The discourse connectives *ao invés* and *pelo contrário* in contemporary European Portuguese

Introduction

The research presented in this paper was developed within a line of research in CELGA focused on discourse connectives rarely mentioned or, let alone, described in the Portuguese grammars available. To the authors’ knowledge, there are no systematic studies available on the constructions with *ao invés* and *pelo contrário* in contemporary European Portuguese. In Peres 1997, *ao invés* and *pelo contrário* are classified as operators that express contrastive connections between discourse units. The specific contrast relation conveyed by the two connectives is not, however, semantically explored by the author. In Duarte 2003, *pelo contrário* is included in the paradigm of supra-sentential paratactic connectives, marking an antithetical contrast between situations. The contrast discourse relation is defined by the author in a comprehensive, all-encompassing way, involving “concessive contrast” (roughly equivalent to denial of expectations), “antithetical contrast” and “substitutive contrast” (the latter equivalent to reformulative and corrective relations). *Ao invés* is not mentioned in Duarte’s classification of textual or discourse connectives. In Costa 2010, *ao invés* and *pelo contrário* are included in the sub-class of contrastive connectives marking contrast through comparison and contraposition.

Given the paucity of remarks on the role of *ao invés* and *pelo contrário*, a thorough investigation of their specific conditions of use is thus needed. Therefore, the objective of this paper is to deepen the research on these two Portuguese discourse connectives, in order to describe their semantic and pragmatic behaviour. Ultimately, it may also contribute to a cross-linguistic discussion on a more fine-grained typology of contrast discourse relations. In terms of theoretical framework, this research assumes a basic distinction between semantic and pragmatic discourse relations, in line with Sanders & Spooren 2001. In the first type of relation, the connected constituents are related at the content level: a link is established between two situations of the external world, represented by the propositional content of each
constituent involved. In the second type, the relation concerns the speech act status (or the illocutionary meaning) of the connected segments. The methodology adopted involves controlled variation of the linguistic context in which the connectives occur, as well as the classical commutation test between connectives. This research is predominantly a data driven one: the empirical data are examples collected from the CRPC (a Portuguese oral and written sub-corpora). However, constructed examples are not totally excluded, whenever they facilitate the manipulation of data or serve to highlight a point.

The outline of the paper is the following one: section 1 will focus on ao invés, taking into consideration the type of discourse constructions in which it can occur and the discourse relations it encodes. Section 2 is devoted to the characterization of pelo contrário, which equally involves describing the constructions in which it occurs as well as the discourse relations it signals. In section 3, the main conclusions of the research will be summarized.

1. Ao invés

In the written sub-corpus of CRPC, the connective ao invés occurs in different syntactic contexts signalling two different discourse relations: contrastive comparison and substitution. This section is subdivided into two sub-sections: 1.1. will explore constructions where ao invés marks a contrastive comparison, more specifically the constructions P || ao invés, Q (1.1.1.) and P, [sp[ao invés de] + NP] (1.1.2). Section 1.2. will concentrate on the construction P, ao invés de + Q (Infinitive sentence), where the connective marks a substitution discourse relation.

1.1. Ao invés in contrastive comparison constructions

1.1.1. P || ao invés, Q

Let us start with examples (1) to (3):

(1) Pior sorte teve o brigadeiro da Força Aérea Lami Dozo, que viu a sua pena de oito anos agravada para doze. Ao invés, o almirante Jorge Anaya viu a sua reduzida de 14 para 12 anos. (J2766P3223X)
‘The Air-force brigadier Lami Dozo was less lucky. He saw his sentence of eight years increased to twelve. To the opposite side, the admiral Jorge Anaya saw his reduced from 14 to 12 years.’

(2) O jornal acentua a indiferença da população face aos acontecimentos e, além disso, o carácter não ideológico dos grupos apoiantes das duas facções. As informações do secretário geral, ao invés, procuram conotar o movimento com o vintismo e o setembrismo (...) (L0250P0027X)

‘The newspaper stresses the indifference of the population concerning the events and the non-ideological nature of the groups that support the two factions. To the opposite side, the information provided by the general secretary tries to connect the movement with the two political trends known as ‘vintismo’ and ‘setembrismo.’’

(3) A título ilustrativo, compare-se o telegrama com a carta. O telegrama é rápido, mas caro, dificultando o número de mensagens a transmitir, ao invés, a carta permite veicular inúmeras mensagens simultaneamente, a baixo preço mas de modo moroso. (L0367P0065X)

‘As an example, let’s compare a telegram and a letter. A telegram is quicker, but expensive, limiting the number of messages conveyed, to the opposite side, a letter makes it easy to send lots of messages in one go, cheaply but slowly.’

In all these examples, the connective ao invés, a prosodic constituent, with a parenthetical intonation contour, prefaces the second member of the construction, Q. However, this position is not a fixed one. As (2a) illustrates, the connective has a certain mobility within the utterance that hosts it:

(2a) As informações do secretário geral (ao invés) procuram (ao invés) conotar o movimento com o vintismo e o setembrismo (??/?ao invés).vi

‘The information provided by the general secretary (to the opposite side) tries (to the opposite side) to connect the movement with the two political trends known as ‘vintismo’ and ‘setembrismo (?/?to the opposite side).’

The connection signalled by ao invés operates between two utterances, giving rise to a coherent text. Ao invés shares the typical properties of discourse connectives: a
(relative) mobility in the host utterance, a specific prosodic behaviour and a procedural meaning (it encodes an instruction on how to relate two adjacent utterances coherently). The construction in which *ao invés* occurs, P || *ao invés*, Q, is symmetrical. Hence, it is possible to change the position of the two utterances (Q|| *ao invés*, P) and still preserve the overall meaning of the construction.

