with z (e.g. sozinho instead of sózinho ‘alone’, ‘lonely’).

AO 86 was the following step, promoted by the Brazilian and Portuguese governments, in order to achieve a common orthography for Portuguese. Radical change considering AO45 were to be adopted such as the suppression of silent consonant letters, the suppression of accents that marked a proparoxytone and a paroxytone and the introduction of the concept of facultatividade (optional spelling).

Although its promoters claim that AO86 would have entailed a unification of 99.5% (due mainly to the suppression of the acute accent in all proparoxitones and several paroxitones, as one can read in the Explanatory Note of AO90), the result was still a partial unification, similar to the AO90’s “unification”, but different from AO45, where a full unification would have been actually achieved had Brazil not rejected the reform 10 years after its approval. As we will see further on, recepção (reception) was written this way in every single Portuguese-speaking country, while both AO86’s base VI and AO90’s base IV determine that, for example, medial p is deleted when not pronounced and maintained when pronounced: in Brazil the correct spelling shall be recepção, and in Portugal receção.

AO 86 was subject to several negative technical assessments (Castro et al., 1987), and to a negative reaction by public opinion. It was eventually abandoned, and replaced by AO90. AO90, following the steps of its predecessor, is controversial and has been subject to several technical negative opinions. There are no ‘technical’ documents supporting it, besides an opinion drafted by one of its co-authors. In Portugal, AO90 is to be fully implemented by 2015 (May, 13th). This deadline, however, does not consider any major midterm review of the controversial bases. Two of these (IV and IX) constitute the core of this article.

On October 12th, 1990, AO90 was approved by its drafters – the Portuguese and Brazilian Academies (Lisbon Academy of Sciences and Brazilian Academy of Letters) –, as well as by the five delegations of the Portuguese-speaking African countries, and a delegation composed of Galician observers. Both the 1911 reform and AO45 were revolutionary, finding a way to accommodate simplification without the suppression of accents or silent letters with diacritic function, so that there would be no need to resort to morphology, syntax or semantics to fill a gap created by the suppression of graphic signs.
The dispute between the etymological and phonological approaches and the kind of analysis to which they have been subjected, left very little space to centre the analysis on the core issues, as we are doing today. By the end of the 19th century there were no studies about neural correlates of the mapping of orthography to phonology (and vice versa); scholars knew much less about the acquisition of literacy than we do nowadays; also the phonological idiosyncrasies of the vowel system of EP, namely, the relationship of stressed and unstressed vowels had not been analysed in depth.  

2. Orthographic depth

In terms of orthographic depth, EP orthography is placed between the isomorphic status of a shallow orthography, where phonemes are represented by graphemes in a direct and unequivocal way, and the asymmetric rank of an opaque orthography with inconsistent grapheme-phoneme correspondences.  

EP orthography shares neither the opacity of English and French orthographies, nor the transparency of those of Finnish, Greek or Italian. However, Andrade & Viana (1996: 122) have a similar view towards EP as the one expressed by Akmajian et al. (2001: 71) for English:

‘If we try using the conventional English orthography (spelling system) to represent speech sounds, we face problems of two major types: first, a single letter of the alphabet often represents more than one sound; and conversely, a single speech sound is often represented by several different letters’.

It is important to keep in mind that the deeper the orthography, the more dependant one is on an orthographic lexicon (OL), given that the ‘direct route’ (the direct link between this OL and the writing or reading performance) results in words which are neither read nor written as pronounced, since the degree of transparency is low. Even though the indirect route gives some degree of independence toward this OL, even as the acquisition of the alphabetical principle and the phoneme-to-grapheme correspondences are sufficient tools to perform reading and writing, the OL plays a crucial role in a shallow orthography, because in such systems the orthographic form is also memorized,

