Como-gerund clauses in European Portuguese: figuring out the riddle

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Abstract

Previous literature on the typology of gerund clauses in Portuguese has overlooked a peculiar type of clauses which are always introduced by *como* ('as') and display an array of characteristics that set them apart from all other gerund clauses (and from other, somehow similar, constructions in different languages). In this paper, we provide an in-depth syntactic and semantic characterisation of these *como*-gerund clauses and the contexts in which they arise, highlighting their similarities and differences regarding other constructions, namely resultative and depictive secondary

predicates. We put forward a proposal to deal with their syntactic configurations and the restrictions they exhibit. We also propose that *como* is obligatory in these clauses because it marks a type-shift operation, which gives *como* gerund clauses a predicative interpretation, usually found in the nominal domain.

Keywords: gerund clause, predicative complements, European Portuguese, secondary predication, type-shift.

1. Introduction

In this paper, we analyse a special type of gerund clause (GC) of European Portuguese (EP) that has been seldom considered in the literature: gerund clauses (in both simple and compound forms[1]) headed by *como* ('as') (henceforth COMO-GC). An example of this structure is given in (1):

(1) O   tribunal   condenou   as   atividades   do
     the   court   condemn-PST.3SG   the   activities   of-the
     homem   como sendo   de   burla   qualificada.
     man   as   be-GER[2]   of   fraud   qualified
     'The court condemned the man's activities as being of qualified fraud.'

Previous literature has provided a typology of GC that includes predicative gerund clauses equivalent to the Prepositional Infinitival Construction (PIC) and adverbial gerund clauses. COMO-GC, however, are rarely described in the literature. For Portuguese, only occasional mentions can be found. For example, Raposo (2013) observes in a footnote that instead of a complement introduced by *como*, verbs of "characterization", such as *descrever* 'describe', *catalogar* 'catalog' or *identificar* 'identify', can occur with a gerund clause with a copular verb introduced by *como* (*o Rui descreveu o chefe como sendo uma pessoa instável* 'Rui described his boss as being an unstable person'). Silvano, Leal & Cordeiro (2019) only highlight the differences between COMO-GC and other types of gerund clauses in EP. Fong (2015), for Brazilian Portuguese, describes a subclass of COMO-GC among other types of GC. For other languages, similar clauses, often described as "*as*-phrases", have been considered in work by Levin (1993), Stump (1985), Bowers (2001), and Rafel (2001), among others. Although many studies address secondary predication and different types of reduced clauses, none, to the best of our knowledge, provides a comprehensive analysis of COMO-GC, nor considers both their syntactic and semantic properties, contrasting them with other types of gerund clauses and predicative complements. This is the main aim of our study.

Our empirical basis is a sample of sentences extracted from the corpus CETEMPúblico (Rocha & Santos 2000; http:www.linguateca.pt/CETEMPublico/). This corpus includes written texts from Portuguese newspapers published in the

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[1]   The simple gerund has the *-ndo* ending, whereas the compound gerund has the auxiliary verb *ter/haver* 'to have' in the *-ndo* form followed by the past participle of the main verb.

[2]   The abbreviation "GER" stands for "simple gerund" (*-ndo* form, partially equivalent to *-ing*).

nineties. The search criterion was the occurrence of *como* followed by a gerundive form in the same sentence. This search rendered 152 cases with the simple gerund and 162 cases with the compound gerund. In a preliminary phase, we analysed 100 sentences with COMO-GC, 50 examples for each type of gerund, and considered their distribution and their syntactic and semantic properties. The annotation parameters were the following: (i) the verbs of the main clause and COMO-GC; (ii) the linguistic element linking both clauses; (iii) the aspectual type of the COMO-GC; (iv) the temporal relation between both clauses. Whenever deemed necessary, we conducted additional searches to validate the occurrence of certain constructions, namely, those involving *como* introducing DP, NP and ADJP. We relied on our intuitions as native speakers to assess the grammatical properties of these constructions.

  Our paper is organised as follows: in section 2, we analyse the syntactic and semantic properties of COMO-GC, contrasting them with other types of GC available in EP; in section 3, we present our proposal of analysis of COMO-GC, taking into account their syntactic and semantic properties; finally, in section 4, we conclude, leaving some open questions for further research.

2. COMO-GC versus other types of GC

In this section, we will establish a comparison between COMO-GC and other types of GC grounded on syntactic and semantic features.

2.1. Syntactic characterisation

In Portuguese, as described in previous studies (Lobo 2001, 2006) and following prior descriptions for other languages (Lagunilla 1999, Lonzi 1988, 1997), GC can be grouped into three types: predicative GC (2); integrated (non-peripheral) adverbial GC (3); peripheral adverbial GC (4):

(2) As crianças chegaram a casa cantando alegremente.
    the children come-PST.3PL to home sing-GER joyfully
    'The children came home singing joyfully.'

(3) Os ladrões arrombaram a porta usando um martelo.
    the thieves break-PST.3PL the door use-GER a hammer
    'The thieves broke the door using a hammer.'

(4) Fazendo muito frio, decidimos   acender a lareira.
    do-GER very cold, decide-PST.1PL light-INF the fireplace
    'Being very cold, we decided to light the fireplace.'

  These different types of GC display different types of syntactic and semantic properties (Lobo 2001, 2006, Leal 2002, 2011): only predicative GC can alternate with the PIC (5); only peripheral adverbial GC are compatible with the compound gerund (6), allow productively stative predicates (7), negation (8), and overt subjects (9). Furthermore, peripheral adverbial GC cannot be focused and, as such, cannot be clefted, behaving differently from non-peripheral GC and predicative GC (10).

(5)   a.   As   crianças chegaram   a casa   cantando/ a cantar
              the   children come-PST.3PL   to home   sing-GER/to sing-INF
              alegremente.
              joyfully
              'The children came home singing joyfully.'

       b.   Os   ladrões arrombaram   a   porta usando/*a usar   um
              the   thieves force-PST.3PL the door   use-GER/to use-INF a
              martelo.
              hammer
              'The thieves forced the door using a hammer.'

       c.   Fazendo/*a fazer   muito frio, decidimos   acender a
              do-GER/*to do-INF   very   cold, decide-PST.1PL light-INF the
              lareira.
              fireplace
              'Being very cold, we decided to light the fireplace.'

(6)   a.   ??As   crianças   chegaram   a   casa   tendo
              the   children   come-PST.3PL to   home   have-GER
              cantado   alegremente.
              sing-PTCP   joyfully
              'The children came home having sung joyfully.'

       b.   ??Os ladrões   arrombaram   a   porta tendo   usado
              the   thieves   break-PST.3PL the   door   have-GER use-PTCP
              um martelo.
              a   hammer
              'The thieves broke the door having used a hammer.'

       c.   Tendo   feito   muito frio, decidimos   acender
              have-GER do-PTCP very   cold, decide-PST.3PL light-INF
              a   lareira.
              the   fireplace
              'Being very cold, we decided to light the fireplace.'

