

SOME ISSUES ON QUANTIFICATION IN CONSECUTIVE CLAUSES

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RÉSUMÉ

Les phrases aux propositions consécutives constituent un problème complexe en raison de leur statut syntaxique et de leur interprétation sémantique, celles-ci donnant lieu à des analyses très différentes. Notre but, dans cet article, est de proposer une analyse sémantique des phrases subordonnées consécutives finies en Portugais Européen fondée sur des critères de quantification. En effet, nous concluons que la quantification joue un rôle très important dans les phrases consécutives en ce qui concerne leur interprétation. Les données observées suggèrent l'existence de trois types différents de phrases consécutives – celles quantifiant sur des individus (objets), celles quantifiant sur des situations et celles quantifiant sur des propriétés. Cette tripartition nous aide à expliquer quelques restrictions importantes relatives aux différents marqueurs linguistiques dans les phrases consécutives. Elle peut expliquer aussi quelques restrictions sur les classes de mots, la nature des classes aspectuelles des situations de la proposition principale et le type de prédicats nominaux compris dans la quantification.

ABSTRACT

The sentences with consecutive clauses have been a controversial topic because not only their syntactic status but also their semantic interpretation are confronted with many problems which give rise to different analysis. Our aim in this paper is to propose a semantic analysis of finite subordinate consecutive sentences in European Portuguese grounded on quantificational issues. In fact, quantification in consecu-

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tive sentences plays a very important role regarding their interpretation. The data suggest the existence of three different types of quantificational consecutive sentences corresponding to quantification over individuals (objects), quantification over situations and quantification over properties. This division helps to explain some relevant restrictions related to the sort of linguistic 'triggers' of consecutive structures and, in some cases, related to the classes of words that can occur with these, to the nature of aspectual classes of situations of the main clause and to the type of nominal predicates involved in the quantification.

INTRODUCTION

Traditionally, the research on consecutive sentences in works of general scope and even in some which analyse more specifically this theme (see Brito (2003a); I. Álvarez (1999); Giusti (1997); Hybertie (1996)) points out intensification as one of the most relevant properties of these structures. In fact, it is normally said that it is some type of intensification expressed in the main clause that leads to the consequence represented in the subordinate clause. However, an attentive analysis of the data reveals that this idea is too restrictive since there are other types of strategies followed while constructing consecutive sentences.

Therefore the main goal of this paper is to describe the semantic behaviour of consecutive clauses in European Portuguese from a quantificational point of view and to outline a preliminary proposal of division based on semantic criteria. The consecutive sentences that are taken into consideration are the finite subordinate consecutive clauses introduced by the following triggers: inflected and non inflected *tanto* ('so much/so many'), *tão* ('so'), *tantas vezes* ('so many times'), *cada* ('such'), *um* ('a'), *tal* ('such') and *um tal* ('such a').

The data suggest the existence of three different types of quantificational structures corresponding to quantification over individuals (objects), quantification over situations and quantification over properties. We will argue that these three types of quantification are associated with different triggers. For instance, the inflected *tanto* ('so much/so many') relates to quantification over individuals, the non inflected *tanto* ('so much') and *tão* ('so') to quantification over properties and *tão* ('so') and *tantas vezes* ('so many times') to quantification over situations.

This paper has the following structure: in section 1, the consecutive sentences involving quantification over individuals will be analysed; in 2, those involving quantification over situations; and, in 3, the ones that involve quantification over properties. Finally, some conclusions will be drawn.

1. QUANTIFICATION OVER INDIVIDUALS

Quantification over entities occurs only when the quantifier *tanto* ('so much/so many') is involved and when this quantifier syntactically agrees with the noun in its scope³. These nouns are much more common in the singular

3 For a discussion about nominal reference, see Oliveira & Duarte (2003).

than in the plural. In the singular, non count nouns are systematically used (cf. (1) and (2), with *água* ('water') and *silêncio* ('silence')). In the few cases in which count nouns occur, these nouns are shifted to non count ones (cf. (3), with *gargalhada* ('laugh')).