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1From a phonological point of view, EP may be said to have a seven vowel system, /i, e, ɛ, a, u, o, ɔ/; the non-high vowels typically undergo stress dependent phonological reduction, that is /ɛ, e/ and /ɔ, o/ rise to [ɨ] and [u], respectively, and /a/ to [ɐ], in unstressed position’; (iii) this phonological process does not take place, however, if the vowel is followed by a tautosyllabic lateral or glide, or is nasalized. It is generally accepted that the blocking of stress-dependent vowel reduction resulted, historically from the profound prosodic changes that occurred in the evolution from Latin to Portuguese and which incurred in the loss of consonants in the coda’, Andrade, 1999: 543.

which is important in terms of not only word recognition accuracy, but also reading and writing speed.¹

In terms of theoretical preliminaries, the main features of a transparent orthography are

(1) (i) Regular phonography; (ii) one to one grapheme-phoneme correspondence; (iii) less dependent on an OL;

whereas the main features of an opaque orthography are

(2) (i) Irregular phonography; (ii) the rule ‘one to one grapheme-phoneme correspondence’ is not applicable; (iii) highly dependent on an OL.

Bases IV and IX contain the most critical technical issues concerning AO90, since the suppression of consonant letters with diacritic function and of acute accents in some words brings instability concerning the grapho-phonological structure of EP, as we will see in the two following sections.

3. Orthographic Agreement of 1990, base IV, 1.º, b

Base IV

Consonant sequences

1. The letter 'c', when it stands for a velar stop in the sequences cc (second c is fricative), çç and ct, and the letter 'p' in the sequences pc (c stands for a fricative), pç and pt, are preserved in some cases and removed in other.

Thus:

(...)

b) They are removed when they are invariably silent in the cultivated pronunciations of the language: ação, acionar, afetivo, aflição, aflito, ato, coleção, coletivo, direção, diretor, exato, objeção; adoção, adotar, batizar, Egito, ótimo.²

3.1. Consonants with diacritic function: a transparency issue (‘-acção’)

Within the framework of AO45, considering the reference to Gonçalves, 1947: 92 in section 1 (consonant letters with diacritic value were kept), the situation is the following:

(3) (i) There are 45 lemmata ending in -acção without [k] before -ção; (ii) all 45 lemmata ending in -acção have [a] before -ção; ³ (iii) none of these 45

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¹ See Fayol & Jaffré, 2008: 183.
³ In Valada, 2010, the diacritic function of the consonant letter c in lemmata ending in -acção is discussed, in the orthographic norm of EP. It is proposed that the suppression of the silent c in lemmata ending in -acção is inadequate for graphemic reasons, concerning the digraph <ac>, the diacritic function of c, in respect to the oralization of a, and its fundamental role in the graphophonemic structure of the written EP. Data in Valada, 2010: 104-105 concern both AO 45 (where 3052 lemmata end in -acção, with a 0.29% of [ɐ] before -ção, and 45 lemmata end in -acção [without c=[k]], with 0% of [ɐ]), and AO 90 (where 3097 lemmata end in -ação, with a 1.74% of [ɐ] before –ção).
lemmata ending in \(-acção\) have \([t]\) before \(-ção\); (iv) hence, there is a Rule 1: in lemmata ending in \(-acção\) there is \([a]\) without any \([v]\) exception.

(4) (i) There are 3052 lemmata ending in \(-ação\); (ii) in 3043 lemmata ending in \(-ação\) there is \([t]\) before \(-ção\) (99.71%); (iii) in only 9 lemmata there is an \([a]\) before \(-ção\) (0.29%); (iv) hence, there is a Rule 2: in lemmata ending in \(-ação\) there is \([a]\) before \(-ção\), with a 0.29% \([a]\) exception.

Within the framework of AO90, with the suppression of the consonant \(c\):

(5) (i) There are no lemmata ending in \(-acção\); (ii) there is no Rule 1.

