

Consequential constructions in contemporary European Portuguese: A contribution

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Abstract

The aim of this study is to provide an integrated description of consequential constructions in European contemporary Portuguese, relating their syntactic, semantic and pragmatic behavior. It will be argued that the discourse segment introduced by the connectives *consequentemente*, *de forma que*, *daí (que)*, *de modo que*, *por isso*, *assim* can be analyzed in terms of a supplement (Huddleston & Pullum 2002), not syntactically integrated with its anchor, but semantically related to it. Semantically, consequential constructions may be paraphrased by causal ones involving an adverbial subordinate clause. But, unlike causal constructions, consequential ones connect two distinct speech acts. The suppression of the consequential connective may trigger two different readings, but it will be argued that, for pragmatic reasons (Levinson 2000), the preferential reading is still the consequential one.

Key-words: consequential constructions, discourse relations, discourse markers, supplementation, European Portuguese

1. Introduction

To the author's knowledge, there is no thorough investigation focused exclusively on the syntactic, semantic and pragmatic properties of consequential constructions in contemporary European Portuguese. The descriptive study presented here is an attempt to provide additional knowledge about these constructions and, therefore, contribute to bridge the gap just mentioned.

Although these constructions are mentioned in the new reference grammar of European Portuguese, in the chapter on adverbial subordination (Lobo 2013), their behavior is barely described.

In Lopes (2004), a contrastive approach to consequential and conclusive constructions in European Portuguese is sketched, within Sweetser's (1990) theoretical framework, which advocates a tripartite analysis of meaning, unfolding over the content, the epistemic and the speech act domains. Lopes argues that consequential constructions operate at the content domain, whereas conclusive constructions involve both the epistemic and the speech act domains¹. But the main purpose of the paper is to explore empirically Maat & Degand (1999) hypothesis that there are constraints in the choice of connectives signaling consequence (including logical consequence or conclusion), based on the degree of the speaker's involvement in the discourse.

In this study, it will be argued that consequential constructions do not involve subordinate adverbial clauses, as is assumed in Lobo (2013). A battery of tests provides evidence that consequential clauses behave, syntactically, as supplements, according to Huddleston & Pullum (2002) definition of supplementation: a clause that is intonationally separate, or set off by punctuation, not syntactically integrated with its anchor, but semantically related to it.

It will also be argued that the constructions at stake display a discourse relation, which will be called *Consequence*². Discourse relations, also labeled rhetorical relations by Asher & Lascarides (2003), Mann & Thompson (1988), and Taboada & Mann (2006), are relations that hold together different text spans, enabling the hearer or reader to assign coherence to a text. It is well known that the set of discourse relations is not definite or closed, and the terms used to identify them are not convergent in different theoretical frameworks focused on discourse or text coherence. But all researchers in the area, independently from their different backgrounds (descriptive, cognitive, formal and computational), acknowledge that a text or discourse is a structured entity which exhibits cohesion and coherence.

Discourse relations can be present in a text without being signaled by any kind of connective. In this case, they are simply inferred in the interpretation process,

given the propositional content of the juxtaposed sentences, and their consistency with world knowledge. But very often discourse relations are signaled through discourse connectives or discourse markers (henceforth DMs). In this paper, the empirical data displaying the Consequence discourse relation involve DMs³. The data were collected from CETEMPúblico, an on-line written corpus of contemporary Portuguese newspaper texts. Randomly, 120 examples were collected and analyzed, involving different connectives: *de modo que*, *de forma que*, *daí (que)*, *por conseguinte*, *consequentemente* and *por isso*. From this sample, some paradigmatic examples were selected in this paper. An example with *assim*, already analyzed in Lopes & Carapinha (2004), was added to the corpus.

The structure of the study is the following one: in section 2, syntactic properties of consequential constructions will be discussed, in contrast with the syntactic behavior of causal ones, in order to prove that the former illustrate a case of supplementation; in section 3, a semantic description will be carried out, taking into account temporal, modal and aspectual properties, and some relevant pragmatic issues will also be tackled; finally, in section 4, the main conclusions will be presented, highlighting the main properties of consequential constructions and stressing that these constructions display paradigmatically the role and behavior of DMs, both formally and functionally.