- (1) *O João bebeu tanta água que ficou mal disposto.*
The-João drank so-much water that got sick.
João drank so much water that he got sick.
- (2) *Estava tanto silêncio que se podia ouvir uma folha a cair.*
Was so-much silence that could hear a leaf falling.
There was so much silence that we could hear a leaf falling.
- (3) *O João soltou tanta gargalhada que fez rir toda a gente.*
The-João gave so-much laugh that made laugh everybody.
João gave so many laughs that he made everybody laugh.

In the plural, count nouns are systematically used, which is expected, since only this kind of nouns allows the plural without type shifting (cf. (4) and (5)).

- (4) *O João soltou tantas gargalhadas que fez rir toda a gente.*
The-João gave so-many laughs that made laugh everybody.
João gave so many laughs that he made everybody laugh.
- (5) *O João comeu tantas bolachas que ficou mal disposto.*
The-João ate so-many cookies that got sick.
João ate so many cookies that he got sick.

The occurrence of the eventuality expressed by the consecutive clause is dependent of the existence of a certain quantity of entities, in the case of count nouns, or it is dependent on the existence of a certain portion of an entity, in the case of non count nouns. In both cases, the denotations of the nouns are involved in the state of affairs expressed by the main clause. These amounts are not determined and they are contextually dependent (see (6)).

- (6) a. *FC Porto marcou tantos golos que ganhou o jogo.*
FC Porto scored so-many goals that won the game.
FC Porto scored so many goals that it won the game.
- b. *FC Porto marcou tantos golos que ganhou o campeonato.*
FC Porto scored so-many goals that won the championship.
FC Porto scored so many goals that it won the championship.

In (6a), the quantity of goals is established by the eventuality expressed by the consecutive clause and it may be 3, 4, 5 or even more goals. But in (6b), the quantity of goals will be greater than in (6a). In fact, our world knowledge indicates that the required number of goals to be champion is greater because it is necessary to play several games, and not only one game.

(7) is another example of this context dependency. The number of boars in (7a) is smaller than the number of boars in (7b), due to the different entities involved in the state of affairs expressed by the main clause and their ability to eat. The same applies to (8). The difference is that, in this case, we are not considering the cardinality of a set of entities, but the extension of a contextually dependent portion of an entity, since there is a non count noun (*vinho* ('wine')).

- (7) a. *Panoramix* *comeu* *tantos* *javalis* *que* *ficou* *mal* *disposto*.
Panoramix *ate* *so-many* *boars* *that* *got* *sick*.
Panoramix ate so many boars that he got sick.
- b. *Obelix* *comeu* *tantos* *javalis* *que* *ficou* *mal* *disposto*.
Obelix *ate* *so-many* *boars* *that* *got* *sick*.
Obelix ate so many boars that he got sick.
- (8) a. *Panoramix* *bebeu* *tanto* *vinho* *de* *uma* *vez* *só* *que* *ficou* *mal* *disposto*.
Panoramix *drank* *so-much* *wine* *all* *at* *once* *that* *got* *sick*.
Panoramix drank so much wine all at once that he got sick.
- b. *Obelix* *bebeu* *tanto* *vinho* *de* *uma* *vez* *só* *que* *ficou* *mal* *disposto*.
Obelix *drank* *so-much* *wine* *all* *at* *once* *that* *got* *sick*.
Obelix drank so much wine all at once that he got sick.

Notice that, if we follow Chierchia (1998) and consider that the extension of singular non count nouns denotes the set of individuals that are minimal parts of a substance and all possible pluralities of those individuals, we can provide a solo explanation to these cases. Therefore, in (7), we are considering the cardinality of a set of individuals denoted by *javalis* ('boar') and in (8) we are considering the cardinality of a set of individuals which are minimal parts of the denotation of *vinho* ('wine').

All in all, the occurrence of the eventuality expressed by the consecutive clause depends of an undetermined and contextually dependent quantity of entities (with count nouns) or portion of an entity (non count nouns) involved in the state of affairs expressed by the main clause.

