

# Word order in Portuguese gerund clauses: comparing Old Portuguese and Dialectal Portuguese

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## Orde de palabras en oracións xerundivas do portugués: unha comparación entre o portugués antigo e o portugués dialectal

### Abstract

Differently from the standard contemporary variety of European Portuguese, in which subject-verb inversion is considered categorical in gerund clauses, in Old Portuguese and Dialectal European Portuguese we can find both subject-verb and verb-subject orders in gerund clauses. These variable word orders challenge the generalization that languages with a positive specification of the null subject parameter display obligatory subject-verb inversion in gerund clauses. Therefore, other factors have to be taken into account. This work investigates the factors that condition subject-verb word order in gerund clauses of Old Portuguese and Dialectal European Portuguese, considering data from CORDIAL-SIN, a corpus of spoken varieties of speakers from rural areas of Portugal, and data from a sample of texts from the CIPM, a Computerized Corpus of Medieval Portuguese. Corpus data show us that there is a difference in the frequency of subject-verb inversion in both varieties: verb-subject is the predominant word order in Old Portuguese, while subject-verb is the predominant word order in the dialects, regardless of the presence of inflected gerunds. In what concerns the conditioning factors that may trigger one order or the other, we considered the type of verb, the type of subject, and the presence of a connective. In the dialects, regardless of overt inflection, the most important factor for the post-verbal occurrence of the subject is the type of verb. In contrast, in Old Portuguese subject-verb inversion is the dominant pattern and post-verbal subjects can be found with all verb classes. We hypothesize that differences between the two varieties may correlate with the productivity of gerund clauses introduced by a connective, the specification of the C-domain and information-driven movement.

### Keywords

Language varieties, Portuguese, gerund clauses, inflected gerund, word order, subject-verb inversion

### Resumo

Contrariamente ao que sucede na variedade padrón do portugués europeo, en que a inversión do suxeito se considera categórica en oracións xerundivas, no portugués antigo e en variedades dialectais do portugués europeo encontramos as ordes suxeito-verbo e verbo-suxeito nas oracións xerundivas. Esta variación na orde de constituíntes desafia a xeneralización segundo a cal as linguas con especificación positiva para o parámetro do suxeito nulo teñen inversión suxeito-verbo obrigatoria nas oracións xerundivas. Hai, pois, outros factores que deben ser considerados. Este traballo investiga os factores que condicionan a orde suxeito-verbo nas oracións xerundivas do portugués antigo e do portugués europeo dialectal a partir de datos do CORDIAL-SIN, un corpus con transcrisións de fala de informantes de áreas rurais de Portugal; e dunha mostra de textos do CIPM, *Corpus Informatizado do Portugués Medieval*. Os datos destes córpora mostran que hai unha diferenza entre ambas as variedades na frecuencia da inversión suxeito-verbo: a orde predominante en portugués antigo é verbo-suxeito, mentres que a orde suxeito-verbo predomina nos dialectos, a pesar da presenza dos xerundios flexionados. Como factores condicionantes que poden producir unha orde ou a outra, consideramos o tipo de verbo, o tipo de suxeito e a presenza dun conector. Nas variedades dialectais, independentemente da presenza de flexión visible, o factor máis relevante para a posición posverbal do suxeito é o tipo de verbo. Pola contra, en portugués antigo predomina a posición posverbal e os suxeitos posverbiais aparecen con calquera tipo de verbo. Presentamos a hipótese de que as diferenzas entre estas dúas variedades están relacionadas coa produtividade das oracións xerundivas introducidas por un conector, coa especificación do dominio-C e con movemento desencadeado polo estatuto informativo dos constituíntes.

### Palabras chave

Variedades lingüísticas, portugués, oracións xerundivas, xerundio flexionado, orde de palabras, inversión suxeito-verbo

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**1. INTRODUCTION**

The position of the subject relative to the verb in gerund and participial clauses is subject to crosslinguistic and intralinguistic variation. In French and in English, absolute clauses with *-ant* and *-ing*, respectively, always display a preverbal subject:

- (1) a. Les enfants étant curieux, ...  
b. \*Étant les enfants curieux, ...
- (2) a. The children being curious, ...  
b. \*Being the children curious, ...

In Spanish, Italian and Modern Standard European Portuguese gerund clauses, we usually have the opposite word order – the subject follows the main verb or the auxiliary verb:

- (3) a. Siendo los niños curiosos, ...  
b. \*Los niños siendo curiosos...
- (4) a. Essendo i bambini curiosi...  
b. \*I bambini essendo curiosi...
- (5) a. Sendo as crianças curiosas, ...  
b. %As crianças sendo curiosas, ...<sup>1</sup>

Classical analyses in the Principles and Parameters Framework assume that verb-subject order in gerund clauses of Romance languages is the consequence of T to C movement (Rizzi 1982, Roberts 1994, Ambar 1988, among others), that is movement of verbal inflection (Tense) to the higher functional node C (Complementizer). According to some analyses, T to C movement occurs due to the non-finite status of the gerund which cannot license the subject through spec-head agreement. Several authors have established a correlation between word order in absolute clauses and the Null Subject Parameter (Roberts 1994, Barbosa 1995, 2002, Santos 1999): null subject languages display verb-subject word order and non-null subject languages display subject-verb word order.

Old Portuguese and dialects of European Portuguese are null subject languages, as shown in (6) and (7).