2. Syntactic analysis

Let us consider the following examples:

(1) ... *A DGT detectou agora que esse parecer não constituía legalmente a aprovação do pedido de localização, daí que tenha decidido convocar uma reunião da comissão (...) para deliberar sobre o assunto.* (ext9291-soc-95b-1)

[... The DGT has now detected that that report does not constitute a legal approval of the request for location. As a result, it has decided to call for a meeting of the committee to decide on the matter.]⁴

(2) *Em cada uma delas, detinha cinco por cento do capital, daí ter sido conhecido em todo o mundo como o «senhor cinco por cento».* (ext217866-clt-96b-1)

[He had five percent of the capital in each one. As a result, he was known everywhere in the world as “mister five percent.]

(3) *Tinham baixo nível económico e más condições habitacionais, de modo que recorriam à mendicidade como meio de sobrevivência.*(ext13178-soc-97a-2)

[They were poor and had bad housing conditions. As a result, they survived by begging.]

(4) *Há quatro dias que nos bombardeiam, por isso consideramos o acordo caducado.*(ext1155578-pol-96a-3)

[They have been bombing us for four days. Therefore, we consider that the agreement has expired.]

(5) *Aumentou (...) o grau de profissionalismo, consequentemente melhorou (...) o nível do espectáculo.* (ext78727-des-91b-2)

[The degree of professionalism has increased. Consequently, the performance has improved.]

(6) *A Península Ibérica define-se como um pequeno continente, (...), onde as influências oceânicas pouco se fazem sentir no seu interior. Assim, durante o Verão, tornam-se frequentes as altas temperaturas que provocam a formação de centros de baixas pressões.*[L0323P0040X]⁵

[The Iberian Peninsula is defined as a small continent, (...), where the ocean influences are barely noticeable. As a result, in summer, high temperatures are frequent, triggering low pressure centers.]

(7) *Na Bélgica, o Anderlecht cedeu um empate em Antuérpia, de forma que o Brugge tem já 10 pontos mais do que os actuais campeões.*(ext13059-des-96a-1)

[In Belgium, Anderlecht obtained a draw in Antwerp. As a result, Brugge is already 10 points ahead of the champions.]

(8) *As equipas de médicos e enfermeiros são cada vez em número mais reduzido, por conseguinte, falta assistência e vigilância.* (ext1045563-soc-94b-2)

[There are fewer and fewer teams of doctors and nurses. As a result, there is a lack of assistance and vigilance.]

All these examples illustrate consequential constructions in Portuguese. In Lobo (2013), a chapter in the most recent European Portuguese reference grammar, clauses introduced by the expression *de forma que* (the only connective taken into consideration in this grammar) are classified as subordinated adverbial resultative clauses⁶. They are barely described as expressing a result or consequence of the situation represented in the main clause. The precise syntactic status of the clauses is not discussed, i.e., the degree of syntactic integration of the resultative (or consequential) clause in the main clause is not explored.

It is relatively consensual that there are two types of adverbial subordinate clauses, according precisely to the degree of syntactic integration of the clauses in a higher constituent (Lobo 2003; 2013, among others). Applying to example (3) the tests that are usually used to distinguish between integrated subordinate clauses and peripheral ones, the conclusion is that the clause introduced by the connective *de modo que* rejects all syntactic focusing structures that are perfectly accepted by integrated subordinate clauses (as, for example, causal ones). More specifically, it rejects the focusing cleft structure (3a), and does not occur under the scope of focusing negation (3b) nor under the scope of focus particles like *only* (3c):

(3a) **Era de modo que recorriam à mendicidade como meio de sobrevivência que tinham baixo nível económico e más condições habitacionais.*

[*It was as a result they survived by begging that they were poor and had bad housing conditions.]

(3b) **Não tinham baixo nível económico e más condições habitacionais de modo que recorriam à mendicidade como meio de sobrevivência.*

[*They were not poor and had bad housing conditions as a result they survived by begging.]

(3c) **Só tinham baixo nível económico e más condições habitacionais de modo que recorriam à mendicidade como meio de sobrevivência.*

[*They only were poor and had bad housing as a result they survived by begging.]