(6) (i) Instead of 3052 lemmata ending in \(-ação\), there are 3097; (ii) there are still 3043 lemmata with \([t]\) before \(-ção\), but now they correspond to 98.26%; (iii) instead of only 9 lemmata (0.29%) with \([a]\) before \(-ção\), there are now 54 (1.74%); (iv) within the framework of AO45, the Rule 2 was \([t]\) before \(-ção\), with a 0.29% \([a]\) exception, which means that the exception increases and the rule decreases.

Within the framework of AO45, there were two rules:

(7) (i) Rule 1 – in unstressed position \(<AC>\) is \([a]\), without exceptions; (ii) rule 2 – in unstressed position \(<A>\) is \([t]\) (with few exceptions).

Within the framework of AO90

(8) (i) There is only Rule 2, since there is no room for Rule 1 (\(<AC>\) is removed); (ii) rule 2 still states that \(<A>\) is \([t]\), but there is a sixfold increase in these exceptions.

If the diacritic function of \(c\) is neglected, \(a\) in \(-ação\) may lead to \([t]\) before \(-ção\) instead of \([a]\), as it would be when there was \(<AC>\).

3.2. The loss of transparency and the paradox of exception: ‘adopção’

Within the framework of AO45:

(9) (i) All the 21 lemmata ending in \(-oção\) have an \(<O>\) with \([u]\) pronunciation; \(1\) (ii) 4 lemmata end in \(-opção\); the lemmata \(opção\) and 3 semantically related lemmata (\(adopção\), \(pré-adopção\) and \(readopção\)); (iii) \(p\) \(<P>\) in \(opção\) is \([p]\); (iv) in the semantically related lemmata aforementioned (9 ii) \(p\) has a diacritic function towards the \(o\) as part of the composite grapheme \(<OP>\) and in these lemmata this \(o\) is unambiguously \([ɔ]\).

Within the framework of AO90:

(10) (i) The rule ‘all the lemmata ending in \(-oção\) have a \(<O>\) with \([u]\) pronunciation’ comes to an end; (ii) 24 lemmata end in \(-oção\): 21 with an \(o\) that is \([u]\) and 3 with an \(o\) that is \([ɔ]\).

Within the framework of AO90, there is now a clear tendency towards \([u]\) for the three semantically related lemmata aforementioned (9 ii), since the \(p\) is removed, with a concurrent elimination of the composite grapheme \(<OP>\).

The following paradox of exception arises:

\(1\)For the lemmata, I use MorDebe, the database of ILTEC, via the ‘pesquisa por padrões’ (search by patterns): http://www.portaldalinguaportuguesa.org/index.php?action=padrao. However, this database was ‘updated’ to AO 90 rule, since February 2010. It is feasible to identify AO 45, when the number of lemmata is relative small. But for Valada, 2010, I had to request lists.
Within the framework of AO45

(11) (i) The three semantically related lemmata aforementioned (9 ii) represent 75% of the lemmata ending in -opção, with only 25% representing opção, the only lemma where p is <P> and [p]; (ii) adopção, pré-adopção and readopção are the rule; (iii) opção is the exception.

Within the framework of AO90

(12) (i) The three semantically related lemmata aforementioned (9 ii) represent 12.5% of the lemmata ending in -oção (3 in 24) and opção is the only lemma ending in -opção; (ii) adoção, pré-adoção and readoção are the exception; (iii) opção is the rule.

This implies the demotion of the rule (75%) to the exception (12.5%) in one case and the promotion of the exception (25%) to the rule (100%) in another. This is what I call the paradox of exception.

3.3 Full homonymies

3.3.1 Corrector / Corretor

Within the framework of AO45

(13) (i) Corrector (e.g. ‘checker’ as in ‘spell checker’) has e (part of the composite grapheme <EC>) with [ɛ] pronunciation; (ii) corretor (e.g. ’broker’ as in ‘stock broker’) has <E> with [i] pronunciation.

Within the framework of AO90, there is now an issue of full homonymy, given that the e of corretor can be either [ɛ] or [i], with a clear tendency towards [i], and since c is removed with a concurrent elimination of the composite grapheme <EC>.