- (6) Porque  $\emptyset$  **matando** a criação é que  $\emptyset$  não lucram nada. (ALV09)
- (7) assi  $\emptyset$  se partirom per cansaço, **entrante** aa noite, como mui boos cavaleiros (XIV c. NLL)

We would, thus, expect to find verb-subject word order in these varieties. However, this prediction is not borne out. Differently from the standard null subject languages mentioned above, in these Portuguese varieties we can find variable word orders in absolute gerund clauses: the subject can precede or follow the verb. These variable patterns challenge the generalization that languages with a positive specification of the null subject parameter display obligatory subject-verb inversion in gerund clauses (cf. also Fiéis / Lobo 2010).

<sup>1</sup> We use the symbol % to indicate that there is variation among speakers as to the acceptability of this word order.

- (8) a. **O gado estando** habituado àquilo, conforme ouviam o toque do chocalho, do coiso, (...) ia tudo atrás. (CBV50)  
 b. **Estando a mulher** lá, vieram-se embora... (PIC4)
- (9) a. E sse pela ventuyra algũu entrasse en ordẽ ssen outorgamẽto de ssa molh(e)r e **ele seendo** eno moesteyro q(ui)sesse ella entrar en moesteyro en religiõ podeo faz(er) (XIV c. PP)  
 b. assy q(ue) depoy q(ue) a çea foy feyta (...), **sabendo elle** q(ue) todalas cousas metera o Padre en ssas mãos e q(ue) del ueera e a elle hya leuãtousse da çea e desuistusse das vistiduras q(ue) tragia uestidas e tomou huũũ grã pano (XIV c. PP)

How can we account for this variation? In this work, we analyse subject-verb word order patterns in gerund clauses of Old Portuguese and non-standard dialectal varieties of European Portuguese (with and without inflected gerunds) and we investigate which factors condition the word orders.

We will address the following questions:

- i. What is the frequency of each word order pattern?
- ii. Is word order influenced by the type of verb, the type of subject, the type of clause?
- iii. Does the availability of inflection on the gerund influence the word order patterns?
- iv. What is the structural representation of subject-verb inversion in these varieties?
- v. How can we account for the variable word order patterns?

We will show that there are differences in the frequency of subject-verb inversion in Old Portuguese compared to the dialect varieties and we hypothesize that different varieties have different feature specifications in the C domain which correlate with the productivity of the availability of gerund clauses introduced by connectives. Furthermore, variable word orders seem to be driven by information-driven movement.

## 2. METHODOLOGY

Our study is based on two written corpora:

- i. CORDIAL-SIN, Syntax-oriented Corpus of Portuguese Dialects, available online at the webpage of Centro de Linguística da Universidade de Lisboa<sup>2</sup>. It contains selected excerpts of spontaneous and semi-directed speech from interviews made with aged and uneducated speakers living in rural areas from 42 locations within the continental territory of Portugal and the archipelagos of Madeira and Azores. The corpus comprises approximately 600.000 words.
- ii. CIPM – Computerized Corpus of Medieval Portuguese, available at Centro de Linguística da Universidade Nova de Lisboa<sup>3</sup>. From this corpus, we selected a sample of texts written in prose from the 12<sup>th</sup> century to the 16<sup>th</sup> century. These include legal documents, chronicles and instructive texts, as shown in Table 1.

Text	abbreviation	century
<i>Documentos Notariais</i>	DN	XII-XVI c.
<i>Clíticos na História do Português</i>	CHP	XII-XVI c.
<i>História do Galego-Português</i>	HGP	XIII-XVI c.
<i>Foro Real</i>	FR	XIII c.
<i>Primeira Partida</i>	PP	XIV c.
<i>Livro da Montaria</i>	LM	XIV c.
<i>Leal Conselheiro</i>	LC	XV c.
<i>Livro das Três Virtudes</i>	LTV	XV c.
<i>Crónica dos Reis de Bisnaga</i>	CRB	XVI c.
<i>Catecismo</i>	Cat	XVI c.

**Table 1.** Texts that constitute the subcorpus of Old Portuguese

<sup>2</sup> Martins, A. M. (coord.) [2000- ] 2010. *CORDIAL-SIN: Corpus Dialectal para o Estudo da Sintaxe / Syntax-oriented Corpus of Portuguese Dialects*. Lisboa, Centro de Linguística da Universidade de Lisboa. URL: <http://www.clul.ulisboa.pt/en/11-resources/314-cordial-sin-corpus-2>

<sup>3</sup> <http://cipm.fch.unl.pt>

For CORDIAL-SIN, we treated separately locations in which the gerund can bear person inflection and locations where gerunds do not show person inflection. We searched the Part of Speech annotated file and retrieved gerund verbal forms. For Old Portuguese texts, the retrieval of gerund forms was done using the Program Concordance. Gerunds within gerund clauses were then selected and classified according to the following criteria: i) word order (subject-verb; verb-subject); ii) type of verb (transitive; intransitive; unaccusative; copula); iii) type of subject (personal pronoun; demonstrative pronoun; full DP; clause); iv) presence or absence of connective.