Besides the structures discussed above, there are also consecutive clauses introduced by *tanto* ('so much') and followed by noun without syntactic agreement between the two (cf. (9)).

- (9) *Isso* *era* *tanto* *verdade* *que* *o* *primeiro* *lance* *de* *perigo* *dos* *donos* *da* *casa* *surgiu* *aos* *17*'.
That *was* *so-much* *truth* *that* *the* *first* *hit* *of* *danger* *of-the* *owners* *of-the* *house* *happened* *at-the* *17*'.
That *was* *so* *true* *that* *the* *first* *dangerous* *hit* *of* *the* *owners* *of* *the* *house* *happened* *at* *17*'.

There are also consecutive clauses introduced by *tão* ('so'), *cada* ('such'), *tal* ('such'), *um* ('a') and *um tal* ('such a') and followed by noun. However, there is quantification over individuals only in the cases of *tanto* ('so much/so many') plus noun with syntactic agreement. The structure such as the one presented in (9) and those with triggers as *tão* ('so'), *cada* ('such'), *tal* ('such'), *um* ('a') and *um tal* ('such a') involve quantification over properties and they will be discussed in section 3.

2. QUANTIFICATION OVER SITUATIONS

Some consecutive clauses involve the quantification over eventualities. In these cases, the consequence arises as a result of the repetition or the recurrence of a given situation in a non-specified number of times.

The expression of quantification over situations in consecutive clauses may be obtained in different ways. The construction *tantas vezes... que* ('so many times... that'), illustrated in (10), is, perhaps, the most relevant one, since it points unambiguously and consistently to the repetition of a given situation as the source of the consequence:

- (10) *O Pedro gritou tantas vezes que acordou os vizinhos.*
The Pedro screamed so-many times that woke-up the neighbours.
Pedro screamed so many times that he woke up the neighbours.

Sentences comprising the adverb *tanto* ('so much') are typically ambiguous between a reading expressing the quantification over situations and an interpretation relating to the quantification over properties. Consider the following example:

- (11) *A Maria estudou tanto que teve excelentes notas.*
The Maria studied so-much that had excellent results.
Maria studied so much/so many times that she got excellent results.

A sentence like (11) may be interpreted in two different ways: in order to get excellent results, Maria could have studied hard, intensively (property reading) but she also could be involved in a sufficient number of situations of study, achieving that goal (repetition of situations reading).

Applying obligatorily to noun phrases, the inflected *tanto* ('so much/so many') only indirectly gives rise to a quantification-over-situations reading. In fact, the meaning conveyed by the consequence presented in the consecutive clause may force a spreading of the individuals under the scope of the quantifier over different eventualities. Consider the following example:

- (12) *Este crocodilo comeu tantos gnus que cresceu rapidamente.*
This crocodile ate so-many gnus that grew-up quickly.
This crocodile ate so many gnus that it grew up quickly.

In sentence (12), *tantos* ('so many') quantifies explicitly over the individuals in its scope – namely, *gnus* ('gnus'). The interpretative conditions

imposed by the consequence referred to in the consecutive clause, however, force an inference of multiple eventualities: in order for the crocodile to grow up, it must have eaten many gnus in different situations.

Since it unambiguously applies to eventualities, the quantifier *tantas vezes* ('so many times') occurs freely in the main sentence, showing no significant changes in its core meaning.

If we select a quantifier, like *tanto* ('so much'), that conveys some kind of ambiguity, however, its position in the main sentence may be somehow relevant.

If all required conditions are met, the non inflected *tanto* ('so much') may quantify over situations not only in a post-verbal position (cf. (13)) but also in a pre-verbal one (cf. (14)):

- (13) *A Rosa Mota correu tanto que ganhou muitos prémios.*
The Rosa Mota ran so-much that won many prizes.
Rosa Mota ran so much||so many times that she won several prizes.
- (14) *A Rosa Mota tanto correu que ganhou muitos prémios.*
The Rosa Mota so-much ran that won many prizes.
Rosa Mota ran so much||so many times that she won many prizes.