3.3.2 Coacção / Coação

Within the framework of AO45

(14) (i) Coacção (‘coercion’) has an a (part of the composite grapheme <AC>) that is [a]; (ii) coação (‘filtering’) has an <A> that is [ɐ].

Within the framework of AO90

(15) The <A> of coação can be either [ɐ] or [a].

Besides the transparency issue [dealt in 3.1], there is now an issue of full homonymy: the a of coação can be either [a] or [ɐ], with a clear tendency towards [ɐ], since c is removed with a concurrent elimination of the composite grapheme <AC>.

3.4 Partial homonymies

3.4.1 Recepção/ Recessão

Within the framework of AO45
(16) (i) *Recepção* (‘reception’) has an *e* (part of the composite grapheme <EP>) with [ɛ] pronunciation, (ii) *recessão* (‘recession’) has two <E> with [i] pronunciation.

Within the framework of AO90

(17) The second *e* of *receção* can be either [ɛ] or [i].

There is now an issue of partial homonymy, the second *e* of *receção* can be either [ɛ] or [i], with a clear tendency towards [i], since *p* is removed with a concurrent elimination of the composite grapheme <EP>.

3.4.2 *Concepção*/ *Concessão*

Within the framework of AO45

(18) (i) *Concepção* (‘conception’) has an *e* (part of the composite grapheme <EP>) with [ɛ] pronunciation; (ii) *concessão* (‘concession’) has a <E> with [ɨ] pronunciation.

Within the framework of AO90

(19) The *e* of *conceção* can be either [ɛ] or [i].

There is now an issue of partial homonymy (homophony): the *e* of *conceção* has a clear tendency towards [i], since *p* is removed with a concurrent elimination of the composite grapheme <EP>.

4. AO90 (IX, 9.º)

**Base IX
Accentuation in paroxytonic words**

(...)

9. Both acute and circumflex accents are removed, when they were there to differentiate paroxytonic words with open-mid or close-mid vowels from proclitic homographs. Hence, the following words will no longer be differentiated by means of an accent: para (á), inflected form of parar, and para, preposition; pela(s) (é), inflected forms (nominal and verbal) of pelar, and pela(s), contraction of per and la(s); pelo (é), inflected form of pelar, and pelo(s) (ê), noun or contraction of per and lo(s); polo(s) (ó), noun, and polo(s), archaic and popular contraction of por and lo(s); etc. ¹

4.1 Acute accents (‘pára’/ ‘para’): Transparency, Semantics and Syntax

4.1.1 Transparency

In terms of transparency, within the framework of AO90, the suppression of the acute accent of the verbal flexion *pára* (‘stops’/ ‘stop’) [3rd person singular present indicative and 2nd person singular imperative of the verb *parar* (‘to stop’)] presents a serious problem of inconsistency, since within the framework

of AO45 there was a consistency of grapheme-phoneme and phoneme-grapheme correspondences.

Within the framework of AO45
(20) There are 4 graphemes (<P>, <A> <Á> and <R>) for 4 segments ([p], [ɐ], [a] and [ɾ]).

Within the framework of AO90
(21) There are 3 graphemes (<P>, <A> and <R>) for 4 segments ([p], [ɐ], [a] and [ɾ]).

The suppression of the acute accent of the verbal flexion pára presents a serious problem of consistency.

4.1.2 Semantics

There is also a problem of polysemy, within the framework of AO90, since the suppression of the acute accent may cause confusion because of the homographs created: para (verbal flexion) and para (preposition: ‘to’ or ‘for’).