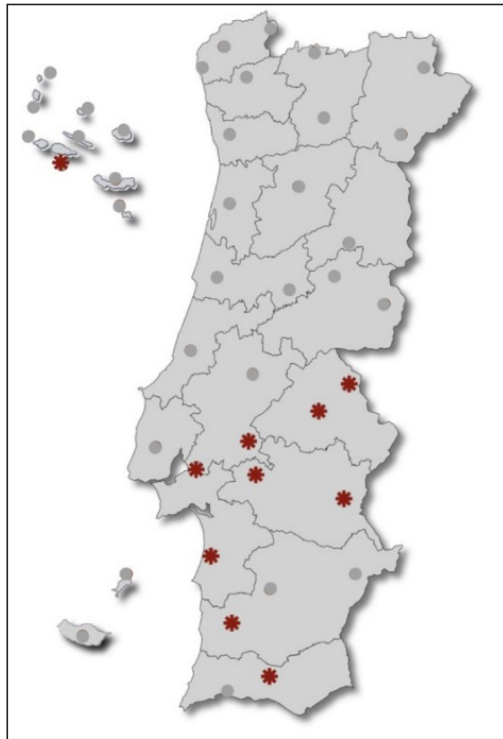
### 3. WORD ORDER IN GERUND CLAUSES OF DIALECTAL PORTUGUESE

#### 3.1. Variation in gerund clauses

In CORDIAL-SIN, some southern and insular varieties may have inflected gerunds, that is, gerunds with person morphology, similarly to inflected infinitives (10) (Lobo 2008).

(10) Em **sendem** muitos, já se lhe chama uma vara. (CORDIAL-SIN, AAL 86)

The geographic area of inflected gerunds overlaps with the geographic area where the gerund is productive in progressive structures (Carrilho / Pereira 2011) (cf. Map 1). In those varieties, in general, gerund adverbial clauses are more productive.



**Map 1.** Distribution of inflected gerunds in CORDIAL-SIN (adapted from Lobo 2008)

Since the availability of person inflection on the gerund is a factor that might condition subject-verb word order, we decided to analyse separately data from the locations with and without inflected gerunds according to our corpus.

There are 10 locations where we find inflected gerunds in the corpus, distributed across the south of Portugal and the Azores:

AAL = Alto Alentejo (Portalegre) (4);  
 ALC = Alcochete (Setúbal) (18);  
 CBV = Cabeço de Vide (Portalegre) (12);  
 CPT = Carrapatelo (Évora) (39);  
 LUZ = Luzianes (Beja) (26);

LVR = Lavre (Évora) (17);  
 MLD = Melides (Setúbal) (35);  
 PAL = Porches e Alte (Faro) (5);  
 PIC = Bandeiras, Cais do Pico (Horta) (20);  
 STJ = Santa Justa (Santarém) (29).

In the other 32 locations, inflected gerunds were not attested in the corpus.

### 3.2. Word order in the varieties with inflected gerunds

In the varieties with inflected gerunds, we can find gerund adverbial clauses with null subjects (11), with overt preverbal subjects (12)-(13) and with post-verbal subjects (14):

- (11) Agora, em **fazendem** o resto das outras é que fica tudo ali junto, já. (AAL24)  
 ‘Well, it is when they made the others that everything is held together.’
- (12) E então hoje a coisa, estarem a pagar, **eles tendem** as coisas em casa, fazem a toda a hora, quando querem. (AAL36)  
 ‘And then having to pay when they have the stuff at home they do it all the time, when they want to.’
- (13) Em **eles tendem** a outra, já não querem aquela. (LVR5)  
 ‘When they have the other one, they don’t want that one anymore.’
- (14) Dizem que depois, **vindem as águas novas**, aparecem uns carochinhos. (LVR33)  
 ‘They say that afterwards when the new waters come some little bugs appear.’

Adverbial gerund clauses without overt subjects are by far the most frequent. From a total of 235 adverbial gerund clauses in those 10 locations, only 66 have an overt subject. In most cases the person agreement morpheme is not visible, since there is no overt morpheme in the first and third singular persons, like in inflected infinitives:

- |                  |                    |
|------------------|--------------------|
| (15) eu chegando | I arriving         |
| tu chegando      | you arriving-2Sg   |
| ele chegando     | he arriving        |
| nós chegãndomos  | we arriving-1Pl    |
| eles chegando    | they arriving -3Pl |

In the analysis of the position of the subject in relation to the verb we have not included the cases where the subject is in a topic initial position preceding a connective.

Globally, we observe that subjects occur more often in a preverbal position (Table 2):

	Number	%
<b>Su-V</b>	42	<b>64%</b>
<b>V-Su</b>	24	<b>36%</b>
Total	66	100%

**Table 2.** Proportion of Su-V/V-Su orders in gerund clauses in the 10 locations with inflected gerunds

In the following sections, we investigate if the different word order patterns are conditioned by specific factors: i) presence of connective; ii) type of verb; iii) type of subject.

#### 3.2.1. Presence of connective

In these varieties gerund clauses may be introduced by different connectives: *bem* ‘well’ (4 occurrences), *caso* ‘case’ (1 occurrence), *como* ‘how’ (1 occurrence), *em* ‘in’ (66 occurrences), *em bem* ‘in well’ (7 occurrences), *quando* ‘when’ (47 occurrences), *mesmo* ‘even’ (4 occurrences), *onde* ‘where’ (=when, 1 occurrence). Some of these connectives are usually found only in finite clauses in the standard variety. It seems thus that overt inflection makes gerund clauses closer to finite domains (Lobo 2001, 2008).