Moreover, they cannot occur in alternative interrogative sentences (3e), another syntactic behavior that distinguishes these clauses from integrated adverbial ones:

(3e) **Tinham baixo nível económico e más condições habitacionais de modo que recorriam à mendicidade como meio de sobrevivência ou de modo que aceitavam qualquer emprego?*

[*They were poor and had bad housing conditions, as a result they survived by begging or as a result they accepted any job?]

A possible explanation for this behavior is to assume that consequential clauses are loosely attached, in syntactic terms, to the main clause and are, therefore, peripheral adverbial clauses. But this does not seem to be an accurate answer. In fact, we argue that the outcome of the connection is not, syntactically speaking, a complex sentence fostering a subordinate clause. We will call upon a battery of tests, among which Peres' 1997, to prove our point.

The first test involves embedding the whole utterance as an internal argument of a verb that allows (simple or complex) complement clauses (3f); the second one involves embedding the whole utterance under the scope of a sentence adverbial (3g):

(3f) **O Rui disse [que [tinham baixo nível económico e más condições habitacionais, de modo que recorriam à mendicidade como meio de sobrevivência]].*

[*Rui said [that [they were poor and had bad housing conditions, as a result they survived by begging.]

(3g) **Possivelmente, [tinham baixo nível económico e más condições habitacionais, de modo que recorriam à mendicidade como meio de sobrevivência].*

[*Possibly, [they were poor and had bad housing conditions, as a result they

survived by begging.]

In (3f), the asterisk stresses that the construction in italics does not behave as a complex sentence, built from two integrated clauses. In fact, only the first member of the construction, the first clause, is interpreted as the complement of the *dicendi* verb *dizer* (“to say”).

Similarly, in (3g), only the first clause is interpreted as being under the scope of the sentence modal adverb *possivelmente* (“possibly”).

The conclusion one can infer from these two tests is that the discourse fragment in italics in (3f) and (3g) does not behave as a complex sentence, built upon two connected clauses, a main one and a dependent one. The same outcome holds if the same manipulation applies to other examples, with different connectives. Therefore, the connectives at stake do not behave like subordinating conjunctions. They are discourse connectives or DMs, linking two discourse spans that, though semantically related, are not syntactically integrated.

If the behavior of example (3) is contrasted with the behavior of its causal paraphrase (9), the difference is striking:

(9) *Recorriam à mendicância como meio de sobrevivência porque tinham baixo nível económico e más condições habitacionais.*

[They survived begging *because* they were poor and had bad housing.]

(9a) *O Rui disse [que [recorriam à mendicância como meio de sobrevivência porque tinham baixo nível económico e más condições habitacionais.]*

[Rui said [that [they survived begging *because* they were poor and had bad housing.]

(9b) *Possivelmente, [recorriam à mendicância como meio de sobrevivência porque tinham baixo nível económico e más condições habitacionais.]*

[Possibly, [they survived begging *because* they were poor and had bad housing.]]

Examples (9a) e (9b) are perfectly acceptable. This means that the connection built up by the subordinating conjunction *porque* (“because”) gives rise to a complex sentence that can be embedded in both contexts.

Let us focus now on other linguistic tests that can support and reinforce our line of argument. The insertion of a tag-question after the first clause is totally acceptable in (3), as is shown in (3h), but odd in (8c):

(3h) *Tinham baixo nível económico e más condições habitacionais, não é verdade? De modo que recorriam à mendicidade como meio de sobrevivência.*

[They were poor and had bad housing, wasn't it? As a result, they survived begging.]

(8c) *?Recorriam à mendicidade como meio de sobrevivência, não é verdade? Porque tinham baixo nível económico e más condições habitacionais.*

[?They survived begging, wasn't it? Because they were poor and had bad housing.]

But if the tag-question follows the whole sentence in (8), then it becomes perfectly acceptable (8d):

(8d) *Recorriam à mendicidade como meio de sobrevivência porque tinham baixo nível económico e más condições habitacionais, não é verdade?*

[They survived begging because they were poor and had bad housing, wasn't it?]