It is worth noticing that, in these cases, the quantification-over-situations reading seems to be more preferred in a pre-verbal position than in a post-verbal one, in which the property intensifying interpretation seems to be strengthened.

This difference shows up even more sharply if we consider structures in which we can explore some scope ambiguities. Consider the following illustrative examples:

- (15) *O João bateu tanto na Maria que ela saiu de casa.*
The João beat so-much in-the Maria that she left from home.
João beat Maria so much||so many times that she left home.
- (16) *O João tanto bateu na Maria que ela saiu de casa.*
The João so-much beat in-the Maria that she left from home.
João beat Maria so much||so many times that she left home.

Although both sentences are, to a certain extent, ambiguous, their preferential readings seem to be quite different. While (15) points to an intensive property interpretation, in which Maria leaves home as a consequence of a particularly violent or long beating by João – the post-verbal quantifier is considered to have narrow scope –, (16) expresses typically a quantification over situations in which Maria leaves home as a consequence of repeated beatings by João: here, the pre-verbal quantifier is seen as having wide scope over the whole eventuality.

In short: although *tanto* ('so much') leads to a true interpretative ambiguity between an intensive property and a quantification-over-situations

reading, its placement in the sentence may be relevant concerning the choice speakers make: a pre-verbal quantifier will point preferentially to a repetitive pattern of eventualities; a post-verbal one will typically express the intensification of some relevant property.

The main restrictions to the application of *tantas vezes* ('so many times') quantifying over situations have to do with the aspectual properties of the eventualities involved. As we will point out shortly, such restrictions are not specific to consecutive clauses, since they seem to apply to the phenomenon of quantification over situations in general.

All aspectual classes except individual-level non-phase statives⁴ are compatible with the presence of *tantas vezes* ('so many times') as the following examples confirm:

- (17) **O João foi tantas vezes alto que jogou numa equipa de basquetebol. (individual-level non phase state)*
**The João was so-many times tall that played in- a team of basketball.*
**João was tall so many times that he played in a basketball team.*
- (18) *A professora foi tantas vezes simpática com os alunos que estes lhe ofereceram um ramo de flores. (individual-level phase state)*
The teacher was so-many times nice with the students that these her gave a bunch of flowers.
The teacher was nice to the students so many times that they gave her a bunch of flowers.
- (19) *A Maria esteve tantas vezes doente que não foi de férias. (stage-level state)*
The Maria was so-many times sick that not went for holidays.
Maria was sick so many times that she didn't go away on holidays.
- (20) *Este ano choveu tantas vezes que o rio transbordou. (process)*
This year rained so-many times that the river overflowed.
During this year it rained so many times that the river overflowed its banks.
- (21) *O Pedro tocou a sonata tantas vezes que acordou os vizinhos. (culminated process)*
The Pedro played the sonata so-many times that woke-up the neighbours.

⁴ We distinguish between individual-level non-phase statives and individual-level phase statives on the grounds of aspectual criteria. The former behave consistently as "standard" states, while the latter, in the appropriate conditions, exhibit some characteristic properties of processes. For details and tests to identify both classes, cf. Cunha (2004).

Pedro played the sonata so many times that he woke up his neighbours.

- (22) A *Ana caiu tantas vezes que partiu uma perna.*
(*culmination*)

The Ana fell-down so-many times that broke a leg.

Ana fell down so many times that she broke her leg.

In addition to individual-level non phase states, all eventualities that cannot be repeated do not combine with *tantas vezes* ('so many times'):

- (23) **O meu gato morreu tantas vezes que o enterrei no jardim.*

**The my cat died so-many times that him buried in-the garden.*

**My cat died so many times that I buried him in the garden.*

The data we have just presented strongly suggest that *tantas vezes* ('so many times') behaves like other linguistic expressions that quantify over situations such as *N vezes* ('N times') or *cada vez mais vezes* ('more and more times') in that it selects count situations as its input category (see Cunha & Leal, 2006; Cunha, 2007). So, we claim that *tantas vezes* ('so many times'), like the above mentioned quantifiers, exclusively co-occurs with count situations, that is, eventualities that simultaneously can be bound and can be repeated (see Cunha, 2007, for details).