In these kinds of contexts, *ao invés* could be replaced by *pelo contrário* or *ao contrário* without any meaningful changes in the computation of the intended discourse relation:

(2b) *O jornal acentua a indiferença da população face aos acontecimentos e, além disso, o carácter não ideológico dos grupos apoiantes das duas facções. Pelo contrário/ ao contrário, as informações do secretário geral procuram conotar o movimento com o vintismo e o setembrismo (...)*

The equivalence relation between the lexical meaning of the items *invés* and *contrário*, in Portuguese, can explain the free commutation mentioned above. But other Portuguese connectives could also replace *ao invés*, while maintaining the overall meaning of the text:

(2c) *O jornal acentua a indiferença da população face aos acontecimentos e, além disso, o carácter não ideológico dos grupos apoiantes das duas facções. Já / em contrapartida / mas as informações do secretário geral procuram conotar o movimento com o vintismo e o setembrismo (...)*

Nevertheless, the occurrence of *ao invés*, *ao contrário* and *pelo contrário* seems to facilitate the interpretation (and, therefore, reduce the cognitive effort involved in processing it), because these connectives signal the discourse relation intended by the speaker more transparently than *já*, *em contrapartida* or *mas*. In fact, through their lexical meanings, they indicate how the hearer has “to integrate their host unit into a coherent mental representation of discourse” (Hansen 1998: 358) more directly. Being less grammaticalised, they provide a more direct access to the discourse relation they explicitly pinpoint.
It is worth noting that, in the examples above, the discourse relation explicitly marked by *ao invés* may be inferred even if the connective is suppressed, as the interpretation of (1a) proves:

\[(1a)\] *Pior sorte teve o brigadeiro da Força Aérea Lami Dozo, que viu a sua pena de oito anos agravada para doze. O almirante Jorge Anaya viu a sua reduzida de 14 para 12 anos.*

‘The Air-force brigadier Lami Dozo was less lucky. He saw his sentence of eight years increased to twelve. The admiral Jorge Anaya saw his reduced from 14 to 12 years.’

The fact that the marker may be deleted highlights the decisive role of the propositional content of each utterance in the interpretation process. Let us now move to the semantic constraints that the connective *ao invés* imposes on its linguistic environment. In other words, let us clarify the conditions of its appropriate use. This will lead us to characterize the contrastive comparison discourse relation.

Uttering (1), (2) or (3), the speaker compares two situations implicitly, foregrounding their dissimilarities. Contrary to canonical comparative constructions – the comparative degree sentences, which express a comparison between individuals or situations that share an underlying gradable property\(^x\)- the contrastive comparison constructions do not involve any kind of quantification or degree constituent.

Foolen (1991:85) defines the contrastive comparison relation in the following terms: “Two comparable states of affairs typically contrasted by taking two topics and predicating them to differ in some respect”. According to this definition, (4) expresses a contrastive comparison, which is not obviously the case with (5):

\[(4)\] *A Inês é baixa. Ao invés, o irmão é alto.*

‘Inês is short. *To the opposite side*, her brother is tall.’

\[(5)\] # *A Inês é baixa. Ao invés, o irmão é ágil.*

#‘Inês is short. *To the opposite side*, her brother is agile.’

Although we globally agree with Foolen’s definition, we still think that it could be refined by adding that the predicates have to belong to the same conceptual domain
or, in other words, have to encode opposite values of the same underlying property. The relevance of this restriction becomes clear if we contrast the unacceptability of (5) with the full acceptability of (4). The fact that *alto* (tall) and *baixo* (short) specify opposite values of a more abstract property (the gradable property ‘height’) licenses the occurrence of *ao invés* in (4). (5) is odd because there is no single scale underlying *baixa* (short) and *ágil* (agile).

A more accurate definition of the discourse connective *ao invés* is now possible: it is a two-place operator, connecting two utterances, each one consisting of an ordered pair of elements. Schematically: \[\text{Ao invés } [a, C], [b, D]\]. The first element of each utterance \((a, b)\) denotes the entities contrasted, the latter \((C, D)\) expresses the properties that distinguish them. And we have to bear in mind that those properties belong to the same conceptual domain. It is worth noting that this definition highlights both the propositional nature of the related constituents and their illocutionary autonomy.

In Lopes 2002, it was put forward that a contrastive comparison discourse relation involved a semantic opposition between two propositions. Such semantic opposition was then defined in the following way: there is a predicate \(C\) in the first proposition and a predicate \(D\) in the second proposition such that from \(D\) one infers \(\sim C\). This definition may now be improved, since from \(C\) one also infers \(\sim D\). This semantic constraint results from what was previously said about the existence, at a more abstract level, of an underlying gradable property for both \(C\) and \(D\) predicates.

To sum up: the contrastive comparison relation is typically activated when the two connected utterances, at their propositional level, have distinct arguments in the subject position (the non marked position for topics) and distinct predicates, matching the semantic constraints mentioned above. Examples (1) to (3) paradigmatically illustrate the discourse relation at stake. The large majority of the corpus examples also illustrate this use of *ao invés*.

Let us briefly return to example (3), repeated here:

(3) *A título ilustrativo, compare-se o telegrama com a carta. O telegrama é rápido, mas caro, dificultando o número de mensagens a transmitir, ao invés a carta permite veicular inúmeras mensagens simultaneamente, a baixo preço mas de modo moroso.* (L0367P0065X)
‘As an example, let’s compare a telegram and a letter. A telegram is quicker, but
cheap but slowly.’

Uttering (3), the speaker expresses a comparison between the telegram and the letter,
contrasting the two means of communication: roughly, the former is quick but
economical, the latter is slow but cheap. The predicates quick/slow, economical/cheap
are polar antonyms. Therefore, the assertion of one of the terms entails the negation of
the other. Hence, C → ¬D and D → ¬C. Even though we have no corpus examples, it
is obvious that complementary predicates xi (which trigger the same inferences) are
equally acceptable in contrastive comparison constructions, as we can see in the
example (6) below:

(6) O Pedro está sempre presente nas festas de família. A irmã, ao invés, está sempre
ausente.
‘Pedro is always present in family parties. His sister, to the opposite side, is always
absent.’