The different behavior of (3h) and (8c) emphasizes the illocutionary autonomy of the first clause in (3h). Indeed, it is well known that tag-questions follow assertions. That is why its occurrence is perfectly acceptable in (3h) and (8d), where the tag-question follows an assertion, but odd in (8c), because the first clause of the causal construction is not asserted on its own. In fact, the causal construction *p because q* is a single assertion: the speaker asserts the causal link between *p* and *q*.

The last relevant test involves combining the comment clause *como sabes* (“as you know”) with consequential and causal constructions, (3i) and (9d) respectively:

(3i) *Como sabes, tinham baixo nível económico e más condições habitacionais, de modo que recorriam à mendicidade.*

[As you know, they were poor and had bad housing, as a result they survived begging.]

(9d) *Como sabes, recorriam à mendicidade como meio de sobrevivência porque tinham baixo nível económico e más condições habitacionais.*

[As you know, they survived by begging because they were poor and had bad housing.]

In (9), the comment clause only applies to the first member of the construction (*tinham baixo nível económico e más condições habitacionais*). However, in (10) the comment involves the whole construction.

Combining the results of all the tests applied to consequential constructions, and bearing in mind that there is, obviously, a semantic connection between the two clauses, which is made explicit by the DM at stake, we reach the conclusion that these constructions fit Huddleston & Pullum's definition of supplementation (2002:1350): "it is the lack of integration into the syntactic structure that distinguishes supplementation from dependency constructions and coordination. But supplementation is like coordination in being non-headed: since the supplement is not integrated in the structure it cannot function as a dependent to any head." And further ahead the same authors add: "although supplements are not syntactically dependent on a head, they are semantically related to what we call their *anchor*." (2002:1351).

Being a supplement, the consequential clause can not occur before the anchor, as the following example shows:

(11) **De modo que recorriam à mendicidade, tinham baixo nível económico e más condições habitacionais.*

[*As a result they survived begging, they were poor and had bad housing.]

This behavior contrasts with what happens with typical adverbial subordinate clauses, which can occur in initial position, fronting the main clause⁷.

It is worth stressing that the syntactic autonomy of the consequential supplement clause seems paralleled by its prosodic behavior. In fact, an intonation break sets off the supplement, and this is signaled in written texts by punctuation marks. In the corpus where the examples were collected from, the punctuation marks are quite variable, from a comma to stronger punctuation marks such as a semicolon, dash or full stop. Strong punctuation marks, like full stops, dashes and even semi-colons, signal a strong syntactic autonomy between the two members of the construction, which is the outcome of two different speech acts.

To sum up: consequential constructions do not behave as subordinate complex clauses. The connectives that introduce the second member of the construction are prototypical DMs, and not subordinate conjunctions: they signal a discourse relation between the two members of the construction, which occur in linear sequence but are not integrated into syntactic structure.

As many researchers have already stated, there is a continuum or a cline between clause combining in discourse, from loose to tight combination (Huddleston & Pullum 2002; Lehmann 1985; Mendes 2013; Peres & Mascarenhas 2006, a.o.). The continuum may be represented as is shown in table 1:

Juxtaposition	Supplementation	Coordination	Peripheral Subordination	Integrated Subordination
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Table 1: the continuum of clause combining in discourse

In juxtaposition cases, there are no discourse relational devices between the two clauses, whereas in supplementation DMs signal the coherence relation at stake. It is exactly the case with the consequential constructions under analysis.

Focusing now on the distribution of the DMs, it is possible to state, according to the empirical data, that they prototypically head the consequential clause. But it is undeniable that there is a difference in the distribution of *de modo que*, *de forma que*, *daí (que)* on the one hand, and *consequentemente*, *por conseguinte*, *por*

isso and *assim*, on the other hand. In effect, the former have a fixed position, whereas the latter have a certain mobility within their host utterance, as the following manipulation of examples (4) and (5) shows:

(4a) *Há quatro dias que nos bombardeiam, consideramos, por isso/consequentemente/assim/por conseguinte, o acordo caducado.*

[They have been bombing us for four days. We consider, therefore, that the agreement has expired.]

(5a) *Aumentou o grau de profissionalismo; melhorou o nível do espectáculo, consequentemente/por conseguinte, por isso/? assim.*

[The degree of professionalism has increased. The performance, has improved, as a consequence.]