3. QUANTIFICATION OVER PROPERTIES

There is a third type of quantificational consecutive sentences: the one that involves quantifying over properties. The quantifier *tão* ('so') that occurs as antecedent of this type of consecutive sentences intensifies a particular property locating it in a point of a qualitative scale featured by many points. This property can be expressed by an adjective, an adverb and, in specific contexts, a noun as exemplified in (24), (25) and (26), respectively:

- (24) *Cavaco Silva foi tão democrata que nem quis contrariar o Catroga⁵.*

Cavaco Silva was so democrat that not-even wanted go-against the Catroga.

Cavaco Silva was so democrat that he didn't even want to go against Catroga.

- (25) *Jogou tão pouquinho que dos seus pés nunca surgiu grande perigo para Vítor Baía.*

Played so little that from-the his feet never arouse great danger for Vítor Baía.

He played so little that a big danger never arouse for Vítor Baía from his feet.

⁵ The examples (24)-(26), (30), (31), (33), (34), (42) and (43) were taken from Corpus: CETEMPúblico v1.7, available at the web page <http://acdc.linguatca.pt/cetempublico/> in the following search done Jun 27 00:57:39: [lema="tão"] [pos="N"] [0,3] [lema="que"].

- (26) *Sou tão, tão fado que até me sinto feliz por ser triste.*
Am so, so fado that even me feel happy for be sad.
I am so, so fado that I even feel happy for being sad.

The combination “*tão* (‘so’) plus adjective” is undoubtedly the most common⁶. Although only the qualificative adjectives (27) have the feature of gradation mandatory for the type of structure under study, the relational adjective (28) as also the adverbial adjective (29) are compatible with *tão* (‘so’) because these two are recategorised as qualificative adjectives abandoning its technical and strict sense.

- (27) *A mulher do anúncio era tão bonita que todos no restaurante deixaram de comer para a ver.*
The woman of-the commercial was so beautiful that all in-the restaurant stopped of eat to he see.
The woman of the commercial was so beautiful that everyone in the restaurant stopped eating to see her.
- (28) *A escola do Jaime era tão urbana que os alunos do campo eram discriminados.*
The school of-the Jaime was so urban that the students from-the countryside were discriminated.
Jaime’s school was so urban that the students from the countryside were discriminated.
- (29) *A promessa era tão falsa que a Maria nunca mais acreditou nele.*
The promise was so false that the Maria never again believed in-him.
The promise was so false that Maria never believed him again.

Nevertheless, there are some adverbial adjectives that don’t need to undergo any kind of recategorisation and still be part of a consecutive structure such as *frequente* (‘frequent’) or *longo* (‘long’). So one cannot speak of a homogeneous rule regarding the type of adjectives that can occur as antecedent of consecutive clauses.

All in all, the adjectives must be gradational in order to undergo the value of intensification denoted by the quantifier *tão* (‘so’). When the sentences with consecutive clauses display in the antecedent an adjective, this must lie in the group of the qualificative gradational adjectives or be re-analysed as one of those.

⁶ Here we adopt a classification presented in proposals such as Brito (2003b), Demonte (1999) and Miguel (2006) of three lexical-syntactic classes: qualificative adjectives, relational adjectives and adverbial adjectives. The qualificative or modifier adjectives express qualities, states of the names that they modify. The relational adjectives, also known as referential and thematic adjectives, express a relation between the noun they modify and its arguments. The adverbial adjectives modify the way the concept or intension of a term applies itself to a certain referent (Miguel, 2006) and they can also modify a situation.