So far, only antonymic predicates were taken into account. But a relevant question
must be raised: what happens when ao invés connects utterances whose predicates are
not lexically marked as contrary or contradictory? Does the connective force an
antonymic reading or do we simply reject the construction, because the conditions of
use of the connective are being flouted?
Let us examine examples (7) and (8), adapted from Rossari 2000:

(7) A Ana foi esquiar. Ao invés, o irmão ficou em casa.
‘Ana went skiing. To the opposite side, her brother stayed at home.’

(8) ??A Ana adora Bach. Ao invés, o irmão adora Satie.
?? ‘Ana loves Bach. To the opposite side, her brother loves Satie.’

In example (7), ao invés imposes constraints on the semantic profile of the
constituents it relates. (8) seems acceptable in a context where only two possibilities,
in exclusive disjunction, exist – skiing or staying at home. Such a context licenses the
interpretation of skiing and staying at home as contradictory terms, and, consequently, the contrastive comparison relation may be preserved. The connective formats the interpretation context, given that the propositional contents do not automatically license the contrastive comparison reading. If the constraints imposed by the connective are compatible (or not inconsistent) with world knowledge or background assumptions, the construction becomes acceptable. The degree of acceptability of (8) is lower, because the pragmatic building of a context where loving Bach or loving Satie may be interpreted as mutually exclusive, seems rather difficult. Therefore, we follow Foolen 1991, when he says that “the construction of the contrast may take place on the pragmatic level, with the help of world knowledge”. This means that the connective is appropriate not only in contexts where the propositional content of the two utterances licenses the antithetic reading requested by the contrastive comparison relation, but also in cases where this reading is not pragmatically rejected. However, in the latter contexts, the presence of the connective is obligatory.

1.1.2. $P, \left[PP \text{[ao invés de]} + \text{[NP]}\right]$

Let us now consider examples (9) and (10):

(9) *As mulheres que não têm útero devem tomar apenas estrogéneos, ao invés das que não foram operadas (…) (R1233)*

‘Women who do not have a womb should only take oestrogens, *to the opposite side of* those who were not operated on.’

(10) *(...) Não tem medo de nada, nem do quarto escuro nem do fim do mundo, ao invés do Santiago, um audaz aventureiro que anda sempre cheio de pavor (...)* (L0511P0351X)

‘He fears nothing, neither the dark room nor the end of the world – *to the opposite side of* Santiago, a brave adventurer who is always frightened.’

In these examples, the relevant constituent is a prepositional phrase (PP) whose head is the prepositional expression *ao invés de*, followed by a nominal complement (a
NP). _Ao invés de_ may be replaced by _ao contrário de_ or _contrariamente a_. However, _ao passo que, enquanto (que), já and mas_ cannot replace _ao invés de_, because they only connect clauses or sentences. Syntactically speaking, the constituent introduced by _ao invés de_ seems to behave as a sentence apposition, adding additional information, somehow as sentential non-restrictive relatives do. See the possible paraphrasing of (9) below:

(9a) *As mulheres que não têm útero devem tomar apenas estrogéneos, o que não deverá acontecer com as mulheres que não foram operadas (…)*

‘Women who do not have a womb should only take estrogens, which should not happen with women who were not operated on.’

Nevertheless, (9b) and (9c) show that the structure headed by _ao invés de_ may also occur in the initial or interpolated position, which never happens with the sentential non-restrictive relatives:

(9b) *Ao invés das que não foram operadas, as mulheres que não têm útero devem tomar apenas estrogéneos.*

‘To the opposite side of those who were not operated on, women who do not have a womb should only take oestrogens.’

(9c) *As mulheres que não têm útero, ao invés das que não foram operadas, devem tomar apenas estrogéneos.*

‘Women who do not have a womb, to the opposite side of those who were not operated on, should only take oestrogens.’

Hence, the structure at stake seems to behave syntactically as the parenthetical fluctuant structures analysed by Colaço & Matos 2010.

Let us now focus on the semantic analysis of the construction. First of all, it is undeniable that it is always possible to expand the constituent headed by _ao invés de_, so that it becomes an autonomous utterance. Consider (9d), which paraphrases (9):

(9d) *As mulheres que não têm útero devem tomar apenas estrogéneos. Ao invés, as mulheres que não foram operadas não devem tomar apenas estrogéneos.*
‘Women who do not have a womb should only take oestrogens. To the opposite side, women who were not operated on should not only take oestrogens.’

Utterance (9) compacts the information conveyed by (9d). A discourse strategy aiming to avoid redundancy might explain the choice of (9) instead of (9d). The second utterance in (9d), a sentence with a full propositional content, becomes a non-sentential apposition in (9); the predicate ellipsis is licensed by the lexical core meaning of ao invés (de). Hence, we formulate the hypothesis that the constituent introduced by ao invés de is semantically equivalent to a proposition. A linguistic argument to support this hypothesis is the possibility of applying sentence adverbs (adverbs that can only apply to propositional structures) to the relevant constituent, as is shown in (9e):

(9e) As mulheres que não têm útero devem tomar apenas estrogéneos, ao invés, obviamente, das que não foram operadas.

‘Women who do not have a womb should only take oestrogens, to the opposite side, obviously, of those who were not operated on.’

Another argument to support the hypothesis put forward is the possibility of connecting the structure introduced by ao invés de with a comment clause, whose interpretation requires the presence of a proposition. See (9f):

(9f) As mulheres que não têm útero devem tomar apenas estrogéneos, ao invés das que não foram operadas, como é sabido.

‘Women who do not have a womb should only take oestrogens, to the opposite side of those who were not operated on, as is well known.’