Within the framework of AO90, this newspaper headline (Talixa, 2009)
(22) ‘Bloqueio nos fundos da UE pára projecto de milhões na área do regadio’
[‘Block in EU funds stops project of millions in the irrigated land sector’]

(23) ‘Bloqueio nos fundos da UE para projecto de milhões na área do regadio’
that could either be read as
(24) ‘Block in EU funds stops project of millions in the irrigated land sector’
or
(25) ‘Block in EU funds for project of millions in the irrigated land sector’
The ambiguity causes a high degree of uncertainty since the reader will not be immediately able to know whether there is a specific block of EU funds for that project or if there is a general block in the EU funds that stops the project.

Within the framework of AO45, this sentence has no ambiguity whatsoever.

4.1.3 Syntax

The syntactic ambiguity is quite obvious, since we are facing a verb/preposition homograph.
If para (AO90) = pára (AO45)
then the sequence has two core arguments, the subject and the object, and an oblique/adpositional argument:

- Subject: Bloqueio nos fundos da UE [Block in EU funds]
- Verb: para [stops]
- Object: projecto de milhões [project of millions]
- Adpositional complement: na área do regadio [in the irrigated land sector]

The word para is a verb (the head of a verbal phrase) and it governs a direct object:
If \( para \) (AO90) = \( para \) (AO45) then the sequence is a noun phrase with an embedded prepositional phrase:

- Noun [NP-head]: bloqueio nos fundos da UE
- Preposition: para
- Noun [Preposition complement]: bloqueio nos fundos da UE para projeto de milhões na área do regadio

In this case the word \( para \) is a preposition (the head of prepositional phrase) and it governs a noun phrase.

4.1.4 Ambiguity

There is a tendency to underrate the controversial issue of ambiguity. Those who do so ignore Martinet’s reference to a ‘defect in functioning’ (2006: 5) when it comes to homonymy: ‘it should never be forgotten that homonymy, be it total or partial (as in the case of syncretisms), is a defect in functioning that has to be remedied by reference to context or situation’.

The words of Jakobson (1987: 85) should also be kept in mind, concerning the possibility of the absence of context: ‘Ambiguity is an intrinsic, inalienable character of any self-focused message, briefly a corollary feature of poetry’.

It is argued that the ambiguity caused by AO90 can be easily solved by syntactical context (AR, 1991: 4386). The problem is that not only the absence of context is predictable, but also that context plays a crucial role for reading comprehension. Ambiguity may serve literary purposes, but it does not make reading comprehension easier. Those who pay tribute to ambiguity overlook the fact that not every single text is planned for literary purposes.

5. Conclusion

AO90 does not pursue its original objectives to provide ‘unification’. For instance, the introduction of the facultatividade (optional basis) criterion means that words such as ‘facto’ (EP) and ‘fato’ (BP), \(^1\) which were written differently before AO90, will continue to be written differently after implementation. However, the ‘optional basis’ also means that words like recepção \(^2\) and aspecto \(^3\) (that were written this way in EP and BP before AO90) shall be written differently after its adoption: recepção and aspecto in BP; receção and aspeto in EP. The introduction of the ‘optional basis’ means for the latter that the effect of AO90 is contrary to the ‘unification’ that was the

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\(^1\) Fact.
\(^2\) Reception.
\(^3\) Aspect.
reason for its inception. Words that were written in a unified way shall henceforth be written differently.

In terms of orthographic consistency, AO90 fails to move EP away from the opaque side of the spectrum. Despite the information conveyed by some of its promoters implying that AO90 brings orthography closer to the phonological articulation, the suppression of silent consonant letters with diacritic function and the removal of accents, increasing the number of homographs and promoting opacity, puts paid to any of these claims. The fact is that AO90 adds a significant level of opacity to EP orthography. In some cases, as we have seen, it may even become a source of semantic and syntactic ambiguity.

A substantial midterm review of AO90’s critical bases is one of two conceivable solutions for the current situation. The other solution is a complete abandonment of an instrument that may be politically motivated, but that may as well prove harmful in terms of its implementation. Technical opinions have asserted this argument since the 1980s. There is no technical opinion known to prove otherwise.

6. References