(7)   a.   ??As crianças chegaram   a casa   estando   com   febre.
              the   children come-PST.3PL to home be-GER   with   fever
              'The children came home being with fever.'

       b.   ??Os ladrões   arrombaram   a   porta   estando armados.
              the   thieves   break-PST.3PL the   door   be-GER armed
              'The thieves broke the door being armed.'

       c.   Estando muito   frio,   decidimos   acender a   lareira.
              be-GER   very   cold,   decide-PST.3PL light-INF the   fireplace
              'Being very cold, we decided to light the fireplace.'

(8)   a.   *As   crianças   chegaram   a   casa   não   cantando.
              the   children   come-PST.3PL to   home   not   sing-GER
              'The children came home not singing.'

       b.   *Os ladrões   entraram   em casa   não   usando   um
              the   thieves   come-PST.3PL   in home   not   use-GER a

martelo.
hammer
'The thieves came home not using a hammer.'

    c.   Não   estando   muito   frio,   decidimos   não   acender   a
        not   be-GER   very   cold,   decide-PST.3PL   not   light-INF   the
        lareira.
        fireplace
        'Because it was not very cold, we decided not to light the fireplace.'

(9)   a.   *As   crianças   chegaram   a   casa
        the   children   come-PST.3PL   to   home
        cantando   os   pais   alegremente.
        sing-GER   the   parents   joyfully
        'The children came home the parents singing joyfully.'

    b.   *Os   ladrões   entraram   em   casa   usando   o   mais
        the   thieves   enter-PST.3PL   in   home   use-GER   the   more
        alto   dos   ladrões   um   martelo.
        tall   of-the   thieves   a   hammer
        'The thieves came home using the taller one a hammer.'

    c.   Estando   as   crianças   doentes,   ficámos   em   casa.
        be-GER   the   children   ill,   stay-PST.1PL   in   home
        'Being the children ill, we stayed home.'

(10)   a.   Foi   cantando   alegremente   que   as   crianças
        be-PST.3SG   sing-GER   joyfully   that   the   children
        entraram   em   casa.
        enter-PST.3PL   in   home
        'It was singing joyfully that the children came home.'

    b.   Foi   usando   um   martelo   que   os
        be-PST.3SG   use-GER   a   hammer   that   the
        ladrões   arrombaram   a   porta.
        thieves   break-PST.3PL   the   door
        'It was using a hammer that the thieves broke the door.'

    c.   *Foi   estando   muito   frio   que   decidimos
        be-PST.3SG   be-GER   very   cold   that   decide-PST.1PL
        acender   a   lareira.
        light-INF   the   fireplace
        'It was being very cold that we decided to light the fireplace.'

COMO-GC exhibit an array of properties that clearly set them apart from other types of gerundive clauses: (i) unlike predicative GC, the gerund of COMO-GC cannot alternate with the PIC, with or without *como* (11); (ii) unlike non-peripheral adverbial GC, COMO-GC allow the compound gerund (12), negation (13) and disallow clefting

(14)[3]; (iii) unlike peripheral adverbial GC, they disallow overt disjoint subjects (15) and anteposition (16):

(11)   O   tribunal   condenou   as   atividades   do
        the   court   condemn-PST.3SG   the   activities   of-the
        homem   {como sendo /*(como)   a   ser   de
        man   {as   be-GER / (as)   to   be-INF}   of
        burla   qualificada}.
        fraud   qualified
        'The court condemned the man's activities as being of qualified fraud.'

(12)   O   livro   é   apresentado   como   tendo   sido
        the   book   be-PRS.3SG   present-PTCP   as   have-GER   be-PTCP
        escrito   por   um   psicoterapeuta.
        write-PTCP   by   a   psychotherapist
        'The book is presented as having been written by a psychotherapist.'

(13)   Esta   proposta   foi   criticada   por   muitos como   não
        this   proposal   be-PST   criticise-PTCP   by   many   as   not
        sendo   suficiente.
        be-GER   sufficient
        'This proposal was criticised by many as not being sufficient.'

(14)   ???Foi   como   sendo de   burla   qualificada   que   o
        be-PST.3SG   as   be-GER of   fraud   qualified   that   the
        tribunal   condenou   as   atividades   do   homem.
        court   condemn-PST.3SG   the   activities   of-the man

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[3]   As pointed out by a reviewer, although COMO-GC do not allow clefting in general, they are possible with semi-pseudoclefts, also called 'SER-clefts' (BE-clefts) in Martins & Lobo (2020):

(i)   Apresentaram   o   homem   foi   como   tendo   cometido   muitos
       presented.3PL   the man   was   as   having   committed   many
       erros   no   passado.
       errors   in-the past
       'They presented the man as having made many errors in the past.'

This is not surprising since BE-clefts display a different behavior from other cleft constructions and may focus any constituent that occurs after a finite verb, including different types of verbal constituents:

    (ii) Ele   deve   é   ter   perdido   o   comboio.
         he   must   BE   have   missed   the   train
         Ele   deve   ter   é   perdido   o   comboio.
         He   must   have   BE   missed   the   train
         Ele   deve   ter   perdido é   o   comboio.
         He   must   have   missed   BE   the   train
         'He must have missed the train.'

These cleft constructions presumably do not involve movement of the clefted constituent or of a *wh*-operator, unlike other cleft constructions (cf. Lobo, Santos & Soares-Jesel 2015).

'It was as being of qualified fraud that the court condemned the man's activities.'

(15)   *O   tribunal   condenou   as   atividades   do
        the   court   condemn-PST.3SG   the   activities   of-the
        homem   como   sendo   esse   crime   de   burla   qualificada.
        man   as   be-GER that   crime   of   fraud   qualified
        'The court condemned the man's activities as being that crime one of qualified
        fraud.'

(16)   *Como   sendo   de   burla   qualificada,   o   tribunal
        as   be-GER of   fraud   qualified,   the   court
        condenou   as   atividades   do   homem.
        condemned   the   activities   of-the man
        'As being qualified fraud, the court condemned the man's activities.'

        COMO-GC are, thus, syntactically distinct from the other types of GC in several ways. In what concerns their semantics, they also exhibit fundamental differences regarding the other types of gerund clauses, which is the main topic of the next section.

2.2. Semantic characterisation

This section addresses some semantic properties of COMO-GC, namely their aspectual types, and the temporal relations that COMO-GC establish with their main clauses, while showing how they contrast with other types of gerund clauses.
        Starting with the aspectual issues, different authors (e.g., Lobo 2003, Leal 2002) point out that predicative GC and non-peripheral adverbial GC have aspectual restrictions since they never occur with stative predications. On the contrary, peripheral adverbial GC admit all aspectual types, although with some restrictions – for example, the combination of individual-level states with compound gerund is odd in most cases. However, COMO-GC admit all aspectual types (stative or eventive) without any restriction regarding the gerund form, that is, with simple and compound gerund. Furthermore, there is no change in the aspectual profile of predications due to the presence of simple or compound gerund: COMO-GC maintain the aspectual features of the inner aspect of predications (cf. Verkuyl 1993, among others). The following examples illustrate this claim: (17)-(18), with individual-level predicates, (19)-(20), with stage-level predicates, and (21)-(22), with events.