To sum up: we argue that the construction P, \([PP [ao invés de] + [NP]]\) expresses the same contrastive comparison discourse relation described in 1.1., although through a distinct syntactic configuration. Triggering and licensing the inference of the elliptical relevant predicate (which will be interpreted as opposite to the one expressed in the full proposition P), the connective imposes a propositional reading of the constituent it introduces.
1.2. *Ao invés in substitution constructions*

The corpus provides empirical evidence of another construction involving *ao invés*, the construction P, *ao invés de* + Q (Infinitive clause), which has a totally different interpretation, as is illustrated by the following examples:

(11) (...) *o peso do saneamento, (...) ao invés de ter, conforme o previsto, duplicado, conheceu uma diminuição.* (J19024)

‘The cost of sanitation, *to the opposite side of* having doubled, as was expected, suffered a reduction.’

(12) (...) *ao invés de votarmos contra um mau orçamento de Estado do PS (...), preferimos contribuir para melhorá-lo.* (J16470)

‘*To the opposite side of* voting against a bad state budget, we preferred to contribute to its improvement.’

(13) *Deveriam dar maiores poderes aos municípios, ao invés de apostarem na criação absurda de regiões.* (J14800)

‘They should empower the local governments, *to the opposite side of* insisting on the absurd project of creating new administrative regions.’

(14) *Os empresários portugueses, ao invés de enterrarem a cabeça na areia (...), optaram por encontrar novas formas de negócio.* (J15007)

‘Portuguese businessmen, *to the opposite side of* burying their heads in the sand (...), chose to discover new ways of doing business.’

In all these examples, *ao invés de* may only be replaced by *em vez de* (instead of). In these constructions, there is always co-reference between the subject of the two clauses. The clause introduced by *ao invés de* always involves the Portuguese inflected infinitive, and its subject is always null. Syntactically speaking, the construction is still a sentence, a complex one. This can be proved through linguistic tests, put forward by Peres 1997. The first test involves embedding the whole construction as a that-complement clause, i.e., an internal argument of the matrix
predicate (14a); the second test involves checking whether a sentence adverb may have scope over the construction as a whole (14b):

(14a) *Ele disse [que [os empresários portugueses, ao invés de enterrarem a cabeça na areia, optaram por novas formas de negócio]].

‘He said [that [Portuguese businessmen, \textit{to the opposite side of} burying their heads in the sand, chose to discover new ways of doing business]].’

(14b) *Possivelmente [os empresários portugueses, ao invés de enterrarem a cabeça na areia, optaram por novas formas de negócio].*

‘Possibly, [Portuguese businessmen, \textit{to the opposite side of} burying their heads in the sand, chose to discover new ways of doing business].’

As all subordinate adverbial clauses, the clause introduced by \textit{ao invés de} may occur in sentence initial or final position. However, contrary to prototypical adverbial clauses, the subordinate clause introduced by \textit{ao invés de} rejects focusing effected by the cleft structure (14c), and does not occur under the scope of focusing negation (14d), nor under the scope of focus particles like \textit{only} (14e):

(14c) *Foi \textit{ao invés de enterrarem a cabeça na areia que os empresários portugueses optaram por novas formas de negócio}.*

*‘It was \textit{to the opposite side of} burying their heads in the sand that Portuguese businessmen chose to discover new ways of doing business.’*

(14d) *Os empresários portugueses \textit{não optaram por novas formas de negócio ao invés de enterrarem a cabeça na areia}.*

*‘Portuguese businessmen did not chose to discover new forms of doing business \textit{to the opposite side of} burying their heads in the sand.’*

(14e) * Os empresários portugueses \textit{só optaram por novas formas de negócio ao invés de enterrarem a cabeça na areia}.*

*‘Portuguese businessmen only chose to discover new forms of business \textit{to the opposite side of} burying their heads in the sand.’*
The behaviour of the subordinate introduced by *ao invés de* is thus similar to the peripheral adverbial subordinate clauses. According to Lobo 2003, a subset of the peripheral adverbials is characterized by its presuppositional nature. The oddity of examples (14c) to (14e) may be explained by the presuppositional nature of the infinitive clauses at stake: in fact, only constituents that express new information (and not presupposed information, i.e., background assumptions, information already known or taken for granted) can be focused on. In semantic terms, the discourse relation computed in these constructions is fundamentally distinct from the contrastive comparisons analysed so far. Following Kortmann (1997:88), the term “substitution” will be used to label this new discourse relation, briefly characterised as follows: “of two possible alternative events/activities p and q, q happens or is performed although p was rather to be expected.” Going back to examples (11), (12) and (14), it is clear that they fit this definition: the speaker states that one of the situations happened instead of the other one, which was an expectable alternative.

Another relevant aspect of these constructions is the fact that, often, they imply that the speaker values one of the situations as preferable. In (12), the preference is lexically marked: preferimos *contribuir para melhorá-lo* (we preferred to contribute to its improvement); in (13), the modal verb *dever* (should), in the conditional, expresses the speaker’s evaluation: the occurrence of the situation *dar maiores poderes aos municípios* (empower the local governments) is desirable for the speaker; in (14), the predicate *enterrar a cabeça na areia* (to bury one’s head in the sand) has an inherent negative evaluative feature and, by contrast, we infer that the speaker prefers the alternative one.

2. **Pelo contrário**

This section will explore the constructions with *pelo contrário* available in the corpus. The connective at stake only occurs in constructions of the form P || *pelo contrário* Q, where two utterances are paratactically connected. Sub-section 2.1. will provide contexts where *pelo contrário* signals a contrastive comparison relation, and section 2.2. will focus on contexts in which the connective signals a rectification or correction discourse relation, within a refutation move.

2.1. **Pelo contrário in contrastive comparison constructions**

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Consider examples (15) and (16):

(15) (...) a radiação solar directa, a radiação difusa e a radiação da atmosfera constituem o lado positivo da absorção; pelo contrário, a energia reflectida e os desperdícios por radiação terrestre constituem as perdas, isto é, o lado negativo (...) (L0322P0038X)

‘The direct radiation of the sun, the diffuse radiation and the atmospheric radiation are the positive aspects of the absorption; by the contrary\textsuperscript{xvi}, the reflected energy, as well as the waste of the terrestrial radiation are the negative aspects.’