The frequency of gerund clauses with a connective is quite high: 48% of gerund clauses with an overt subject have a connective.

(16) *Em a perna entrando ali, pronto, já dali não abala.*(CBV48)

(17) *Quando chegando o tempo das batatas, arranjo um taleguinho de batata* (LVR24)

(18) *Onde a gente morrendo, a gente que cá estamos, os velhos, não deve de aparecer já cá mais nenhuns!* (MLD21)

Let us observe whether the presence of a connective influences subject-verb word order:

	With connective	Without connective
Su-V	22/32 69%	20/34 59%
V-Su	10/32 31%	14/34 41%

**Table 3.** Word order and presence of connective

As we can see in Table 3, subject-verb word order is predominant independently of the presence of a connective, although verb-subject word order is a little bit higher without a connective.

### 3.2.2. Type of verb

As is well known, subjects of unaccusative verbs (such as *chegar* 'arrive' and *ir* 'go') and copula verbs (such as *ser* and *estar* 'be') have a special behaviour, since they are internal arguments and in many languages may occur more easily in post-verbal position. The type of verb has been shown to be a highly relevant factor for subject position in many varieties.

Let us consider this factor in the word order of adverbial gerund clauses in the locations with inflected gerunds.

	Copula and unaccusative verbs	Other verbs (transitive and intransitive)
Su-V	24/42 57%	18/42 43%
V-Su	23/24 96%	1/24 4%

**Table 4.** Word order and type of verb

	Su-V	V-Su
Copula and unaccusative verbs	24/47 51%	23/47 49%
Other verbs (transitive and intransitive)	18/19 95%	1/19 5%

**Table 5.** Type of verb and word order

As can be seen in Table 4, subject-verb inversion (V-Su) is much more frequent with unaccusative and copula verbs (96%). As can be seen in Table 5, subjects of transitive and intransitive verbs occur predominantly in preverbal position (95%). Preverbal subjects, however, can occur with all verb classes, that is, subjects of unaccusative and copula verbs occur both preverbally and post-verbally. The type of verb seems thus to be an important factor that conditions the position of the subject.

### 3.2.3. Type of subject

There is also some evidence that the type of subject may also correlate with the preverbal or post-verbal position of the subject (Mota 1997; among others). We have thus considered this other factor, distinguishing three types of subjects: i) Personal Pronoun (19); ii) Demonstrative Pronoun (20); iii) DP (21).

(19) Em **eles** tendem a outra, já não querem aquela. (LVR5)

(20) Quando **aquilo** estando batido, então armavam os taipais, tiravam as agulhas... (LUZ18)

(21) Quando **um galo** cantando de noite, aquilo é 'sinales' ruins. (LUZ45)

As can be seen in Table 6, pronouns are more likely to occur in preverbal position, but DPs occur both in preverbal and post-verbal position. Subject demonstrative pronouns are not very frequent and the 4 cases we found were all preverbal. In preverbal position subjects can be of different types, but post-verbal subjects are predominantly DPs<sup>4</sup>.

	Su-V	V-Su	Total
Personal Pronoun	14 33%	2 8%	16
Demonstrative Pronoun	4 10%	0	4
DP	24 57%	22 92%	46
Total	42 100%	24 100%	66

Table 6. Word order and type of subject

### 3.2.4. Conclusions

In the varieties with inflected gerunds the post-verbal subject position seems to be a marked option. In post-verbal position, we find mainly subjects that are internal arguments of the verb and subjects that are morphophonologically more complex. Although the presence of a connective seems to be a less important factor in the conditioning of subject position, we can observe that, when the gerund clause is introduced by a connective, subject-verb inversion is only found with unaccusative and predicative verbs:

(22) Hoje, *em* **chegando a gente** pouco depois de o sol posto, pregam com elas dentro (...) (LVR11)

## 3.3. Word order in the varieties without inflected gerunds

In the CORDIAL-SIN corpus gerund clauses with uninflected gerunds were found in the following locations:

AJT = Aljustrel (Beja) (40)

ALV = Alvor (Faro) (15)

CDR = Cedros (Horta) (42)

CLC = Câmara de Lobos/Caniçal (Funchal) (6)

CLH = Calheta (Angra do Heroísmo) (38)

COV = Covo (Aveiro) (19)

CRV = Corvo (Horta) (33)

EXB = Enxara do Bispo (Lisboa) (22)

FLF = Fajãzinha (Horta) (9)

GRJ = Granjal (Viseu) (32)

LAR = Larinho (Bragança) (25)

MIG = Ponta Garça (Ponta Delgada) (10)

MIN = Arcos de Valdevez/Bade/ S. Lourenço da

Montaria (Viana do Castelo) (13)

MST = Monsanto (Castelo Branco) (8)

OUT = Outeiro (Bragança) (11)

PFT = Perafita (Vila Real) (3)

PST = Camacha, Tanque (Funchal) (7)

PVC = Porto de Vacas (Coimbra) (21)

SRP = Serpa (Beja) (16)

STA = Santo André (Vila Real) (36)

STE = Santo Espírito (Ponta Delgada) (41)

UNS = Unhais da Serra (Castelo Branco) (30)

<sup>4</sup> We have counted the expression *a gente* 'the people' as a DP, which behaves as the pronoun *nós* 'we'.