3. Semantic and pragmatic analysis

These constructions display the discourse relation of Consequence, acknowledged in different theoretical frameworks focused on discourse or text coherence (Mann & Thompson 1988, Sanders et al. 2001, Taboada & Mann 2006, a.o.). It can be defined as forward Causality: the situation described in the supplement is interpreted as the consequence or the result of the situation represented in the anchor⁸.

The dominant distinction in existing classification proposals within the area of discourse relations (van Dijk 1977; Kehler 2005; Mann & Thompson 1988; Sanders et al. 2001; Taboada & Mann 2006, a.o.) involves a bipartition between subject matter, content or semantic relations on the one hand, when the relation connects situations of the world (the 'real world' or the world described in the text), and presentational or pragmatic relations on the other hand, where the illocutionary status of (at least one of) the discourse spans are taken into account. Consequence discourse relation is a semantic one, relating propositions that are extensionally interpreted, since they denote situations of the world.

The DMs signaling the Consequence discourse relation, with their procedural meanings, automatically trigger the intended interpretation. This means that the

DMs encode instructions on how to interpret the link between the two discourse segments, decreasing processing costs.

There is a semantic equivalence between the consequential constructions and the causal ones, which means that each construction entails the other one. Let us remember the paraphrase between (3) and (8), repeated here:

(3) *Tinham baixo nível económico e más condições habitacionais, de modo que recorriam à mendicidade como meio de sobrevivência.*

[They were poor and had bad housing conditions. As a result, they survived by begging.]

(8) *Recorriam à mendicidade como meio de sobrevivência porque tinham baixo nível económico e más condições habitacionais.*

[They survived begging because they were poor and had bad housing.]

From the point of view of temporal semantics, there is necessarily a relation of posteriority between the situation described in the supplement and the one described in the anchor. And the reference point for the supplement location time is always the anchor time. Therefore, the construction at stake is iconic, since the linearity of discourse reflects the sequential order of the events in the world. Note that iconicity is not present in causal constructions, since in these latter the result is expressed before the cause.

The selection of tense/mood in the anchor and the supplement clauses is a relevant semantic constraint in the processing of the consequential interpretation. Hence, the past and present tenses of the indicative mood, in both discourse spans, lead the hearer/reader to the interpretation that a factual consequence is described as the result of a factual cause. In other words, in consequential constructions, the selection of the indicative mood follows the rule that is valid for its use: both propositions are presented as true⁹.

As Lobo (2013) has already pointed out, when the subjunctive occurs in the clause introduced by the DMs *de modo que* and *de forma que*, the consequential interpretation is suppressed and a purpose reading is automatically triggered:

(12) ... *transplantaram para ratos e ratinhos tumores humanos do pulmão, da mama e do cólon e deixaram-nos «instalar-se» durante cerca de um mês, de forma que eles se espalhassem pelo organismo dos animais sob forma de metástases.* (ext115565-clt-soc-93b-1)

[...they transplanted human lung, breast and colon tumors into mice and rats and let them become established for a month, in order that they would spread throughout their bodies as metastasis.]

With the DM *daí*, the occurrence of the inflected infinitive is mandatory. In the corpus, there are occurrences of simple and compound infinitive. The main semantic difference is that the compound infinitive, due to its perfective aspectual value, describes a situation that is always interpreted as anterior to the utterance time (see example 2), whereas the simple infinitive describes a situation that still holds at the utterance time, as is shown in next example:

(13) *O empregado referido pelo leitor acedeu à situação de desempregado após os 55 anos de idade, daí ter direito a 30 meses subsidiados.* (ext1444165-clt-soc-93a-2)

[The employee mentioned by the reader became unemployed after being 55 years old. As a result, he has the right to receive 30 months of payment.]

In any case, the infinitive keeps the factual nature of the information conveyed by the consequential clause.

With the DM *daí que* (see example 1), the subjunctive mood is mandatory, but this context, along with subordinate concessive clauses introduced by ‘*embora*’, is an exception to the general rule of the subjunctive usage. In fact, the clause introduced by *daí que* is interpreted as true.