(16) A RFA, a Itália, a Bélgica e a Holanda conhecerão pela primeira vez índices de crescimento negativos (...). Pelo contrário, a França, a Irlanda e a Grécia terão ainda índices positivos (...). (J128p1205F)

‘For the first time, Germany, Italy, Belgium and Holland will experience negative growth. By the contrary, France, Ireland and Greece will still have positive growth rates.’

In these examples, two comparable situations are antithetically contrasted. The connective may be replaced by ao invés, since it marks the same discourse relation. It may also be replaced by já, em contrapartida, mas\textsuperscript{xvii} enquanto (que) or ao passo que, without any significant change in the overall reading. The semantic constraints imposed by the contrastive comparison relation have already been made explicit in section 1.1. As can be seen in (15) and (16), pelo contrário typically introduces the second utterance, but interpolation is also possible:

(16a) A RFA, a Itália, a Bélgica e a Holanda conhecerão pela primeira vez índices de crescimento negativos (...). A França, a Irlanda e a Grécia, pelo contrário, terão ainda índices positivos.

‘For the first time, Germany, Italy, Belgium and Holland will experience negative growth. France, Ireland and Greece, by the contrary, will still have positive growth rates.’
However, the occurrence of *peço contrário* in the final position is completely excluded in Portuguese:

(16b)  # A RFA, a Itália, a Bélgica e a Holanda conhecerão pela primeira vez índices de crescimento negativos (...). A França, a Irlanda e a Grécia terão ainda índices positivos, pelo contrário.

‘For the first time, Germany, Italy, Belgium and Holland will experience negative growth. France, Ireland and Greece, will still have positive growth rates, *by the contrary*.’

*Peço contrário* behaves as a prosodic constituent, or an independent tone unit, separated by pauses from the segments it connects\(^{xviii}\), and its meaning is procedural: it encodes instructions on how to integrate the segment it introduces into a coherent mental representation of discourse, guiding, therefore, the interpretation process. Notice that the examples would be perfectly acceptable if the connective was not expressed. In other words, the same discourse relation would be computed even in the absence of the connective, which highlights once more the relevance of the propositional content in the computation of the contrastive comparison discourse relation:

(15a) (...) *a radiação solar directa, a radiação difusa e a radiação da atmosfera constituem o lado positivo da absorção; a energia reflectida e os desperdícios por radiação terrestre constituem as perdas, isto é, o lado negativo (...).*

‘The direct radiation of the sun, the diffuse radiation and the atmospheric radiation are the positive aspects of the absorption; the reflected energy, as well as the waste of the terrestrial radiation, are the negative aspects.’

The construction *P || pelo contrário, Q* is symmetrical: changing the order of the segments would not imply a different interpretation.

### 2.2. *Pelo contrário* as a rectification marker

The following example, a dialogue, paradigmatically illustrates a rectification discourse relation, which takes place within a refutation move:
(17) A: *A situação está a melhorar.* (Z)
    B: *A situação não está a melhorar.* (P) *Pelo contrário, a situação está cada vez pior!* (Q)
    A: ‘The situation is improving.’ (Z)
    B: The situation is not improving (P). *By the contrary\textsuperscript{xxix}, the situation is getting worse and worse!’ (Q)

In B’s intervention, *pelo contrário* introduces a segment Q which rectifies A’s intervention (Z). The rectification move follows a previous segment P, whose function is to refute A’s intervention. Therefore, we assume that refutation is the discourse relation that holds typically between two interventions, an initiative one and a reactive one,\textsuperscript{xx} the first one being the target of the ‘rejection’ expressed in the second one. Hence, the second intervention is a reactive negative intervention, with a retroactive interactional function.\textsuperscript{xxi} To justify the refutation expressed in P, the speaker typically adds a segment Q, whose function is to rectify what, in his/her opinion, was not accurate in A’s intervention. Schematically:

\begin{center}
A’s intervention: Z  
B’s intervention: P || *Pelo contrário*, Q
\end{center}

The refutation discourse relation holds between utterance P (the first member of B’s intervention) and utterance Z (A’s intervention); the rectification relation holds between utterance Q (the second member of B’s intervention) and Z.\textsuperscript{xxii} Utterance Q conveys information that, in the speaker’s opinion, corrects the content of Z (or part of it). Somehow, Q is added to prove the relevance of the refutation move P.\textsuperscript{xxiii} *Pelo contrário* explicitly marks the rectification relation, and imposes constraints on the contents of the constituents it relates.

Contrast (18a) with (18b):

\begin{enumerate}
\item[(18a)] A: *O Rui é reservado.*  
    B: *O Rui não é reservado. É antipático!*  
    A: ‘Rui is reserved.  
    B: Rui is not reserved. He is unfriendly!’
\item[(18b)] A: *O Rui é reservado.*
\end{enumerate}
While B’s intervention in (18a) is totally acceptable, B’s intervention in (18b) is not. And the reason is the clash between the semantic value of the connective, which imposes an antynomic relation between the predicates of the constituents it relates, and the inexistence of such a relation between the two predicates at stake, *reservado* and *antipático* (reserved and unfriendly). Another condition imposed by the connective is the occurrence of a syntactic negation in utterance P. All the connectives that introduce rectification moves seem to impose this constraint, the prototypical example being the connective *mas* (but) (Anscombe & Ducrot 1977, Horn 1989, a.o.).

Example (17) was intentionally constructed to illustrate the prototypical complete sequence involving both refutation and rectification discourse relations. But the corpus provides a large number of examples in which the target of the refutation move (the utterance Z in (17)) is not explicit on the textual surface level:

(19) *E se nos sentássemos aí num desses bancos?*, diz-me o Niassa, que logo se apressa a acrescentar: «Não que eu esteja cansado. Antes pelo contrário. Até me sinto rijo. Elegante, mas rijo. (L0474p0156X)“What about sitting on one of those benches?” says Niassa, adding immediately: “Not that I’m tired. *By the contrary*, I even feel fine. Slim, but fine.”