Although these are more than the double of the locations with inflected gerunds (22 vs. 10), we found approximately the same number of gerund adverbial clauses (274). The productivity of gerund clauses is thus lower in these varieties compared to the ones with inflected gerunds. Remember that in the 10 locations with inflected gerunds we found 235 gerund clauses.

Contrary to the expectation that overt inflection would play a role in word order, we also find variation between subject-verb and verb-subject word orders in these varieties:

(23) a. Agora, em **abalando a senhora** ainda quero ter uma conversa, que ele falta-me aqui umas peças do tear, quero saber onde elas estão. (MST16)

b. Agora em **eu vindo** para baixo, querem ir ver além os molhos (...) como é que são? (MST34)

Of the 274 gerund adverbial clauses, only 58 had an overt subject (excluding the 4 cases where the subject occurred in a topic position before the connective). Most clauses had a null subject:

(24) **Tendo** frio, trabalho, aqueço (CLH26)

When we consider the global results for subject-verb word order, we observe in Table 7 that also in these varieties preverbal subjects are more frequent than post-verbal ones:

	Number	%
<b>Su-V</b>	35	<b>60%</b>
<b>V-Su</b>	23	<b>40%</b>
Total	58	100%

**Table 7.** Proportion of Su-V/V-Su word order in gerund clauses (locations without inflected gerunds)

In the next sections we will investigate whether these word orders are conditioned by the presence of a connective, the type of verb and the type of subject.

### 3.3.1. Presence of connective

In the varieties without inflected gerunds, gerund clauses may also be introduced by connectives, although not as diverse as in the varieties with inflected gerunds. We find the connectives *em 'in'* (101 occurrences across the locations), *quando 'when'* (only 1 occurrence) and *se 'if'* (only 2 occurrences). Almost half of the adverbial gerund clauses with an overt subject have a connective (43%).

Consider now Table 8:

	With connective	Without connective
<b>Su-V</b>	15/25 60%	20/33 61%
<b>V-Su</b>	10/25 40%	13/33 39%

**Table 8.** Word order and presence of connective (locations without inflected gerunds)

We observe that preverbal subjects are more frequent than post-verbal ones regardless of the presence of a connective.

### 3.3.2. Type of verb

Considering the type of verb, we may observe in Tables 9 and 10 that post-verbal subjects are mainly found with unaccusative and predicative verbs. Transitive and intransitive verbs are mainly found with preverbal subjects. In the preverbal position, however, we find subjects of both types of verbs. The preverbal position is then less marked than the post-verbal one.



	Copula and unaccusative verbs	Other verbs (transitive and intransitive)
Su-V	16/35 46%	19/35 54%
V-Su	20/23 87%	3/23 13%

**Table 9.** Word order and type of verb (locations without inflected gerunds)

	Su-V	V-Su
Copula and unaccusative verbs	16/36 44%	20/36 56%
Other verbs (transitive and intransitive)	19/22 86%	3/22 14%

**Table 10.** Type of verb and word order (locations without inflected gerunds)

When the gerund clause has a connective, we only find post-verbal subjects with unaccusative and predicative verbs:

(25) Isto aqui é muito frio em **vindo o Inverno**, minha senhora. (GRJ44)

### 3.3.3. Type of subject

Overt subjects of these gerund clauses can be of different types: i) personal pronouns (26); ii) demonstrative pronouns (27); iii) DPs (28):

(26) Que eu não gostava de arroz de bacalhau, e em **ela** o fazendo até cheirava! (AJT9)

(27) e depois, em já estando **aquilo** bem rijo, já estava meio espremido, tinha aqui por baixo ainda outro contrapeso. (PVC10)

(28) **O pão** (...) não ficando bem cozido, o miolo fica num bolo. (PST18)

Consider in Table 11 how the type of subject conditions word order<sup>5</sup>:

	Su-V	V-Su	Total
Personal Pronoun	14 40%	5 22%	19
Demonstrative Pronoun	0	1 4%	1
DP	21 60%	17 74%	38
Total	35 100%	23 100%	58

**Table 11.** Word order and type of subject

As observed for the locations with inflected gerunds, subject pronouns occur predominantly in preverbal position. DP subjects may occur either in preverbal or post-verbal position, but post-verbal subjects are predominantly DPs.

### 3.3.4. Conclusions

Locations with uninflected gerunds have results similar to the ones we find for locations with inflected gerunds:

<sup>5</sup> As above, we have considered the indefinite subject *a gente* 'the people' as a DP, since it is not always clear that it behaves as a regular pronoun.

- i. the presence of a connective is not as important as other factors in what concerns word order: both orders are found in gerund clauses with and without a connective;
- ii. the post-verbal position is mostly found with subjects that are internal arguments, that is with unaccusative and predicative verbs;
- iii. pronouns tend to occur in preverbal position.

### 3.4. Comparing varieties

As we have seen above, there does not seem to be a significant difference in what concerns subject-verb word order patterns between the locations with and without inflected gerunds. In both cases, preverbal subjects are more frequent than post-verbal ones. Gerund clauses introduced by connectives are productive in both cases, although there are differences in what concerns the type of connectives available. Even when the clause does not have a connective, it is the preverbal position that is more frequent and it is not restricted to some verb classes. We can thus conclude that in these varieties the verb does not compete with a lexical connective. In both cases, post-verbal subjects are much more frequent with unaccusative and copula verbs. It is plausible to consider that the connectives occupy the C position, since post-verbal subjects in gerund clauses with a connective are restricted to unaccusative and copula verbs. We can conclude that V-to-C movement in those varieties is only residual, even when the C position is lexically empty. Post-verbal subjects are predominantly internal arguments and they are the only option with overt connectives.