There is a total semantic equivalence between *p // daí que q* and *p // daí q*, since there is compatibility between the subjunctive tenses and the infinitive form chosen¹⁰. See the linguistic manipulation of the examples:

(2) *Em cada uma delas, detinha cinco por cento do capital, daí ter sido conhecido em todo o mundo como o «senhor cinco por cento».*

(2a) *Em cada uma delas, detinha cinco por cento do capital, daí que tenha sido conhecido em todo o mundo como o «senhor cinco por cento».*

[He had five percent of the capital in each one. *As a result*, he was known everywhere in the world as “mister five percent.]

(2b) *Em cada uma delas, detém cinco por cento do capital, daí ser conhecido em todo o mundo como o «senhor cinco por cento».*

[He has five percent of the capital in each one. *As a result*, he is known everywhere in the world as “mister five percent.]

In the corpus, and in quantitative terms, the consequential clause introduced by *daí*, involving an infinitive form, has fewer occurrences than its equivalent finite clause introduced by *daí que*. Our empirical data also show the productivity of the construction involving *daí* followed by a noun phrase whose head is a deverbal noun¹¹.

The following table sums up the mood distribution in consequential clauses, according to the connectives selected¹²:

DMs	de forma/modo que, assim, consequentemente, por conseguinte	daí que	daí
Mood	Indicative	Indicative	Infinitive

Table 2: mood distribution and consequential DMs in Portuguese

The factive nature of consequential constructions is a defining property. As they always denote extensional entities, i.e., factual situations, located in space and time, consequential clauses totally reject the occurrence of modal (epistemic or deontic) operators, as is shown in (3i) and (3j):

(3j) *Tinham baixo nível económico e más condições habitacionais, de modo que #tinham de/#deviam recorrer à mendicância como meio de sobrevivência.*

[They were poor and had bad housing, as a result, they #had to/ #should survive begging.]

(31) *Tinham baixo nível económico e más condições habitacionais, # de modo que penso que tinham de recorrer à mendicidade como meio de sobrevivência.*

[They were poor and had bad housing, # as a result, I think they survived begging.]

It is important to clarify the use of the symbol # in (3j) and (3l). The symbol is only intended to stress that the presence of modal operators immediately changes the interpretation: the consequential interpretation is blocked, and a conclusive reading is automatically triggered. This means that the clause introduced by the DM will be interpreted as a conclusion (or the logical consequence of a process of reasoning), and the previous clause will be read as the premise or evidence from which the conclusion is inferred¹³.

Concerning the aspectual classes of the predications involved in the two members of the construction, the empirical data from the corpus do not provide evidence on any semantic restrictions. In fact, all aspectual classes can occur either in the anchor or in the supplement, as far as the consequential reading is consistent with world knowledge, or some other knowledge source. Thus, events (processes, culminated processes, culminations and points, according to Moens' terminology (1987), adopted by Raposo *et al.* 2013) and states may be coherently connected by the Consequence discourse relation. Examples (1) to (8) illustrate some of the possible combinations: in (1) two culminations; in (2), two states; in (3) A state and a process; in (4), a process and a state; in (5) a culminated process and a state; in (6), two states, in (7), a culminated process and a state, and in (8), two states.

Let us now focus on what happens, semantically speaking, in the absence of the DMs. If the consequential DMs are suppressed in all the examples, giving rise to two independent and juxtaposed sentences, the Consequence discourse relation may not be automatically inferred, leading to a possible ambiguity. Let us consider the following examples:

(1a) *A DGT detectou agora que esse parecer não constituía legalmente a aprovação do pedido de localização. Decidiu convocar uma reunião da comissão especial para deliberar sobre o assunto.*

[The DGT has now detected that that report does not constitute a legal approval of the request for location. As a result, it has decided to call for a meeting of the committee to decide on the matter.]

(14) *Nós é que abrimos este caminho. Sabemos que o abrimos suficientemente estreito para que mais ninguém possa passar por ele, além de nós. (ext1512165-pol-95b-2)*¹⁴

[We did open this way. We know we have opened it narrow enough so that no one can walk through it, but us.]