(20) *E como tal, tinha um certo horror à magistratura. Não era horror aos magistrados, pelo contrário, tinha pelos magistrados um respeito especial; tinha horror era a exercer essa profissão (…)*(108-03-Q00-001-49-M-A-6-5-C)‘And as such, I somehow hated the magistracy. I didn’t hate the magistrates, by the contrary, I respected them a lot; I hated the idea of practising law.’

In this case, the target of the refutation is not an expressed utterance, but an implicit one: the speaker mentally anticipates a possible inference drawn by the hearer and triggered by what he (the speaker) has just said. And it is this inference that is accommodated in the discourse and licenses the interpretation of the negative
statement as a refutation move. Our assumption that the negation in segment P is not a descriptive negation, but a refutative one needs further explanation.

It is widely acknowledged in the linguistic community that it is difficult to establish a clear-cut boundary between descriptive and metalinguistic uses of negation\textsuperscript{xxvi}, namely in cases where the negation is used to refute the propositional content of a potential utterance. Generally, it is assumed that it is possible to reject implicit utterances in a certain context. In other words, refutative negation may have scope over what a speaker has actually said, but also over what he might have thought.\textsuperscript{xxvii} However, this formulation seems rather inaccurate: beyond its intrinsic vagueness, it may imply that all the uses of negation are, in fact, refutative ones. Although the objective of this paper is not to resolve this intricate issue – apart from anything else because, in many cases, it definitely is difficult to decide what the appropriate reading in a given context is –, we think that we may be able to make a contribution.

One of the contexts that favours the refutative interpretation of negation is the one where the target of refutation, although not linguistically expressed, may be inferred from the verbal context. That is what happens with example (20), where the first statement (\textit{Tinha um certo horror à magistratura}/ I hated the magistracy) could license the inference that the speaker hates magistrates. There is another kind of context that seems to favour the refutative interpretation: it is the case when a discourse topic is clearly a polemic one, i.e., whenever antagonic opinions are expectable. Consider example (21):

\begin{itemize}
  \item \textbf{(21)} \textit{O despedimento do treinador não vai melhorar a situação do clube. Pelo contrário, vai piorá-la.}
  \begin{quote}
  ‘Firing the trainer is not going to improve the situation of the club. \textit{By the contrary}, it will worsen it.’
  \end{quote}
\end{itemize}

In (21), it is expectable that some entities, at least those with the power to do it, had argued that firing the trainer would be beneficial for the club. Therefore, the refutative reading of segment P seems preferential. Besides, the polemic nature of the topic under discussion could become quite explicit in a sequence like the following one:
(22) *Ao contrário do que afirma a direcção, o despedimento do treinador não vai melhorar a situação do clube. Pelo contrário, vai piorá-la.*

‘Contrary to what the management says, firing the trainer will not improve the situation. *By the contrary,* it will worsen it.’

Going back to corpus examples (19) and (20), they illustrate non-dialogic discourse fragments where, by definition, the target utterance being refuted is absent. In order to fully describe and explain these constructions, Ducrot’s notion of polyphony needs to be invoked: the speaker anticipates mentally a given utterance, whose responsibility is not his/hers but some other enunciative source (another ‘voice’ or viewpoint), and rejects it in P, presenting the correct alternative in Q. Besides the absence of the utterance that is the target of the refutation move, it is also frequent in the corpus that the rectification segment is reduced to the connective that typically introduces it:

(23) *(…) isto para conhecer um aluno é preciso tempo. Porque… vêm doutros professores, uns são repetentes, outros vêm doutro professor, eu não estou aqui a criticar o trabalho do outro professor, pelo contrário…* (60-14-S00-005-39-M-A-4-5-00)

‘We need time to get to know a student. Because…they come from other teachers, some of them are repeating, some come from another teacher, I’m not criticizing another teacher’s work, *by the contrary…*’

It is the intrinsic value of the connective (antithetical contrast) that licenses the ellipsis of the rectificative segment Q. In fact, the occurrence of *pelo contrário* triggers automatically the inference of the non-explicit proposition Q:

(24) **A:** *A vitória nas próximas eleições está agora facilitada.*

**B:** *A vitória não está facilitada. Pelo contrário!*

**A:** ‘The victory in the next elections will be easier now.
**B:** The victory won’t be easier. *By the contrary!*’
In the last example, the occurrence of *pelo contrário* licenses the inference that for B the victory will be even more difficult. It is not strictly necessary to say it. The connective may co-occur with adverbial expressions like *bem* (quite) and *muito* (very), which intensify the instruction it codes, as well as with focus particles like *até* (even), which stresses the contrast between the target element undergoing refutation and the element considered as most accurate by the speaker:

(25) *Jospin e os rocardianos defendem a teoria do apoio activo. Para o primeiro-secretário as coisas são claras: com as suas críticas (...) o «maire» de Belfort não ajuda a esquerda. Isto não quer dizer que Lionel Jospin seja contra o debate, muito pelo contrário.* (J1908P1219A)

‘Jospin and Rocard’s supporters defend the theory of active help. For the First-secretary things are clear: with his criticisms, the mayor of Belfort does not help the leftwing. This does not mean that Jospin is against the debate, quite *by the contrary.*’

(26) *Repete-se, a finalizar, que não está em causa o mérito do êxito «leonino», como é óbvio, mas não se pode dizer é que se assistiu a uma grande final. Bem pelo contrário.* (J1831P1015E)

‘We repeat, to finish off, that the merit of the club is not in question, obviously, but we cannot say that the final match was “great”. Quite *by the contrary.*’