In gerund clauses without a connective, V-Su order is also found mainly with unaccusative verbs. There are 4 cases (out of 56) with transitive verbs (29)-(30), but two of them (30) have a post-verbal pronominal subject that may behave as an expletive<sup>6</sup>. In these varieties, as described in Carrilho (2008), we find overt expletives associated with specific illocutionary contexts:

- (29) a. **Dando-se eles** bem - que às vezes, aparecem assim e depois aparecem 'aravidades'. (SRP12)  
b. **Dando-se eles** bem, diz assim (SRP12)
- (30) a. Só **fazendo-lhe ele** assim INQ É que... ele sai... (CBV48)  
b. **Querendo ele** - por exemplo -, querendo (ele) /eu\ fazer uma teia de sacos, tira-se-lhe a estopa... (OUT12)

## 4. WORD ORDER IN GERUND CLAUSES OF OLD PORTUGUESE

As we mentioned in the introduction, in Old Portuguese we could also find both preverbal and post-verbal subjects in gerund clauses:

- (31) a. E, **estando Elle** em nós, recebemos seus dões. (XV c. Cat)  
b. E, **elle estando** em sua oraçon (...), veeo subitamente sobre elle hũ grande lume do ceo (...) (XIV c. CGE)
- (32) a. **Joham Rrodriguez estando** no lugar, veo sobrelle o concelho de Ledesma (...) (XV c. CDF)  
b. **Achando os abades ou os priores** que sseus mōges auia feyto algũs erros pero seiã pequenos podenos castigar (XIV c. PP)

Post-verbal subjects may occur immediately after the main verb (32b) or auxiliary verb (33) or after an object or adjunct (34):

- (33) e sse o fezessê (contra) seu deffendimêto **auendoos elle** ante **rrogados** e deffendudo q(ue) o nõ ffezessem (XIV c. PP)
- (34) quããdo elle meesmo dá algo a algũũ homê q(ue) lho gããhe nõ **sabendo esto o p(re)ljado**. (XIV c. PP)

The verb can also be preceded by the object:

- (35) Promissom **fazêdo** algũũ homê a out(ro) de ssa vōõtade de cousa dereyta e bõa deuēna mãteer (XIV c. PP)

<sup>6</sup> In the context the most natural interpretation for the subject is an arbitrary one (=if one does/if one wants...).

In the data analysed so far from the selected texts of CIPM, we found 508 gerund clauses with overt subjects (in a total of more than 3000 gerund clauses). We did not consider ambiguous cases. As in the dialectal data, most gerund clauses have null subjects.

The overall proportion of preverbal and post-verbal subjects is given in Table 12:

	Number	%
<b>Su-V</b>	43	8,5%
<b>(X)-V-(X)-Su</b>	465	91,5%
Total	508	100%

**Table 12.** Proportion of Su-V/V-Su word order in gerund clauses of Old Portuguese

As we can observe, subject-verb inversion is clearly the dominant pattern. Preverbal subjects are much less frequent than post-verbal ones in gerund clauses. This pattern is clearly different from the one we found in the dialectal varieties. In the following sections, we shall consider whether there are conditioning factors for these different word orders.

#### 4.1. Presence of connective

Gerund clauses with a connective are not frequent in our Old Portuguese corpus. From the 508 gerund clauses with overt subjects only 17 have a connective, which corresponds to 3% of the gerund clauses with overt subjects. This is very different from the frequency of gerund clauses with connectives in the dialects, approximately 50%. The connectives found in this corpus were *em* 'in' (16 occurrences) and *sem* 'without' (1 example)<sup>7</sup>:

- (36) E q(ue) uos ssem out(ra) Justiça nêhua possades pênhorar no uosso pelo uosso **ssem me chamãdo**  
**Eu** p(or) elo fforçado nê A fforça (XIV c. DN138)
- (37) muytas vezes o vimos acontecer que, **en querendo o monteyro** acorrer ao alaão, que, **en chegando**  
**elle** ao porco, o porco se espedia do alaão ou por feridas ou per cansaço (XIV c. LM)
- (38) Ca d(eo)s o faz affim que **em destrebuindo tu** aos pobres mereças que te de mais . E que os pobres  
sejam coroados de diadema (XV c. LTV)

In Table 13 we present the number of preverbal and post-verbal subjects in each type of clause:

	With connective	Without connective
<b>Su-V</b>	0	43
<b>V-Su</b>	17	448

**Table 13.** Word order and presence of connective (Old Portuguese)

As we can observe, the presence of a connective does not favour preverbal subjects. All the preverbal subjects found in the corpus occur in clauses without a connective. In gerund clauses with a connective we only found post-verbal subjects. This pattern is quite different from the one we find in the non-standard varieties.

#### 4.2. Type of verb

Considering the type of verb, we find gerund clauses with different verb classes, including transitive verbs (39), unaccusative verbs (40) and copula verbs (41):

<sup>7</sup> The gerund clauses with connectives were found in the following texts: LM (9); LC (1); PP (2); CRB (1); FR (1); DN (2); LTV (1).