The second combination mentioned above, *tão* ('so') followed by a noun, imposes many restrictions on the type of noun and on its syntactic role. In fact, the nouns that can be combined with the quantifier *tão* ('so'), also named pseudo-adjectives, are again those that are characterised as having the feature of gradation and the feature of representing a property (compare (30) and (31) with (32)). In order to accomplish this reading, the nouns in question experience a change of meaning and sometimes adopt a stereotyped meaning. Furthermore, these nouns must occur on a non argument position.

- (30) *Jorge Jardim foi sempre tão senhor de si que alegou não poder ir em determinada data a Belém despedir-se protocolarmente do Presidente Craveiro Lopes.*

Jorge Jardim was always so lord of himself that alleged not be-able go in certain date to Belém say-farewell of-protocol to-the President Craveiro Lopes.

Jorge Jardim was always so lord of himself that he alleged not being able to go in a certain date say farewell of protocol to the President Craveiro Lopes.

- (31) *São autênticas raridades... tão raridades que ambos os donos são do Belenenses.*

Are true rarities... so rarities that both the owners are from-the Belenenses.

They are true rarities... so rarities that both owners are from the Belenenses.

- (32) **O João comeu tão bolo que ficou doente.*

**John ate so cake that became ill.*

The last lexical category to be combined with *tão* ('so') in the consecutive sentences is the adverbial as exemplified in the following examples:

- (33) *O jogo correu-lhe tão malzinho que deu um passo atrás numa hipotética transferência.*

The game went-for-him so badly that took a step back in-a possible transfer.

The game went so badly for him that he took a step back in a possible transfer.

- (34) *Os senhores aparecem com a questão do veto, tardiamente... tão tardiamente que me pergunto o que se passou entretanto!*

The gentlemen come with the question of-the veto, late... so late that myself as what went-down in between!

The gentlemen come with the question of the veto, late ... so late that I ask myself what went down in between.

The adverbs used in the intensifying expression must convey properties that can be gradated in a qualitative scale, what amounts to say that they must be able to be placed in a point of that scale. The adverb of manner *malzinho* ('badly') and of time *tardiamente* ('late') share the feature of gradation. However, the adverbs of assertion, of negation, of doubt and of in-

tensity or quantity and some adverbs of time (namely temporal locating adverbs), of place and of manner cannot be property assigners to situations in consecutive sentences, as shown by the following examples:

- (35) **O tremor de terra destruiu tão possivelmente a cidade que não há notícias de edifícios intactos.*
**The shaking of earth destroyed so possibly the city that no is news of buildings intact.*
**The earthquake destroyed so possibly the city that there isn't news of intact buildings.*
- (36) **O tremor de terra ocorreu tão aqui que não ficou pedra sobre pedra.*
**The shaking of earth happened so here that not remained stone over stone.*
**The earthquake happened so here that no stone was left unturned.*
- (37) **O tremor de terra destruiu tão ontem a cidade que hoje à noite tudo estava normal.*
**The shaking of earth destroyed so yesterday the city that tonight everything was normal.*
**The earthquake destroyed so today the city that last night everything was normal.*
- (38) **O tremor de terra foi tão assim que destruiu a cidade toda.*
**The shaking of-the earth was so like-that that destroyed the city whole.*
**The earthquake was so like that that it destroyed the whole city.*

The quantification over properties of situations can also be triggered by the quantifier *tanto* ('so much') with the meaning of 'in such a degree'. Whenever this happens, all aspectual classes are compatible with consecutive structures, as proved by the following examples:

- (39) *As crianças gostam tanto do infantário que não querem ir-se embora.*
The children like so-much of-the nursery-school that not want go away.
The children like the nursery school so much that they don't want to go away.
- (40) *O João deseja tanto ter um bebê que até sonha com isso.*
The João wishes so-much have a baby that even dreams about that.
João wishes so much to have a baby that he even dreams about it.
- (41) *Há dias em que tudo isto me deprime tanto que choro.*
Are days in which everything this me depresses so-much that cry.
There are days that everything depresses me so much that I cry.