(27) *Olha, e às vezes nem se chega a conhecer porque não é os muitos anos que faz com que se conheçam. Até talvez pelo contrário* (725-08-TD0-002-37-F-A-4-4-A)

‘You see, sometimes you don’t really get to know the person, because it’s not the length of time that makes you know people. Perhaps it’s even *by the contrary.*’

The rectification connective *pelo contrário* may also co-occur with the adverbial *antes* (rather), which reinforces the instruction encoded by the connective: the speaker definitely intends to generate a revision, rather than a simple update of the current discourse context. Or, in other words, the rectification utterance is intended to replace the target constituent under refutation.
O Governo está a abrandar a pressão sobre os promotores imobiliários das costas algarvia e alentejana. Pelo menos é o que se depreende de um documento que esclarece a interpretação oficial do chamado decreto das compatibilidades. Mas o secretário de Estado do Ordenamento garante que não está a ceder em coisa alguma. “Antes pelo contrário, estamos a retirar argumentos a quem pretende combater o decreto.” (J18285)

‘The government is alleviating the pressure on the builders on the Alentejo and Algarve coast. At least, that’s what one infers from the document that clarifies the official interpretation of the so-called “compatibility” regulation. But the Secretary of State responsible for planning guarantees that he is not giving up in any way. “Quite by the contrary, we are removing the arguments put forward by those who want to fight the regulation”.

Concerning its position, pelo contrário, in these kinds of constructions, always prefaces the rectification segment. Notwithstanding its null mobility, the connective at stake is a tone unit, it relates discourse segments and does not contribute to the truth conditions of the sentence it introduces, a property shared by all discourse markers. Its meaning is a procedural one. Contrary to what happened in the contrastive comparison constructions, in these (refutation) rectification constructions there are no connectives that can replace pelo contrário while maintaining the instruction of antithetical contrast it marks.

3. Main conclusions

To sum up, from our data we can draw the following conclusions:

1. Concerning the connective ao invés, there is empirical evidence, in the corpus, that P, [PP ao invés de + [NP]] is the most productive construction, followed by P || ao invés, Q and, less represented, P, ao invés de + Infinitive clause. From the empirical data, it is possible to draw the conclusion that the connective ao invés only occurs in written texts, in ECP. In the oral sub-corpus, no example was found.

1.1. We have argued that the first two constructions illustrate a contrastive comparison discourse relation, expressed in two different syntactic structures. The discourse
relation involves an antithetical contrast between two comparable situations and imposes semantic constraints on the constituents related by the connective. The constituent headed by *ao invés* may not be a sentence, as happens in the structure \[ P, [pp \textit{ao invés de} [+ NP]] \], but the semantics of the connective always allows the inference of an embedded full proposition. Given its anaphoric nature and its semantics, the connective licenses the inference of the elliptical predicate, which has to be semantically opposed to the one expressed in \( P \).

1.2. In the contexts where *ao invés de* may be replaced by *em vez de* (instead of), the discourse relation computed is not the same. It is a substitution relation: the two situations related by the connective are alternative ones, but they are not antithetically contrasted and the speaker seems to evaluate one of them as preferential.

1.3. Empirical data prove the polysemy of the connective. If we assume the marking of an antithetic contrast between comparable situations as its basic value, the substitution value may be analysed as an extension through generalization: contrast remains a relevant feature, but the antithetic opposition feature undergoes a process of semantic bleaching.

2. Concerning *pelo contrário*, its frequency of use is much higher and it occurs both in the written and the oral corpora.\(^{xxx}\) It only occurs in \( P \parallel \textit{pelo contrário}, Q \) constructions, relating paratactically two utterances and signalling either a contrastive comparison or a substitution relation.

2.1. In the former case, the connective operates in the content domain: two comparable situations are antithetically contrasted and *pelo contrário* may be replaced by *ao invés*. In the latter, dominant in our corpus, the relation marked by the connective operates in the illocutionary domain: the speaker rectifies a previously explicit or implicit assertion. However, the connective still signals a contrast between the propositional content of two utterances. In fact, it introduces a rectificative utterance whose propositional content must antithetically contrast with the one expressed in the target of refutation.
The following figure summarizes the main results of this research:

<table>
<thead>
<tr>
<th></th>
<th>Contrastive comparison relation</th>
<th>Rectification relation</th>
<th>Substitution relation</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Ao invés</em></td>
<td>x</td>
<td>-</td>
<td>x</td>
</tr>
<tr>
<td><em>Pelo contrário</em></td>
<td>x</td>
<td>x</td>
<td>-</td>
</tr>
</tbody>
</table>

References


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i Centro de Estudos de Linguística Geral e Aplicada, a research unit founded by FCT and located in Faculdade de Letras da Universidade de Coimbra.

ii Even though *ao invés* and *pelo contrário* may occur with other functions in contemporary European Portuguese (see (i) and (ii), examples from the corpus: (i) *Ela procedeu ao invés dos mortais* / She acted unlike the mortals; (ii) *Mas é claro que a marcha pode ser ao invés* / Of course the march can be in reverse), this paper will only focus on their connective function. In historical terms, it is possible that the expression, in the first stages of the history of the Portuguese language, contributed to the propositional content of the host sentence, and later on developed into a connective. Only a historical study can validate this hypothesis.
There is no consensus in the linguistic community on the definition of the discourse relation *Contrast* (cf., among others, van Dijk 1977, Mann & Thompson 1988, Rudolph 1996, Sanders et al.1992, Couper-Kuhlen & Kortmann 2000, Asher & Lascarides 2003, Schwenter 2000). The same label is often used to refer to two fundamentally distinct discourse relations: on the one hand, denial of expectations, the semantic connection underlying adversative constructions (i), on the other hand, dissimilarity between two comparable situations (ii):

(i) A Ana adora música, mas detesta jazz.
   Ana loves music but hates jazz.

(ii) Os nossos salários desceram, mas/enquanto (que)/ao passo que/ os dos gestores subiram.
   Our salaries went down, while the managers’ went up.