In both cases, it is possible to infer two kinds of discourse relations: a Consequence one and an Addition one. Nevertheless, by default, the Consequence relation will be inferentially processed. This can be explained in line with Levinson (2000: 122), who says: “when events are conjoined, they tend to be read as temporally successive, and if at all plausible, as causally linked.” The explanation provided by the author for this ‘maximization’ or enrichment of discourse coherence is based on pragmatic principles. More precisely, Levinson calls upon the informativeness principle (an elaboration of the second Gricean quantity maxim), which induces the addressee to enrich the informational content of the speaker’s utterance, by assuming “the richest, causal and referential connections between described situations or events, consistent with what is taken for granted.” (Levinson, 2000: 114). But the inference, being an implicature, may be cancelled or suspended, as shown by the following constructed examples:

(13) *O Rui trabalhou muito. De qualquer modo, está exausto.*

[Rui worked a lot. He is exhausted, anyway.]

(14) *O Rui trabalhou muito. Está exausto, mas talvez não seja pelo trabalho.*

[Rui worked a lot. He is exhausted, but may be it’s not because of the work.]

So, when the DMs are explicit, the identification of the intended discourse relation is immediate and transparent, and does not rely on defeasible heuristics.

Pragmatically, consequential constructions always involve two speech acts, more specifically, two assertions. It is not possible to connect two speech acts belonging to different classes, using the same DMs, and still obtain a consequential reading, as is shown below:

(15) *São horas de ir para a escola. #De modo que levanta-te!*

[It's time to go to school. #As a result, get up!]

This is due to the semantic properties of the construction: as outlined above, the consequential construction implies that two described situations are true and that a cause-consequence link holds between them¹⁵. In (15), the second clause conveys an order, whose felicity conditions exclude truth conditions.

Given the possibility, for the speaker/writer, to choose between a consequential construction and a causal one, a relevant question arises: which are the communicative effects of choosing to utter two different assertions instead of a single causal assertion? The only plausible reason is that the speaker intends to highlight the second assertion, introduced by the consequential DM, pointing out its salience in terms of text or discourse continuation. It is what happens in the following example:

(16) *Mário de Almeida prepara-se para cumprir mais um mandato na Associação ... Só que, após os resultados das últimas eleições autárquicas, vai encontrar uma Associação onde o peso do PSD está reforçado. Daí que as figuras das vice-presidências laranja ganhem uma revigorada importância. Mário de Almeida confia que o clima de entendimento entre todos os autarcas se manterá, mas não esconde uma preocupação: que Isaltino Morais seja a escolha do PSD para uma vice-presidência. (CRPC, J47522)*

[M. de A. is preparing to fulfil his mandate in the Association...However, following the results of the last local elections, he will be confronted by a greater prevalence of the supporters of PSD. As a result, the PSD vice-presidents will be of great importance. M. de A. trusts that the conciliatory climate between all Mayors will continue, but doesn't hide his concern that Isaltino Morais will be chosen by PSD as a vice-president.]

After stating the importance of the vice-presidents, the writer continues elaborating on Almeida's concern with one of the vice-presidents. But further investigation with other longer texts is needed to fully validate our hypothesis.

4. Main conclusions

The main conclusions of this study are driven from the data under analysis and attempt to be a contribution to the characterization of consequential constructions in contemporary European Portuguese. Furthermore, this study also sheds some light on what DMs are, by contrast with conjunctions. The following paragraphs will sum up the main results of the investigation.

a. Contrary to Lobo (2013), it is argued that consequential clauses are not subordinate adverbial clauses. A battery of syntactic, semantic and pragmatic tests have proved that the constructions at stake are typically a case of supplementation. In fact, there is semantic dependency between the supplement and the anchor, but there is no syntactic integration between them. In other words, the outcome of the connection is a coherent text, but not a complex subordinate sentence.

b. Semantically, the constructions under analysis illustrate the Consequence discourse relation, which mirrors the Cause discourse relation. Consequential constructions are iconic, since they reproduce, in the discourse linearity, the natural temporal sequence of the situations of the external world linguistically expressed. Thus, in terms of time location, the situation described in the supplement is always posterior to its reference point, the time interval associated with the situation described in the anchor. Furthermore, factuality is a relevant semantic feature of these constructions, as was shown by the tense/mood analysis. Therefore, the presence of modal expressions in the supplement immediately blocks the consequential reading, triggering a conclusive one. No restrictions were found concerning the aspectual classes of predications involved, as long as they are consistent with world knowledge.