(17)   as   actividades   que   o   tribunal   condenou
        the   activities   that   the   court   condemn-PST.3SG
        como   sendo   de   burla   qualificada
        as   be-GER of   fraud   qualified
        'the activities that the court condemned as being of qualified fraud'

(18)   fez   -se   referência   ao   «cash-flow»   como
        make-PST.3SG himself   reference   to-the   «cash flow»   as

tendo	sido	de	836,8	mil	contos
have-GER	be-PTCP	of	836.8	one thousand	contos

'reference was made to the «cash flow» as having been of 836.8 million escudos'

(19)
a	central	era	definida	como	estando	em
the	plant	be-PST.3SG	define-PTCP	as	be-GER	in

más	condições
bad	conditions

'the plant was defined as being in bad condition'

(20)
O	líder	africano	foi	dado	como	tendo
the	leader	African	be-PST.3SG	give-PTCP	as	have-GER

estado	na	origem	de	um	desfalque.
be-PTCP	in-the	source	of	an	embezzlement

'The African leader was said to have been the source of an embezzlement.'

(21)
o	valor	das	acções	da	Lusotur	foi
the	value	of-the	shares	of-the	Lusotur	be-PST.3SG

apontado	como	variando	entre	os	14	e	os
indicate-PTCP	as	range-GER	between	the	14	and	the

20	mil	escudos
20	thousand	escudos

'the value of Lusotur's shares was indicated as ranging between 14 and 20 thousand escudos'

(22)
«The ways of gentleness»	é	apresentado	como	tendo
«The ways of gentleness»	be-PRS.3SG	present-PTCP	as	have-GER

sido	escrito	por	uma	psicoterapeuta.
be-PTCP	write-PTCP	by	a	psychotherapist

'«The ways of gentleness» is presented as having been written by a psychotherapist.'

So, regarding aspect, COMO-GC appear to be a completely neutral construction, that is, they do not impose any restriction on the occurrence of basic aspectual types and they apparently preserve the characteristics of these same basic types.

The second topic of this characterisation concerns temporal issues. Both simple and compound gerunds convey temporal information (Leal 2001, 2011), but, nonetheless, they are considered to be temporally defective, since their temporal information is only related to the Temporal Perspective Point (TPpt) (Kamp & Reyle 1993).[4]

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[4]   Kamp & Reyle (1993) propose a bi-dimensional theory of tense, according to which a situation is located in relation to its TPpt and to the utterance time. Since the gerund only establishes the first type of relation, it creates a defective domain. In fact, the Infinitive, another non-finite form, behaves similarly to the gerund, carrying only the temporal information regarding its TPpt (cf. Cunha & Silvano 2006).

As mentioned before, one feature that characterises COMO-GC is that they admit both simple and compound gerund forms, which sets COMO-GC apart from both predicative GC and non-peripheral adverbial GC. On the other hand, peripheral adverbial GC admit compound gerunds, but they establish different temporal relations with the main clause. These relations are partially determined by the basic temporal value of the gerund forms, the relative position of the clauses, and the aspectual type of both clauses (cf. Leal 2002, Lobo 2003, Silvano, Leal & Cordeiro 2021). These considerations are illustrated in (23) and (24).

(23)   Tendo   rodado   a   chave   na   fechadura,   o
        have-GER   turn-PTCP   the   key   in-the lock,   the
        rapaz   entrou   em   casa.
        boy   enter-PST.3SG   in   house
        'Having turned the key in the lock, the boy entered the house.'

(24)   O   rapaz   entrou   em   casa,   tendo   rodado   a
        the   boy   enter-PST.3SG   in   house, have-GER   turn-PTCP   the
        chave   na   fechadura   (antes/depois).
        key   in-the lock   (before/after)
        'The boy entered the house, {having turned the key in the lock (before) / and then he turned the key in the lock (after)}.'

Both examples bear the compound gerund. According to Leal (2002, 2011), this verb form exhibits a [+ anteriority] feature. This means that clauses with this tense are always located in a time interval anterior to their TPpt. The TPpt of a compound gerund can be either the time interval locating the situation denoted by the main clause or the utterance time, and the choice of one or the other is conditioned by the relative position of clauses in the sentence. Therefore, if the gerund clause occurs before the main clause, as in (23), only the time interval locating the main clause is available as TPpt for the gerund clause. In (23), the boy turned the key in the lock before he entered the house. But if the gerund clause occurs after the main clause, as in (24), there are two possible TPpt available for the gerund clause: the time interval locating the main clause, which triggers an anteriority reading similar to (23), and the utterance time, in which case the situation described by the gerund clause is interpreted as anterior to the utterance time, but posterior to the temporal interval locating the main clause – in this case, the boy turned the key in the lock after entering the house.

Although peripheral adverbial GC and COMO-GC admit both gerund forms, the latter behave quite differently from the former in what concerns temporal relations: with simple gerund, COMO-GC are always interpreted as simultaneous to the situation described in the matrix clause, whereas with compound gerund they are always interpreted as anterior to the situation described in the matrix clause. These differences between simple and compound forms of the gerund in COMO-GC trigger different presuppositions. For instance, in (25), with the simple gerund, the situation expressed by the COMO-GC (*Moçambique ser um "lupanar de balas"*) is located in a time interval overlapping the time interval locating the event of the main clause (*descrever* 'describe'). In other words, the event of 'describing' and the state of 'being a "whorehouse of bullets"' are simultaneous. Changing the gerund form, as in (26), with the compound gerund, the situation described in the COMO-GC (*Moçambique ser um*

"lupanar de balas") is now located in a time interval anterior to the time interval locating the event of the main clause (*descrever* 'describe'), so a presupposition arises that Mozambique was no longer a *"lupanar de balas"* in the time interval that corresponds to the event of 'describing'. Contrary to what happens with peripheral adverbial GC (cf. (24)), the gerund clause in (26) has only an anteriority reading.

(25) José Craveirinha   descreveu   Moçambique como sendo
      José Craveirinha   describe-PST.3SG   Mozambique as   be-GER
      um   "lupanar de balas".
      a   "whorehouse of bullets"
      'José Craveirinha described Mozambique as a "whorehouse of bullets".'

(26) José Craveirinha   descreveu   Moçambique como tendo
      José Craveirinha   describe-PST.3SG   Mozambique as   have-GER
      sido   um   "lupanar de balas".
      be-PTCP   a   "whorehouse of bullets"
      'José Craveirinha described Mozambique as having been a "whorehouse of bullets".'

So, although COMO-GC establish temporal relations with the main clause, these temporal readings are completely determined by the basic temporal value of the gerund forms (simultaneity, with simple gerund; anteriority, with the compound gerund). Additionally, peripheral adverbial GC with compound gerund occurring after the main clause, as mentioned above, have two TPpt available – the time interval locating the situation denoted by the main clause and the utterance time –, which gives rise to two possible temporal relations. COMO-GC, however, only allow one temporal interpretation, which is determined by the gerund form (cf. (24), with two temporal readings available, and (26), with only one temporal reading). One can conclude that COMO-GC are somehow "encapsulated" and do not interact with other linguistic elements that are typically relevant for calculating the temporal location of peripheral adverbial GC.

In the next section, we outline a proposal that accounts for the syntactic and semantic characteristics of COMO-GC discussed in the previous sections.