We will try to fine-tune the relation of contrast signalled by the two Portuguese connectives ‘ao invés’ and pelo contrário.

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### Footnotes

iii There is no consensus in the linguistic community on the definition of the discourse relation *Contrast* (cf., among others, van Dijk 1977, Mann & Thompson 1988, Rudolph 1996, Sanders et al.1992, Couper-Kuhlen & Kortmann 2000, Asher & Lascarides 2003, Schwenter 2000). The same label is often used to refer to two fundamentally distinct discourse relations: on the one hand, denial of expectations, the semantic connection underlying adversative constructions (i), on the other hand, dissimilarity between two comparable situations (ii):

(i) A Ana adora música, mas detesta jazz.
   Ana loves music but hates jazz.

(ii) Os nossos salários desceram, mas/enquanto (que)/ao passo que/ os dos gestores subiram.
   Our salaries went down, while the managers’ went up.

We will try to fine-tune the relation of contrast signalled by the two Portuguese connectives ‘ao invés’ and pelo contrário.

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vi In the translation of the examples, we took the decision of giving an English gloss of the Portuguese connective: *ao invés* involves the preposition *a* (to) contracted with the masculine singular definite article *o* (the) plus the noun *invés* (opposite side). In a free translation, *whereas* seems to be an appropriate connective in English, in these contexts.

vii The only position that seems excluded is the sentence final position.

viii Contrary to ‘*ao invés*’, *já* (already) does not have any mobility in the host utterance.

ix The connective ‘*mas*’ (but) is not being used in this example with its prototypical denial of expectation value, but with its contrastive value (cf. Tomás 2003). And contrary to ‘*ao invés*’, it has a fixed position in the host utterance.

x The procedural meaning of the connective seems strongly motivated by the lexical meaning of the word ‘*invés*’ (contrary). In other words, we could say that the conceptual meaning of the PP, from which the connective developed, is not completely ‘bleached’.

xi More accurately, in canonical comparative constructions the speaker expresses an ordered relation between the values of a single scale property attributed to the individuals or situations being compared.

xii Cf. Cruise (1986: 198): “The essence of a pair of complementaries is that between them they exhaustively divide some conceptual domain into two mutually exclusive compartments.”

xiii In these contexts, the appropriate translation in English is *contrary to*.

xiv In fact, in a normative perspective, the latter should be chosen as the appropriate connective, since the utterances do not express an antithetical contrast between comparable situations, but a simple contrast between alternative situations. However, the data cannot be ignored in a linguistic study: the corpus shows that *ao invés de* has developed a polysemy and can also be used in contexts where it means *em vez de* (instead of).

xv The occurrence of *pelo contrário* marking a contrastive comparison relation is much more frequent in the CRPC written sub-corpus than in the oral one. In this latter, *pelo contrário* has an almost exclusive rectification value.
Once more, we took the decision of giving an English gloss of the Portuguese connective: *pelo contrário* involves the preposition *por* (by) contracted with the masculine singular definite article *o*, plus the noun *contrário* (contrary). An appropriate translation in English seems to be *whereas*, in these contexts.

Cf. note xvii.

The pause after the connective, is generally marked by a comma in written texts. It may also be marked by full stop, when the segment Q is deleted. The pause that precedes the connective may be marked by comma, full stop, semicolon or dash.

A suitable translation in English is *on the contrary* in these contexts.


Note that the rectification relation at stake involves two different interventions, performed by two different speakers. It should not be confused with a corrective self-reformulation move, a move carried out by the same speaker when he/she wants to rectify what he/she previously said: (i) *Nunca tomei anseolíticos. Aliás, só tomei uma vez.* I never took tranquilizers. Or better, I only took them once.

The negation is typically expressed by the negation operator ‘*não*’ (not), but it can also be marked by negative quantifiers like ‘*nunca*’ (never), ‘*nada*’ (nothing), ‘*ninguém*’ (nobody), ‘*nenhum*’ (none). Some other constructions with negative polarity may also occur, even though they do not exhibit a syntactic negation: (i) *Os riscos de conflitos militares estão longe de ter acabado, antes pelo contrário.* *Entrou-se um sistema em que o risco de conflitualidade é maior* (R2366).

‘The risks of military conflict are far from being over. On the contrary, the risk of conflict has increased.’

The high frequency of corpus examples where the target of refutation is only evoked (by its refutative utterance) may be explained by the difficult access to polemic spontaneous interactions. Political discourse taken from sessions of parliament may be a good source to collect sequences like the one presented in (17).

We follow Ducrot (1972,1973) and Horn (1985,1989) on the distinction between descriptive and metallinguistic negation.


In Ducrot (1984), polyphony is explained through the distinction between speaker and ‘énonciateur’: «J’appelle «énonciateurs» ces êtres qui sont censés s’exprimer à travers l’énonciation, sans que pour autant on leur attribue des mots précis; s’ils «parlent», c’est seulement en ce sens que l’énonciation est vue comme exprimant leur point de vue, leur position, leur attitude, mais non pas, au sens matériel du terme, leurs paroles.» (p. 204). Other authors, though not assuming Ducrot’s distinction, acknowledge the importance of polyphony in the analysis of monologic discourse. Schwenter (2000), following Roulet (1984), states that monologic discourse often involves the expression of at least two viewpoints.

In a total of 51 occurrences of ‘*ao invés*’ in the corpus, 26 illustrate the P || *ao invés de* + NP construction, 19 illustrate the P || *ao invés* Q one and only 6 display the P, *ao invés de* + Infinitive clause.

*Pelo contrário* predominantly signals the rectification relation in the corpus. In the oral sub-corpus, in 20 occurrences, 18 illustrate this relation. Only two occurrences
license the contrastive comparison reading. In the written sub-corpus, in a total of 50 occurrences, 34 signal a rectification relation and the remainder mark a contrastive comparison relation.