c. Unlike subordinate clauses connected by causal conjunctions, which give rise to a complex sentence, uttered as a single assertion, the two clauses connected by consequential DMs have illocutionary autonomy, since they correspond to two different assertions. And this pragmatic autonomy is reflected in the syntactic behavior of the construction, as well as in its prosodic properties.

d. In the absence of Consequential DMs, two interpretations seem possible, one of them based on the Consequence relation, the other one on the Addition relation. Nevertheless, it was argued that pragmatic heuristics favors, by default, the reading of Consequence.

e. The expression DM should be used specifically for the connectives that occur in these type of constructions, i.e., in constructions that involve an anchor and a supplement: they signal a semantic (or semantic-pragmatic) instruction between two discourse spans, thus contributing decisively to text/discourse optimal coherence, but, syntactically, they do not give rise to a (complex or compound) sentence. Therefore, the distinction between DMs and other connectives, namely subordinating and coordinating conjunctions, becomes a clear-cut one: the latter connect two clauses within a single sentence, whereas the former articulate a supplement with an anchor. This clarification will have a positive impact in the definition of DMs, a concept far from being stabilized in the linguistic community.

Notes

¹ Cf. Lopes (2009) for a detailed argumentation that Conclusion and Justification are pragmatic discourse relations, operating both in the epistemic domain, the meaning domain representing reasoning, and in the illocutionary domain, related with speech acts.

² Consequence is totally equivalent to Result (Asher & Lascarides 2003; Kehler 2005; Mann & Thompson 1988). In Sanders et al. (1992), there is a single label, Cause-Consequence relation, which encompasses forward and backward causality.

³ The adjective *consequential* will be used to refer to the connectives that signal the discourse relation at stake, as well as the clauses they introduce.

⁴ In the translation of the Portuguese connectives *de forma que*, *de modo que*, *daí (que)* and *assim* we took the decision of using the English connective *as a result*.

⁵ This example was collected from CRPC (Corpus de Referência do Português Contemporâneo/Contemporary Portuguese Reference Corpus).

⁶ The designation will be avoided in order to avoid ambiguity between the constructions at stake and those which are, in English, typically called resultative (for example, *John hammered the metal flat*).

⁷ It is known that causal clauses may occur in initial position, with a topic function, or in final position, with an informational focus function. Consequential clauses have no movement and always express new information.

⁸ Given the cumbersome nature of cause-consequence notions, from the Logic point of view, it will be assumed and intuitive and neutral notion of the cause, which will also cover 'reason', 'motivation', as well as volitional and non-volitional *de re* cause. And the same for consequence, which will cover 'effect', 'result', be it volitional or non-volitional.

⁹ Although in the corpus there are no examples where the future tense of the indicative mood occurs, the following constructed example shows that it is compatible with consequential constructions: (i) *A gasolina vai subir na próxima semana, de modo que vou começar a andar mais a pé*. ['The price of petrol is going to increase next week. As a result, I'm going to walk in a more regular basis.']. In this context, the situations are located in the future but they are taken for granted by the speaker.

¹⁰ The symbol || marks an intonational break.

¹¹ Let us see an example: "A moção ontem aprovada não contém o mesmo tom crítico que tem caracterizado o discurso de elementos do PSD local sobre o citado «esquecimento», daí a aprovação (...) pelos socialistas."

¹² It is arguable that infinitive is a mood, even though it is classified as such in many portuguese grammars (cf. Marques 2013). We will not discuss the issue here.

¹³ In Lopes (2004), it was already shown, through empirical data, that *por isso*, *daí (que)* and *de modo que* may also signal a Conclusion discourse relation in Portuguese.

¹⁴ Adapted from the following original text: "Nós é que abrimos este caminho, por isso sabemos que o abrimos suficientemente estreito para que mais ninguém possa passar por ele, além de nós." ['We did open this way, as a result we know we have opened it narrow enough so that no one can walk through it, but us.']

¹⁵ The pragmatic property at stake is quite relevant to distinguish between consequential and conclusive constructions. In fact, conclusive constructions may relate two different classes of speech acts: *São horas de ir para a escola. Portanto, levanta-te!* ['It is time to go to school. So, get up!']

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