3. Our proposal for the analysis of COMO-GC

In this section, we will first consider the syntactic properties of COMO-GC by analysing their syntactic distribution, that is, the contexts in which they may occur, and especially the types of verbs that select them. We will then discuss the status of the COMO-GC, taking into account the differences between the syntactic types identified and the nature of *como* ('as') and we will investigate the internal structure of the GC that follows *como*. Finally, we will put forward an analysis that can account for the syntactic and semantic features of this type of structure.

3.1. The COMO-GC as a special predicative domain

As described in section 2.1, COMO-GC have properties that distinguish them from other GC. In particular, they seem to function as predicates of a special type of small clause. In our data, the COMO-GC follow 43 different verbs, the more frequent ones being, by order of frequency, *citar* 'cite', *apontar* 'point', *apresentar* 'present', *considerar* 'consider', *referir* 'refer' and *identificar* 'identify'.[5] In the occurrences that we analysed, three different verb patterns may be observed, similar to three subclasses of verbs that Levin (1993) includes under the label "Verbs with Predicative Complements", namely the types 29.1. (Appoint verbs), 29.2. (Characterize verbs), and 29.6. (Masquerade verbs).

As described by Levin (1993), verbs from the first group occur in frames of the type <NP V NP (as) NP>: they take a predicative clause as their complement, the predicate is not obligatorily introduced by *as*, and some verbs take other types of sentential complements. Example (27) illustrates this type:

(27)   The president appointed Smith (as) press secretary.   (Levin 1993:181)

Verbs from the second group are followed by a predicate obligatorily introduced by *as*, with the verb frame <NP V NP as NP>, like in (28):

(28)   Angela characterized Shelly *(as) a lifesaver.   (Levin 1993:181)

Verbs from the third group are followed by a predicate obligatorily introduced by *as* which predicates of its subject (cf. 29):

(29)   Dina masqueraded *(as) a lawyer.   (Levin 1993:184)

In our data, COMO-GC can follow verbs with similar properties to these three verb classes. Thus, we can list the following three different verb types:
I. Group 1 includes epistemic and perception verbs, such as *considerar* 'consider', as in example (30).
II. Group 2 includes declarative/saying verbs, such as *citar* 'cite', *descrever* 'describe', *apontar* 'point', *apresentar* 'present', *indicar* 'indicate', *falar de* 'speak about', as in example (31).
III. Group 3 includes manifestation verbs, such as *figurar (no dicionário)* 'appear (in the dictionary)' or *aparecer* 'appear', as in example (32).

(30)   Catroga   considerou   a   pressão   especulativa   como
         Catroga   consider-PST.3SG   the   pressure   speculative   as
         estando   assente   em   pressupostos   artificiais.
         be-GER   based   on   assumptions   artificial
         'Eduardo Catroga considered the speculative pressure as being based on artificial assumptions.'

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[5]   In what concerns the COMO-GC, in the 100 examples that were annotated, there are 34 cases with copular verbs and 16 with non-copular verbs in clauses with the simple gerund, and 14 examples with copular verbs and 36 with non-copular verbs in clauses with compound gerund.

(31)   O   «Jornal de Angola» cita   fontes   próximas de   Nzau
        the   «Jornal de Angola» quote-PRS.3SG   sources   close   of   Nzau
        Puna   como   tendo   garantido   a   execução   de   um
        Puna   as   have-GER   guarantee-PTCP   the   execution   of   one
        elemento.
        element
        'The «Jornal de Angola» quotes close sources of Nzau Puna as having
        guaranteed the execution of one element.'

(32)   nenhuma das   23   empresas   que   aparecem   como
        none   of-the 23   companies   that   appear-PRS.3PL   as
        tendo   adquirido   matéria-prima
        have-GER   acquire-PTCP   feedstock
        'none of the 23 companies that appear as having acquired feedstock'

    The verbs from Group 1 are characterised by being able to alternatively select
a finite clause with a similar meaning, as illustrated by the comparison of (30) with
(33):

(33)   Catroga   considerou   que   a   pressão   especulativa
        Catroga   consider-PST.3SG   that   the   pressure   speculative
        estava   assente   em   pressupostos   artificiais.
        be-PST.IPFV.3.SG   based   on   assumptions   artificial
        'Catroga considered that the speculative pressure was based on artificial
        assumptions.'

    These verbs also accept other predicative complements. With nominal
predicates, *como* is optional. In contrast, in a COMO-GC, *como* is obligatory, as seen
in the contrast between (34) and (35):

(34)   Catroga   considerou   a   pressão   especulativa (como)
        Catroga   consider-PST.3SG   the   pressure   speculative (as)
        um   desastre.
        a   disaster
        'Catroga considered the speculative pressure (as) a disaster.'

(35)   Catroga   considerou   a   pressão   especulativa
        Catroga   consider-PST.3SG   the   pressure   speculative
        *(como)   estando   assente   em   pressupostos   artificiais.
        (as)   be-PST.3SG   based   on   assumptions   artificial
        'Catroga considered the speculative pressure *(as) being based on artificial
        assumptions.'

    Finally, with verbs from Group 1, the predicative complement cannot be
omitted without changing the verb's meaning, as in (36):

(36) */# Catroga   considerou   a   pressão   especulativa.
            Catroga   consider-PST.3SG   the   pressure   speculative
      'Catroga considered the speculative pressure.'

As for verbs from Group 2, *como* cannot be omitted when the predicate is nominal, as illustrated by (37):

(37) Descrevi   Mandela   *(como)   um   herói.
      describe-PST.1SG   Mandela   *(as)   a   hero
      'I described Mandela *(as) a hero.'

These verbs are transitive verbs that may occur only with a DP or PP object and without a predicative complement. As such, with most verbs, the predicative can be omitted (cf. (38b)), although sometimes the meaning of the verb changes (cf. (39b)):

(38) a.   visto   que Olga V.   nos   apresentou   o   estudo
            since   that Olga V.   DAT.1PL present-PST.3SG   the   study
            como   tendo   sido   feito   com   Virodene,
            as   have-GER   be-PTCP   conduct-PTCP   with   Virodene,
            parece   -me   óbvio   que…
            seem-PRS.3SG   DAT.1SG   obvious   that
            'since Olga V. presented us the study as having been conducted with Virodene, it seems obvious to me that…'
      b.   visto   que Olga V.   nos   apresentou   o   estudo,
            since   that Olga V.   DAT.1PL present-PST.3SG   the   study,
            parece   -me   óbvio   que…
            seem-PRS.3SG   DAT.1SG   obvious   that
            'since Olga V. presented us the study, it seems obvious to me that...'

(39) a.   Tony Blair apontou   as   deficiências da   organização
            Tony Blair point-PST.3SG   the   deficiencies of-the organization
            como   tendo   contribuído   para   a   violência.
            as   have-GER   contribute-PTCP   to   the   violence
            'Tony Blair pointed the organization's deficiencies as having contributed to the violence.'
      b.   # Tony Blair apontou   as   deficiências da   organização.
            Tony Blair point-PST.3SG   the   deficiencies of-the organization.
            'Tony Blair took note of the organization's deficiencies.'