- (42) *Além disso, a Compaq tem crescido tanto que precisa de ter mais fornecedores.*
Besides that, the Compaq has grown so-much that needs of having more suppliers.
Besides that, Compaq has grown so much that it needs to have more suppliers.
- (43) *Neste Mundial, há equipas que correm tanto que parecem acreditar que, dessa forma atlética, o jogo dura menos ou acaba antes. (corpora)*
On-this World-Championship are teams that run so-much that seem believe that in-that way athletic the game last less or ends before.
On this world championship there are teams that run so much that they seem to believe that, in that athletic way, the game lasts less time or it ends before.
- (44) *O rapaz tossia tanto que a mãe o levou ao hospital.*
The boy coughed so-much that the mother him took to-the hospital.
The boy coughed so much that his mother took him to the hospital.

There seems that *tanto* ('so much') can intensify both durative and non durative situations, though the latter present more difficulties dictating aspectual commutations.

There are other triggers of consecutive sentences that involve quantification over properties that are combined with nominal expressions. It is the case of *cada* ('such'), *um* ('a'), *um tal* ('such a') and *tal* ('such'). Although we have nouns under the scope of these triggers, the quantification is effectively made over some relevant properties associated with the selected nominal expressions and do not quantify over individuals.

It is worth noticing that *cada* ('such') obligatorily requires a plurality of individuals in its scope, but it is not the number of entities that is quantified (cf. (45)).

- (45) *A gazela deu cada salto que espantou os leões.*
The gazelle gave such jump that scared the lions.
The gazelle gave such a jump that it scared the lions.

What is relevant in (45) it is not the real number of jumps performed by the gazelle, but the quality of those jumps (e.g. their height or their length).

Similar remarks can be made for the other expressions considered here, except for the plurality requirement. In the sentences of (46)-(48) we get a consistent intensive quantification over properties:

- (46) *O João deu UM pontapé ao amigo que o pôs a chorar.*
The João gave A kick at-the friend that him put to cry.
João gave his friend A kick that it made him cry.

- (47) *Cristiano Ronaldo marcou um tal golo que entusiasmou os espectadores.*
Cristiano Ronaldo scored a such goal that roused the viewers.
Cristiano Ronaldo scored such a goal that it roused the viewers.
- (48) *A Maria sentiu tal dor que chamou uma ambulância.*
The Maria felt such pain that called an ambulance.
Maria felt such pain that she called an ambulance.

In sentence (47), for instance, what is said is that it were the exceptional characteristics of the goal performed by Cristiano Ronaldo that caused the enthusiasm of the viewers; in fact, Cristiano Ronaldo scored a single goal, so it is not the quantity of entities (goals, in our example) that is measured out by the combination of the trigger and the noun as those we are analysing here.

It is important to point out that structures including *um* ('a') and, to a certain extent, *cada* ('such'), are only considered consecutive sentences if a special prosody is used. In fact, in (46), unless there is a special prosody, *um* ('a') is interpreted as an indefinite article and the subordinate clause as a relative.

Note, finally, that, although they frequently occur in the singular, nothing prevents *um* ('a'), *um tal* ('such a') and *tal* ('such') from taking in their scope a plurality of entities. However, their interpretation does not change, that is, they continue to quantify over properties, not over individuals. (49) exemplifies with *tal* ('such'):

- (49) *A Teresa contou tais histórias às crianças que elas ficaram assustadas.*
The Teresa told such stories to-the children that they became frightened.
Teresa told the children such stories that they became frightened.

All in all, the quantification over properties in consecutive sentences can be divided into two groups: quantification over properties of individuals and quantification over properties of situations. In the first case, there is the representation of an intensified property expressed (i) by *tão* ('so') followed by an adjective (cf. (50)) or a noun and (ii) by *cada* ('such'), *um* ('a'), *tal* ('such') and *um tal* ('such a') followed by a noun. In the second case, there is a property of a stative or eventive situation denoted by verbs that is emphasised by the quantifiers *tão* ('so') plus adverb (cf. (51)) and *tanto* ('so much').