- (39) a. p(er) **elle mostrãdolha** u(er)dadeyamêt(e) cõ omildade, se o cl(er)igo darlhy nõ q(ui)sesse a lecêça, pôdesse el q(ue)relar a sseu mayoral, assy como ao archip(re)ste ou ao arciadiago ou ena cima ao b(is)po daq(ue)l bispado onde ffosse o cl(er)igo. (XIV c. PP)
- b. E ainda **fazendo os cl(er)igos** lauoyras algũas enas terras das eyg(re)ias (...) podenas teer en sseu pegulhal ata a ssa m(or)te (XIV c. PP)
- (40) et **morrendo vos** en tenpo q(ue) aq(ue)l q(ue) ouuer de auer a d(i)ta herança nõ aja q(ui)nze an(n)os, q(ue) posad(e)s leyxar titor q(ue) o crie & ensigne p(er) las noujdad(e)s ata q(ue) o herdeyro ouuer q(ui)nze an(n)os (XV c. HGP044)
- (41) a. & **o dito abb(ade) don Henrriq(ue) estando** p(re)sente na dita cortina, o dito Pedro P(er)iz filou vun nabo (con) suas uerssas na mao da dita cortina & meteuo ao dito abade na mao, dizendo q(ue) la ent(re)gava a dita cortina & as ditas casas com(o) suas por q(ue) son do dito moesteyro dond'ele é abbad(e); (XIII c. HGP101)
- b. Tanto que forão acabadas as festas se foy pera a cidade nova, **estando elrey** na cidade nova, diserão lhe em como hera entrado hũu embaixador do ydallcãõ, jaa elle sabia que vinha o embaixador, mas desymullava o, que ho nõ sabya, por quoaunto tem de costume nõ mamdar receber nenhũu embaixador. (XVI c. CRB)

In Tables 14 and 15 we find the relation between word order and type of verb in our corpus of Old Portuguese:

	Copula and unaccusative verbs	Other verbs (transitive and intransitive)
Su-V	12/43 28%	31/43 72%
V-Su	210/465 45%	255/465 55%

Table 14. Word order and type of verb (Old Portuguese)

	Su-V	V-Su
Copula and unaccusative verbs	12/222 5%	210/222 95%
Other verbs (transitive and intransitive)	29/281 10%	252/281 90%

Table 15. Type of verb and word order (Old Portuguese)

As we can observe, post-verbal subjects are found with any kind of verb and they are more frequent with every verb type. Preverbal subjects are more common with transitive verbs.

### 4.3. Type of subject

In what concerns the type of subject, we may find: personal pronouns (42)-(43); demonstrative pronouns (44)-(45); indefinite pronouns (46); DPs (47)-(48); and subject clauses (49):

- (42) a. Out(ro)ssy acaegeu de Sã Soeyro q(ue) **elle entrando** na jg(re)ia q(ua)ndo os cl(er)igos q(ue)riam faz(er) sa jslçõ ueo hũa poonba e pousou en sa cabeça e uirom q(ue) era sinal de De(us) e fezerõno logo bispo. (XIV c. PP)
- (43) e **querendo elle** ver homde estavão os portugueses, deitamo o corpo amte hũas ameyas, foy morto de huma espingardada que ho tomou pello meyo da testa (XVI c. CRB)
- (44) E **este cõhocendo** q(ue) era pouco o q(ue) lhe dauã os q(ue) forõ ant(e) a De(us) ssegũdo os bêes q(ue) del rreçebẽ começo elle a dar dizemo demais (PP, s. XIV)
- (45) fiq(ue)n todas estas herdades (...) ao p(ri)meyro fillo ou filla (...) sen enbargo dos outros seus yrmaaos; et **morrendo aq(ue)l** sen fillo ou filla erdeyro q(ue) fiq(ue) ao segũdo (XV c. HGP)
- (46) Mãos iradas **metendo algũu** en cl(er)igo ou ã molh(e)r ou en homẽ de rrelijiõ p(er)a ferilo ou p(er)a matalo ou p(er)a p(re)ndelo cãe en duas peas: a hũa de scomũhõ e a out(ra) q(ue) ha d'ir a Roma q(ue) o asoluã. (XIV c. PP)

- (47) **Achando os abades ou os p(ri)ores** q(ue) sse(us) mōges auiã feyto algūus erros (...) podenos castigar (XIV c. PP)
- (48) & **o dito abb(ade) don Henrriq(ue) estando** p(re)sente na dita cortina, o dito Pedro P(er)iz filou vun nabo (con) suas uerssas na mao da dita cortina & meteuo ao dito abade na mao, dizendo q(ue) la ent(re)gaua a dita cortina & as ditas casas com(o) suas por q(ue) son do dito moesteyro dond'ele é abbad(e); (XIII c. HGP)
- (49) Out(ro)ssy **acaecendo q(ue) festa algu~a de s(an)to daq(ue)lles q(ue) am vigillias caesse en ssegūda feyra**, deuē jauuhar (XIV c. PP)

The distribution of subject-verb word order according to the type of subject is given in Table 16:

	Su-V	V-Su	Total
Personal Pronoun	16 37%	71 15%	87
Demonstrative Pronoun	2 5%	8 2%	10
DP	25 58%	339 73%	364
Quantified or Indefinite Pronoun	0	38 8%	38
Clause	0	9 2%	9
Total	43 100%	465 100%	508

Table 16. Word order and type of subject

In preverbal position we find both pronouns and DPs, the latter being slightly more frequent. In post-verbal position we find mostly DP subjects. Subject clauses and indefinite subjects occur only in post-verbal position.