Both verbs from group 1 and group 2 can occur in the passive voice. In that case, the COMO-GC predicates of their derived subject, base-generated in a complement position (cf. (40)):

(40) Ramos é   citado   como   tendo   afirmado
      Ramos be-PRS.3SG   quote-PTCP   as   have-GER   state-PTCP
      que   com   Artur Jorge   não   trabalha.
      that   with   Artur Jorge   not   work- PST.3SG
      'Ramos is quoted as having stated that he doesn't work with Artur Jorge.'

This possibility makes the syntactic configuration from Group 2 verbs similar to the one from Group 3 verbs.

In verbs from Group 3, we can identify verbs of appearance, such as in example (41):

(41)   A   Portugália   surge   em   título como tendo
        the   Portugália   appear-PRS.3SG   in   title   as   have-GER
        negociado   com   a   Indonésia.
        trade-PTCP   with   the Indonesia
        'Portugália appears in title as having traded with Indonesia.'

These verbs pattern like unaccusative verbs, i.e. they do not select an external argument. Like unaccusative verbs, they may occur in past participle constructions, as in (42):

(42)   Surgido   o   nome   da   Portugália   em   título…
        appear-PTCP   the   name   of-the   Portugália   in   title
        'After Portugália's name appeared in the title...'

Verbs from group 3 have, thus, a subject which is an internal argument of the verb followed by a predicative complement. As such, with verbs from Group 3 the COMO-GC predicates of their derived subject. The predicative complement can also be omitted in verbs from Group 3, as in (43), which is similar to what happens with verbs from Group 2:

(43)   O   nome   da   Portugália   surge   em   título.
        the   name   of-the Portugália   appear-PRS.3SG   in   title
        'Portugália's name appears in title.'

COMO-GC can, thus, be analysed as a special type of predicative complement that predicates of a DP in a predication relation similar to a Small Clause (SC) (Stowell 1981, 1983, Bowers 1993, Citko 2011). However, different from typical SC, which have a non-clausal predicate, in this case, the predicate is a clausal domain. In this respect, these structures are similar to what Rafel (2001) classifies as Complex Small Clauses, which include Pseudo-relatives (44), and Prepositional Infinitival Constructions (PIC) (45), among others:

(44)   Vi   o   Rui   que   corria   sem   parar.
        see- PST.3SG   the   Rui   that   run- PST.3SG   without   stop-INF
        'I saw Rui running without stopping.'

(45)   Vi   o   Rui   a   correr   sem   parar.
        see- PST.3SG   the   Rui   to   run- INF   without   stop-INF
        'I saw Rui running without stopping.'

We will follow here the hypothesis that SC have an asymmetric configuration, where the subject of predication is the specifier of a head and the predicate is its complement (Bowers 1993, 2001, Adger & Ramchand 2003). This type of analysis

has been adopted to account for *as*-phrases in English, where *as* is taken to be the lexicalizer of a Predicate head (Bowers 1993, Heycock 2013):

(46)

```
              PredP
             /    \
          DP        Pred'
         /\        /    \
      John       Pred      DP
                  as       /\
                       a winner
```
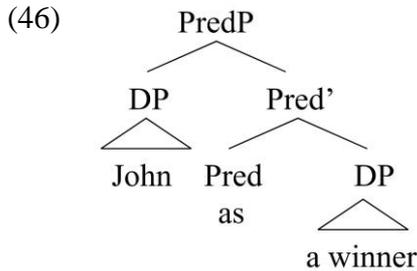
Regarding the status of the connective *como*, it has been analysed in different ways in the literature. Fong (2015) considers it a preposition. Since it only occurs when the predicate is a gerund clause or a DP (but it must be absent with prepositional or adjectival predicates), she argues that it Case licenses the gerund morpheme. This analysis, however, encounters the problem of explaining why *como* is not always present with DP predicates of verbs of Group 1. Additionally, there are examples of *como* introducing AP in our data (see section 3.2).

Another feature of the connective *como* is its presence in different structures introducing a DP that denotes properties of entities and professions, in particular (cf., for Spanish, Gumiel Molina 2005), as in (47):

(47)   Até   1958,   Jan Korec   trabalhou   como   operário numa   fábrica.
        until   1958,   Jan Korec   work-PST.3SG   as   worker   in-a   factory
        'Until 1958, Jan Korec worked as a worker in a factory.'

Sometimes, the same verb is associated to both structures, *como* + DP and *como* + GC, as shown in (48):

(48)   a.   Inácio foi   proposto   com   um   currículo
                Inácio be-PST.3SG   propose-PTCP with   a   curriculum
                que   remonta   a   1941, quando   se
                that   go.back-PRS.3SG   to   1941, when   himself
                inscreveu   como   voluntário   na   AM.
                register-PST.3SG   as   volunteer   in-the AM
                'Inácio was proposed with a curriculum that goes back to 1941, when he registered as a volunteer in the AM.'
        b.   Apesar   de   não   o   poder   fazer,
                despite   of   not   it   can-INF   do-INF,
                inscreveu   -se   no   início   do   ano letivo
                register-PST.3SG himself in-the beginning of-the   year of_school
                como   tendo   transitado   de   ano.
                as   have-GER   pass-PTCP   of   school_level
                'In spite of not being able to do it, he registered at the beginning of the school year as having passed to the next school level.'

In the case of the PIC, the preposition *a* that introduces the infinitival domain has been analysed as an aspectual functional head (Duarte 1993, Barbosa & Cochofel 2005, Casalicchio 2019). In his analysis of Spanish predicative gerund clauses, Casalicchio (2019) also considers that an aspectual head is projected. The author accounts for some differences between predicative gerund clauses and the PIC by assuming that in predicative gerund clauses the progressive morpheme is generated in a lower aspectual head.

There are, however, important differences between predicative gerund clauses equivalent to the PIC and COMO-GC. These differences are found both in their internal structure and in their external structure. On the one hand, COMO-GC are clearly functionally more complex, since they allow the compound gerund, negation, all types of aspectual classes, and different temporal interpretations, according to the gerund verb form. On the other hand, unlike the preposition *a* from the PIC, the connective *como* as an introducer of GC does not impose aspectual restrictions on the situation described by the GC, as described in section 2.2.

Although COMO-GC constitute an autonomous clausal domain, as shown by the fact that they allow negation and may have an anterior interpretation with respect to the situation described in the main clause, there is evidence that they occupy a low position in the sentence, since they can be under the scope of matrix negation and their null subject is controlled by an argument of the main predicate. For instance, in (49), what is negated is the fact that Germany is an imperialist country, and not the fact that there was a description of Germany.

(49)   O   repórter   não   descreveu   a   Alemanha
       the   reporter   not   describe-PST.3SG   the   Germany
       como sendo um   país   imperialista,   mas   antes   como
       as   be-GER a   country   imperialist,   but   rather as
       sendo um   país   ameaçado.
       be-GER a   country   threatened
       'The reporter did not describe Germany as being an imperialist country, but
       rather as being a threatened country.'