- (50) *O Jaime provou um vinho tão bom que quis logo comprar uma garrafa.*
The Jaime tasted a wine so good that wanted straightway buy a bottle.
Jaime tasted a wine so good that he wanted straightway to buy a bottle.

- (51) *A Ana riu tão entusiasticamente que todas as pessoas riram.*
The Ann laughed so enthusiastically that all the people laughed.
Ann laughed so enthusiastically that all the people laughed.

CONCLUDING REMARKS

The semantic study of consecutive sentences carried out on this paper led to the following conclusions.

Firstly, quantification plays a very important role on the semantic interpretation of consecutive clauses. As a matter of fact, the intensification that is traditionally described as a distinctive feature of this type of construction is insufficient to fully characterise them. Besides consecutive clauses that involve the intensification of a property, that is, quantification over properties, there are also those representing quantification over individuals and over situations.

Secondly, the expression of a contextually established quantity of individuals, situations or properties described in the main clause is responsible for the existence of the eventualities represented in the consecutive clause.

Thirdly, each trigger of consecutive clauses selects specific morpho-syntactic categories and provides some clues as to the type of quantificational reading of the sentence.

Finally, we argue that the division of consecutive sentences into three semantic classes corresponding to quantification over individuals, over situations and over properties allows a better understanding of this type of structures since different readings arise depending on the distinct ontological nature of individuals, situations and properties.

BIBLIOGRAPHY

- BRITO A. M. (2003a), "Orações consecutivas", in Mateus M. H. et al., *Gramática da língua portuguesa*, Lisboa, Ed. Caminho, 754-761.
- BRITO A. M. (2003b), "O sintagma adjetival", in Mateus M. H. et al., *Gramática da língua portuguesa*, Lisboa, Ed. Caminho, 370-390.
- CHIERCHIA G. (1998), "Plurality of Mass Nouns and the Notion of *Semantic Parameter*", in Rothstein S. (ed.) *Events and Grammar*, Dordrecht, Kluwer Academic Publishers, 53-104.
- CUNHA L.F. (2004), *Semântica das predicções estativas: para uma caracterização aspectual dos estados*, PhD Dissertation, Faculdade de Letras da Universidade do Porto.
- CUNHA L. F. (2007), "Algumas Reflexões em torno das Possibilidades de 'Contagem' no Domínio das Eventualidades", in Lobo M. & Coutinho M.A. (orgs), *Textos Seleccionados do XXII Encontro Nacional da Associação Portuguesa de Linguística*, Lisboa, APL., 341-353.
- CUNHA L. F. & LEAL A. (2006), "Cada Vez Mais: Algumas Observações acerca da Quantificação e da Graduação" paper presented at the XXXVI Simpósio de la Sociedad Española de Lingüística, UNED, Madrid.

- DEMONTE V. (1999), “El adjetivo: clases y usos. La posición del adjetivo en el sintagma nominal”, in Bosque I. & Demonte V. (eds), *Gramática descriptiva de la lengua española*, Madrid, Espasa, 129-216.
- GIUSTI G. (1997), “Le frasi consecutivi”, in Renzi L. & Salvi G. (orgs), *Grande Grammatica Italiana di Consultazione*, Urbino, Ed. Il Mulino, 825-832.
- HYBERTIE C. (1996), *La Conséquence en Français*, Collection L’Essentiel Français, Paris, Éditions Ophrys.
- I. ÁLVAREZ A. (1999), “Las Construcciones Consecutivas”, in Bosque I. e Demonte V. (orgs), *Entre la Oración y el Discurso. Morfología*. Vol. 3, Cap. 58.
- MIGUEL M. (2006), *Subclasses de adjetivos: comportamento sintático em posição pré-nominal e pós-nominal*, paper presented at Centro de Linguística da Universidade do Porto.
- OLIVEIRA F. & DUARTE, I. (2003), “Referência Nominal”, in Mateus M. H., Brito A., Duarte I. & Faria I., *Gramática da Língua Portuguesa*, Cap. 8, Lisboa, Ed. Caminho.