## 5. DISCUSSION AND CONCLUSIONS

In both varieties considered in this paper most gerund clauses lack an overt subject. When the subject is present, we can find both subject-verb and verb-subject word orders. Both varieties are null subject languages. Therefore, they do not pattern like consistent standard null subject languages in which subject-verb inversion is the norm. We have shown, however, that these varieties differ in the frequency of each word order: subject-verb is the predominant order in the dialectal varieties; verb-subject is the predominant order in Old Portuguese. We have also shown that overt person inflection on the gerund does not influence word order and that different factors condition the preverbal or post-verbal position of the subject in each variety. In the dialectal varieties, the post-verbal position is the marked one and post-verbal subjects are predominantly found with unaccusative and copula verbs. In Old Portuguese it is the post-verbal position that is unmarked and preverbal subjects are more common with personal pronouns and with transitive verbs.

Since verb-subject inversion in the dialectal varieties is almost exclusively found with unaccusative and copula verbs, it is plausible to assume that the verb does not raise to a left peripheral position. Instead, in inversion structures, it is the subject that stays in situ. In Old Portuguese, however, verb-subject inversion is the predominant order with all kinds of verbs. Moreover, we find cases of subject-auxiliary inversion, as in (50), which are generally analysed as V to C movement:

- (50) a. **auendoos** elle ante **rrogados** e deffendudo q(ue) o nō ffezessem. (XIV c. PP)  
 b. Et **auēdo** uos ou uosas uoz(e)s **de bender** ou sopenorar ou allear este d(i)to aforam(en)to (...), q(ue) o façad(e)s ao d(i)to most(eyr)o (XV c. HGP)

It seems, thus, that in Old Portuguese gerund clauses the verb raises to a higher position than in independent clauses and subordinate finite clauses (Martins 2002, Fiéis 2003).

Differently from contemporary non-standard varieties, in Old Portuguese there can be V-Su orders in gerund clauses introduced by a connective with verbs other than unaccusative and copula verbs (e.g. *em* in examples like (37) and (38)). How can we explain this? Either we assume that the connective fills the C position, thus preventing the verb from moving and the subject remains in situ, or in Old Portuguese the connective has a different status (i.e. it is not a complementizer) and there is always V-to-C movement.

Apart from V-Su orders, we sometimes find Su-V orders in Old Portuguese. Does this imply that the V does not raise to the higher functional domain? Although it is difficult to find clear evidence for the structural position of each constituent in these clauses, it is clear that it differs from the position found in the dialectal data. In particular, we observe that the object may precede the verb leading to an OVS word order (51) or, less often, it may follow the verb and precede the subject, leading to a VOS word order (52):

(51) O deryto do padroadigo auendo muytos homêês en hũa eyg(re)ia (...), aq(ue)l deue a rreçeb(er) o b(is)po q(ue) p(re)sentarê os mays e (con) [melhor] entençõ (XIV c. PP)

(52) quãdo elle meesmo dá algo a algũũ homẽ q(ue) lho gããhe nõ sabendo esto o p(re)lado. (XIV c. PP)

We may hypothesize, following previous proposals (e.g. Martins 2011), that the position of the constituents in Old Portuguese is at least partly conditioned by their informational status. We can thus find different word orders in gerund clauses – OVS, SVO, VSO, VOS – depending on the informational status of the subject and of the object. A preverbal subject or object behaves as a topic, the last constituent behaves as a focus and the previous constituent is scrambled or defocused (see Costa 1998 for a proposal of information-driven movement in European Portuguese). It is clear that some types of subjects are typically post-verbal, such as heavy DPs (e.g. DPs modified by a relative clause) and indefinites. In fact, in gerund clauses with OVS, the subject is usually an indefinite (53). In VSO sentences, the subject can be a personal pronoun or a definite DP (54):

(53) Mããos iradas metendo **algũũ** en cl(er)igo ou ã molh(er) ou en homẽ de rreliçõ p(er)a ferilo ou p(er)a matalo ou p(er)a p(re)ndelo cãe en duas peãs (XIV c. PP)

(54) a. E nõ (com)p(ri)ndo **uos** as d(i)tas cousas ou cada hũa delas q(ue) uos p(er)cadés as d(i)tas vihas (XIV c. DN)

b. achando **os caães** aquelle porco e correndo con elle, faria-sse en ello mays fermosa montaria (XIV c. LM)

In SVO sentences, the subject, often a personal pronoun, is usually a topic. In (55), the subject *elle* is anaphoric with respect to *Sã Soeyro*, clearly the topic:

(55) Out(ro)ssy acaçeũ de Sã Soeyro q(ue) **elle** entrando na jg(re)ia q(ua)ndo os cl(er)igos q(ue)riam faz(er) sa jsliçõ ueo hũa poonba e pousou en sa cabeça e uirom q(ue) era sinal de De(us) e fezerõno logo bispo. (XIV c. PP)

The difference in word order patterns between dialectal varieties and Old Portuguese would then be attributable on the one hand to different specifications of the C-domain and on the other hand to the availability of information-driven movement such as topicalization and scrambling.

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