Although it is not completely clear why the subject of the COMO-GC is obligatorily null, since the COMO-GC is not as temporally defective as predicative GC and non-peripheral adverbial GC, we may relate the difference between non-peripheral GC – more defective – and COMO-GC – less defective – to the fact that COMO-GC integrate an opaque predicative domain. As we will argue in section 3.2, we believe that *como* is obligatory with this specific type of GC because it is a type-shifter that turns the whole gerund predication into a predicate. This behaviour seems to be compatible with an analysis of *como* as a special Predicate head that takes the GC as its complement and the subject of Predication as its specifier:

(50)
```
                    PredP
                   /     \
                 DP       Pred'
                /        /     \
           Mandela    Pred      GC
                      como     /  \
                       as    sendo um herói
                             being a hero
```

Considering now the syntactic position where COMO-GC are merged, we can see that COMO-GC have a flavour that reminds us of secondary predication. Secondary predication has been investigated in different frameworks and different proposals have been put forward (Williams 1980, Stowell 1981, 1991, Rothstein, 1983, Schultze-Berndt 2017, a.o.). Usually, a distinction is made between depictives and resultatives, and sometimes also between circumstantial and absolute predicates (Irimia 2005, Rothstein 2012, Bosque 2022, Demonte 2022):

(51)   The cat ate the mouse alive.   (depictive)

(52)   He hammered the metal flat.   (resultative)

(53)   Angry, he closed the door.   (circumstantial)

(54)   He left the room, his hands full of dust.   (absolute)
                                                                            (adapted from Irimia 2005: 24)

Depictives are always temporally simultaneous to the situation described in the main clause, whereas resultatives are always the result of the main eventuality. Depictives can predicate of the object or of the subject, whereas resultatives always predicate of the object.

COMO-GC, however, are different both from depictives and from resultatives: they do not express the result of the main eventuality and they cannot predicate of an external argument of the main verb. Furthermore, COMO-GC cannot occur with all verbs: there are lexical restrictions on the selection of the COMO-GC. This suggests that COMO-GC are selected by the main verb and, differently from depictives, are not generated as adjuncts. In our view, with verbs from Groups 2 and 3, COMO-GC behave as arguments that do not need to be syntactically expressed, that is, as "default arguments" in Pustejovsky's (1995) proposal, whereas with verbs from Group 1, the COMO-GC is part of a propositional internal argument. Take, for instance, example (49): with the verb *descrever* 'describe', the GC specifies the nature of the description that applies to the Theme direct object. Thus, it has a tight semantic relation with the main verb, although this argument does not need to be syntactically expressed. In contrast, verbs from Group 1 select a propositional internal argument whose predicate may be a GC.

Taking this into account, we propose that COMO-GC can be merged in two different configurations depending on the selection properties of the main verb: i) with verbs from Group 1, the main verb selects as its only internal argument a Small Clause (PredP), whose specifier is the DP object and whose complement is the gerund clause (see (55)); ii) with verbs from Groups 2 and 3, the main verb selects two internal arguments: the first one is the DP/PP, the second one is a Small Clause (PredP), whose specifier is occupied by an empty category controlled by the internal argument, in a structure that resembles object control (see (56)):

(55)

```
              VP
              /\
                V'
                /\
          V        PredP
      considerar    /\
      'consider' DP    Pred'
                       /\
                  Pred    TP
                  como
                  'as'
```

(56)

```
              vP
              /\
                v'
                /\
          v        VP
      descreveri    /\
      'describe' DP    V'
                       /\
                  V        PredP
                  ti        /\
                       ∅       Pred'
                               /\
                          Pred    TP
                          como
                          'as'
```
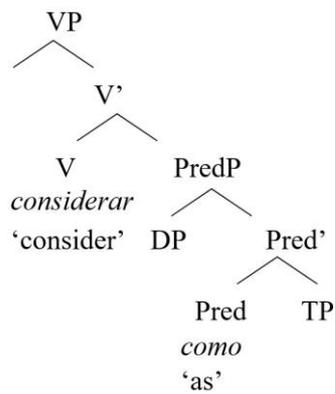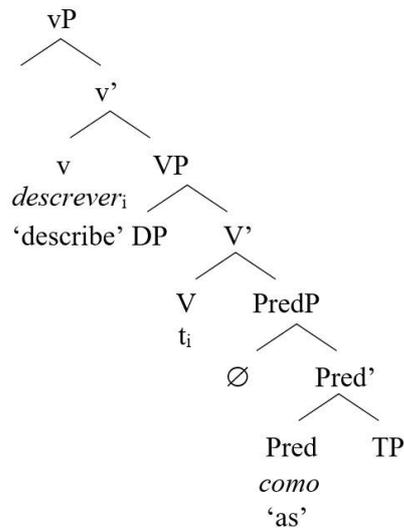
In fact, constituency tests show that with verbs from Group 1 the postverbal DP and the COMO-GC form a constituent (cf. (57)), whereas with verbs from Groups 2 and 3 this is not the case (cf. (58)).

(57)   O   Ministro   considerou   a   situação   como
       the   Minister   consider-PST.3SG   the   situation   as
       sendo um   completo   desastre   e   o   Presidente
       be-GER a   complete   disaster   and   the   President
       também   o   considerou/considerou   o   mesmo.
       also   it   consider-PST.3SG/consider-PST.3SG the   same
       'The Minister considered the situation as being a complete disaster and the
       President also considered it /considered the same.'

(58)   ??Tony Blair   apontou   as   deficiências   da
       Tony Blair   point-PST.3SG   the   deficiencies   of-the
       organização   como   tendo   para   a
       organisation   as   have-GER   contribuído   to   the
                                          contribute-PTCP
       violência   e   a   Rainha também   o   apontou.
       violence   and   the   Queen also   it   point-PST.3SG

'Tony Blair pointed the deficiencies of the organisation as having contributed to the violence and the Queen also pointed it.'

In what follows, we will consider the internal structure of the GC headed by *como*. As shown in section 2.1, COMO-GC, similarly to peripheral adjunct GC, allow the compound gerund, sentential negation and clitics (cf. (12)-(13), renumbered as (59)–(60), and (61)):

(59) O   livro   é   apresentado   como tendo   sido
      the   book   be-PST.3SG   present-PTCP   as   have-GER   be-PTCP
      escrito   por   um   psicoterapeuta.
      write-PTCP   by   a   psychotherapist
      'The book is presented as having been written by a psychotherapist.'

(60) Esta   proposta   foi   criticada   por   muitos como
      this   proposal   be-PST.3SG   criticise-PTCP by   many   as
      não   sendo suficiente.
      not   be-GER sufficient
      'This proposal was criticised by many as not being sufficient.'

(61) Os   investigadores apresentaram   o   estudo como
      the   researchers   present-PST.3PL   the   study as
      tendo   -lhes   aberto   novas   perspetivas   sobre o
      having-GER   DAT.3PL   open-PTCP   new   perspectives   on   the
      assunto.
      topic
      'The researchers presented the study as having opened them new perspectives on the topic.'[6]

Since the projection of a temporal auxiliary, the presence of sentential negation and the licensing of object clitics have been related to the projection of a functional head related to T (cf. Zanuttini 1996, Matos 1999, Gonçalves 1999), this is evidence that COMO-GC project at least a TP domain. However, we have also observed that, unlike peripheral adjunct GC, COMO-GC usually do not have an overt subject:

(62) *Esta   proposta   foi   criticada   por   muitos como
       this   proposal   be-PST.3SG   criticise- PTCP by   many   as
      não   sendo   as   verbas suficientes.
      not   be-GER   the   sums   sufficient
      'This proposal was criticised by many as not being the sums sufficient.'

Despite projecting a TP (and possibly a CP), the GC has a null subject controlled by the subject of the PredP. This behaviour is not that surprising and is not unique to COMO-GC. In fact, infinitival object control structures, where we can find both inflected and non-inflected infinitives, usually have null controlled subjects (63).

However, as shown by Barbosa (2009, 2021) and Santos (2023), overt subjects are allowed provided they have a bound reading and occur in a postverbal position (64)[7]:

(63)   A   mãe   obrigou   as   crianças   a   (*elas)
       the   mother   force-PST.3SG   the   children   to   (*they)
       fazer/fazerem   a   cama.
       make-INF/make-INF.3PL   the   bed
       'The mother forced the children to (*they) make the bed.'

(64)   Santos (2023:14)
       O diretor$_i$ obrigou / ajudou   os médicos$_j$ a   irem
       the director   forced / helped   the doctors   to   go.INF.3PL
       eles$_{j/*k}$ ao   congresso.
       them   to.the   congress.
       'The director forced the doctors to go to the congress themselves.'

Although we have not found overt subjects in COMO-GC, postverbal bound subjects seem to be possible in COMO-GC, which points to a syntactic similarity between COMO-GC and control:

(65)   O   tribunal   considerou   o   homem$_i$
       the   court   consider-PST.3SG   the   man
       como   sendo   ele$_i$ o   único   responsável   pelo
       as   be-GER   he   the   only   responsible   for-the
       rapto.
       kidnapping
       'The court considered the man as being the only one responsible for the kidnapping.'

COMO-GC are, thus, part of a set of defective structures that have a subject argument controlled by a higher constituent.

3.2. A semantic analysis of COMO-GC

At this point we would like to stress some key semantic and syntactic features of the former analysis:

1. the COMO-GC appears to be completely aspect-neutral: it does not restrict the occurrence of basic aspectual types and apparently preserves the features of those same basic types - which is different, for instance, from non-peripheral gerund clauses.

2. COMO-GC temporal readings are completely determined by the basic temporal value of the respective gerund forms (simple gerund triggers simultaneity, whereas

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[7]   We thank two anonymous reviewers for the observation that overt subjects are allowed in a postverbal position in some types of infinitival control structures, which seems possible as well in COMO-GC, provided that the subject is focused and behaves as a bound variable. In that case, the inflected infinitive is the preferred option in infinitival control structures (cf. Santos 2023).

compound gerund triggers anteriority). Furthermore, the TPpt of a COMO-GC is always the time interval locating the situation represented by the main clause, contrary to peripheral adverbial GC with compound gerund occurring after the main clause, which have also the time utterance as an available TPpt.

3. Unlike the other types of gerund clauses, COMO-GC are obligatorily introduced by *como*, which is used productively to introduce DP denoting properties of entities and professions.

4. COMO-GC occur, among others, with main verbs that select small clauses (Group 1), such as *considerar* 'consider', and behave as a predicate of the small clause.

To account for these data, we hypothesise that COMO-GC are radically different from other gerund clauses in that they correspond to different semantic objects. Peripheral gerund clauses correspond to propositions (type *t*), that is, they are "meanings of tense phrases in a context" (van Elswyk 2022), whereas COMO-GC correspond to predicates ($<e,t>$), i.e., they bear an interpretation that is commonly attributed in the domain of DP.

It is a standard assumption that DP interpretation can correspond to different types: *e* (referential), $<e,t>$ (predicative) and $<<e,t>,t>$ (quantificational). Evidence that DP can have a predicative interpretation comes from verbs that allow arguments that can be both adjectival and nominal phrases (such as "consider"). Partee (1987) (among others) assumes that constituent conjunction requires identical semantic types. Therefore, in (66), if one assumes that the AP "competent in semantics", an $<e,t>$ type constituent, is selected by "consider", one has also to assume that the DP "an authority on unicorns" belongs to the same type of the AP since it is conjoined with it.

(66)   Partee (1987:119)
        Mary considers John competent in semantics and an authority on unicorns.

According to Partee (1987), a DP such as "an authority on unicorns" in (66) is a quantificational DP. However, the syntactic context requires a predicative interpretation. This interpretation, according to Partee (1987), is possible in (66) because, although each DP receives a basic interpretation, DP can bear all three interpretations. This possibility can be explained of operators that allow type-shifting. In the case of (66), the relevant operator is BE, which turns quantificational types into predicative types.

As shown in section 3.1, one can find examples with the verb *considerar* 'consider' – and, in fact, with other verbs taking small clauses as arguments, such as *tornar* 'turn' – with AP and COMO-GC (cf. (67)–(68)).

(67) a. O   primeiro-ministro   sueco   anunciou
          the   Prime Minister   Swedish   announce-PST.3SG
          que   a   Suécia não   vai   integrar   a
          that   the Sweden not   go-PRS.3SG   join-INF   the
          primeira   fase   da   moeda   única, considerando o
          first   phase of-the currency   single, consider-GER the

projecto   instável.
project   unstable
'The Swedish Prime Minister announced that Sweden will not join the first phase of the single currency, considering the project unstable.'

b.   Souness   considerou   o   trabalho   dos
      Souness   consider-PST.3SG   the   job   of-the
      árbitros   como sendo mais   difícil   do
      referees   as   be-GER more   difficult   of-the
      que   o   seu.
      that   the   his
      'Souness considered the referees' job to be more difficult than his own.'

(68) a.   O   assassínio   de   Shakaki   tornou   a
            the   murder   of   Shakaki   make-PST.3SG   the
            situação   extremamente tensa.
            situation   extremely   tense
            'Shakaki's murder made the situation extremely tense.'
      b.   O   facto de   estarem   16   mil
            the   fact   that   be-INF.3PL   16   thousand
            pensionistas   envolvidos   torna   este   caso
            pensioners   involve-PTCP   make-PRS.3SG   this   case
            como   sendo   "de interesse nacional".
            as   be-GER   "of interest national"
            'The fact that 16 thousand pensioners are involved makes this case "of national interest".'

Furthermore, it is possible to find in our data the conjunction of a COMO-AP and a COMO-GC, both with simple and compound gerunds:

(69) a.   essas   foram   classificadas pela KBC como
            these   be-PST.3PL   classify-PTCP by-the KBC as
            pró-marxistas e   como tendo   apelos
            pro-Marxist   and   as   have-GER   calls
            à   insurreição   violenta
            for-the insurrection   violent
            'these were classified by KBC as pro-Marxist and as calling for violent insurrection'
      b.   O   nosso batalhão   foi   considerado   como
            the   our   battalion   be-PST.3SG   consider-PTCP as
            inexperiente   ou   incompetente e   como   tendo
            inexperienced or   incompetent and   as   have-GER
            provocado   o   incidente.
            provoke-PTCP   the   incident
            'Our battalion was considered to be inexperienced or incompetent and to have provoked the incident.'

Although our data do not include any example with the conjunction of an AP and a COMO-GC, one can easily manipulate some of the examples above to change the COMO-phrase into an AP, as in (70), a version of (67b), and (71), a version of (69b).

(70)　Souness　considerou　　　o　trabalho　dos　　árbitros ingrato
　　　Souness　consider-PST.3SG　the job　　　of-the referees unpleasant
　　　e　　como　sendo　mais　difícil　　do　　que　o　　seu.
　　　and　as　　be-GER　more　difficult　of-the　that　the　his
　　　'Souness considered the referees' job to be unpleasant and more difficult than his own.'

(71)　O　　nosso batalhão　　foi　　　　　considerado inexperiente
　　　the　our　battalion　　be-PST.3SG　consider-PTCP inexperienced
　　　ou incompetente e　　como tendo　　provocado　o　　incidente.
　　　or incompetent and as　　have-GER　provoke-PTCP the　incident.
　　　'Our battalion was considered inexperienced or incompetent and to have provoked the incident.'

These cases are all well-formed in Portuguese and are evidence that COMO-GC behave as semantic objects of the type $<e,t>$, since they can occur in the same contexts of AP and can also be conjoined with this type of syntactic phrase.

This $<e,t>$ interpretation is not typically attributed to sentences/clauses, but to DP, as mentioned before. So, a type-shift is needed to explain the interpretation of COMO-GC. We propose that *como* is obligatory in COMO-GC because it is lexically marking this type-shift from propositions to predicates, that is, in these constructions, *como* is an operator of the type $<t,<e, t>>$. Example (41), renumbered (72), illustrates this claim: the COMO-GC denotes the set of events of TRADE that occur before their TPpt and that have Portugália as their Agent and Indonesia as their Partner (cf. (73), for the representation of the example in a Neo-Davidsonian way). The anteriority reading is motivated by the use of the compound gerund (cf. section 2.2).

(72)　A　　Portugália　surge　　　　　　em　título　como　tendo
　　　the　Portugália　appear-PRS.3SG　in　title　as　　have-GER
　　　negociado　com　a　　Indonésia.
　　　trade-PTCP　with　the　Indonesia
　　　'Portugália appears in title as having traded with Indonesia.'

(73)　λe [TRADE e & e < TPpt & AGENT e, p & PARTNER e, i]

This proposal can deal with all syntactic and semantic features of COMO-GC highlighted before. First, since there is a type-shift, there are no restrictions regarding basic aspectual classes (that one can find with the other gerund clauses), as they are commuted by *como* into predicates. Additionally, temporal relations are completely determined by the basic temporal value of gerund forms, as *como* operates over the whole gerund predication, making it a predicate. In a sense, the type-shift 'freezes' the properties of these gerund predications, which prevents other temporal mechanisms – such as the ordering of clauses - from changing their temporal location. Thirdly, the

occurrence of *como* is mandatory (corresponding to the lexicalization of a Predicate head in syntax), since this type-shift operation cannot be covert – the input of this operation takes the domain of propositions, but its output corresponds to a semantic object of a different sort. Finally, COMO-GC occur in syntactic environments that usually correspond to semantic predicates, not to propositions, which explains the occurrence of COMO-GC, in particular, with verbs of Group 1.

The fact that *como* requires a semantic predicate as its argument is strengthened by the circumstance that in most cases of *como* introducing DP interpreted as professions, these DP correspond to bare nouns, i.e., semantic predicates (cf. (47), renumbered (74)).

(74)   Até   1958, Jan Korec trabalhou   como operário numa   fábrica.
        until 1958, Jan Korec work-PST.3SG as   worker in-a   factory
        'Until 1958, Jan Korec worked as a worker in a factory.'

However, it is also possible for the DP to correspond to a quantified expression, as in example (75):

(75)   Foi   forçado   a   fugir   e,   pela primeira
        be-PST.3SG   force-PTCP   to   flee-INF   and, for-the first
        vez, admitiu   à   sua   mulher   que
        time, admit-PST.3SG   to-the his   wife   that
        trabalhava   como um   agente informador.
        work-PST.3SG   as   an   agent informant
        'He was forced to flee and, for the first time, he admitted to his wife that he worked as an informant.'

In this case, *um agente informador* 'an informant' has a predicate interpretation (in fact, in this example, one could replace *um agente informador* with *agente informador*, removing the determiner *um*, without changing the meaning), so we must assume that it is *como* that forces the type-shifting of the DP *um agente informador*, from a quantificational type into a predicative type.

Our proposal for the treatment of COMO-GC differs from the former analysis of example (75) in that the type-shifting triggered by *como* applies to a clause domain, i.e., a syntactic object different from a DP, although the output of the type-shifting operation is a denotation that typically corresponds to a DP. As we mentioned before, this type-shift corresponds to Partee's BE operator: we propose that BE can be applied to syntactic objects other than DP, but the result of applying BE is always a semantic object of the "predicative" type.

This proposal blurs the semantic differences between expressions denoting entities and expressions denoting propositions, since the same interpretation can be attributed to both kinds of expressions, under the same semantic operator. However, this is not a radically new idea. For instance, copredication (e.g., Pustejovsky 1995, Asher 2011) is an operation that requires that two different predicates, related to entities and events, can be attributed to one and the same object, expressed by a DP. For instance, in (76), "was delicious" (a property of entities) and "took forever" (a property of events) are attributed to the same entity ("lunch").

(76)   Asher (2011:11)
        Lunch was delicious but took forever.

So, the same syntactic object, the DP "lunch", is lexically ambiguous between the entity and the event interpretation. We propose that gerund clauses are syntactic objects that usually bear event interpretation, but, in the scope of *como*, a lexical expression of BE operator in European Portuguese, they have their interpretation shifted to a predicative (i.e., a DP-like) interpretation.[8]

4. Conclusions

In this paper, we conducted a syntactic and semantic description and analysis of COMO-GC. In sections 2.1 and 2.2 we showed that COMO-GC exhibit a range of syntactic and semantic characteristics that set them apart from all other gerundive clauses. We have also shown (i) that a COMO-GC appears to be completely aspect-neutral (it imposes no restriction on the occurrence of basic aspectual types and apparently preserves the features of those same basic types) and (ii) that COMO-GC temporal readings are completely determined by the basic temporal value of the respective gerundive forms. In section 3.1, we showed (i) that these gerundive clauses occur with three distinct types of verbs in the main clause, (ii) that, in all cases, the null subject of the COMO-GC is coreferential with an internal argument of the verb of the main clause, and (iii) that a COMO-GC constitutes an autonomous clausal domain that is merged in two different configurations, depending on the main verb. In section 3.2, to deal with the syntactic and semantic features of COMO-GC, we put forward the hypothesis that *como* ('as') requires a type-shift of the semantic type of the gerundive clause and that the output of this type-shift is a predicative ($<e,t>$) interpretation, similar to the one exhibited by certain DP.
        In the future, we plan to address several facets of this analysis, namely the nature of the null subject category of the COMO-GC and the relation it establishes with its antecedent. We also intend to investigate in more detail the conditions that trigger the type-shifting and the correlation between the temporal relations/aspectual classes and linguistic features of these structures.

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[8]   Furthermore, Portuguese (and other languages, such as Spanish and Italian) exhibit nominalisations of infinitival clauses, which is another argument to consider that the borders between entities and events are not clear-cut (for European Portuguese, cf. Brito 2012, among others).

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