1. Introduction
Gerunds are non-finite verbal forms lacking agreement and temporal features –see Fernández Lagunilla (1999), RAE (2009, 2010), and Rodríguez-Ramalle (2016), among other authors. Due to their morphological defectiveness, they are syntactically dependent, that is, they are constrained to combine with an inflected verb, which can be an auxiliary verb or a lexical verb. In the former case the gerund is selected by the finite verb and forms a periphrasis –cf. *Está lloviendo* (‘it is raining’)-, whereas in the latter the gerund behaves as an adjunct –cf. *Salieron de casa lloviendo* (lit. ‘they left home raining’). Furthermore, as has been frequently observed, gerunds are imperfective verbal categories whose temporal meaning “is usually interpreted as simultaneous with regard to the action or the process expressed by the main verb” (RAE 2010: § 27.3.1, *our translation*). Accordingly, the interpretation of the second example above is adequately rendered in the following way: ‘they left home while it was raining’.

In this paper, we shall study non-prototypical values of gerunds in Ecuadorian Spanish and other varieties of Spanish spoken in the Andean region.¹ In particular, we shall see structures in which gerunds exhibit a temporal value of anteriority which contrasts with the prototypical aspectual values found in Standard Spanish. Apart from the aspectual reading of simultaneity explained above, gerunds in Standard Spanish encode other aspectual values, which range from immediacy to posteriority between the events in the inflected verb and the gerund. Andean Spanish, however, admits a reading of the gerund in which it expresses an action that precedes the one expressed by the inflected verb. This is the reading, absent from Standard Spanish, this paper focuses on.

In order to approach a linguistic variation problem, we have located our research in methodology that goes beyond introspection and makes use of a varied array of methods to clarify data.

¹ The bulk of data and phenomena analysed in this paper come from varieties of Spanish spoken in the Ecuadorian highlands. Since the phenomenon, however, extends beyond Ecuador, we have occasionally used other varieties (like Peruvian Spanish) to illustrate some point for which we did not have first-hand data in Ecuadorian Spanish. These cases have all been referenced as not belonging to the Ecuadorian variety under study here.
This paper has the goals of examining the behavior of the gerunds of anteriority in Ecuadorian Spanish and drawing the connection between Ecuadorian gerunds and converbs in Quechua. It seeks to provide relevant diachronic evidence that the aspectual values of Ecuadorian gerunds are also attested in the history of Spanish and offers a preliminary explanation of the nature of the contact-induced linguistic change. Finally, it reviews the relevant methods to approach the data under discussion (linguistic variation).

We put forward three hypotheses that guide our research in this paper:

1) We claim that there are two patterns in which the aspectual value of anteriority is present in gerund verbal complexes in Andean Spanish: one which is better analyzed as a case of embedding and one which is better approached in terms of periphrases. In addition, we provide a syntactic analysis to account for each of these constructions.

2) We also claim that these values of gerunds stem from the aspectual features of gerunds in Spanish (both current and historical) and are not only the result of borrowing from Quechua as has been often assumed (for example, in R.A.E., 2009, 2010).

3) We state that these aspectual values were triggered in Andean Spanish as a consequence of linguistic contact between Spanish and Quechua.

The structure of this paper is as follows: in the following section we provide an overview of methodologies used in our research, focusing on two surveys of grammaticality judgments and corpora analysis; section 3 describes the two ways in which gerund verbal complexes can form in Andean Spanish, namely embedding of an adverbial clause headed by the gerund and periphrasis-like combinations with an inflected verb; section 4 offers a syntactic analysis of these two patterns; section 5 contains a paradigm of Quechua structures that have been proposed to correspond to Spanish gerunds in situations of linguistic contact and which are therefore relevant as potential triggers of the anteriority interpretation of gerunds in Andean Spanish; section 6 describes gerunds in Old Spanish to explain how they worked before contact with American native languages, and section 7 explores the diachronic dimension of how

---

2 We use the term ‘Quechua’ to refer to the language because this is the most common in English. However, the Ecuadorian variety is locally referred to as *kichwa*
these structures could appear in this Spanish variety; finally, a conclusion closes the paper.

2. Methodology

In this section we shall describe the array of methodologies used to acquire data for our analysis. These methods include in the first place the relevant literature on this topic, which provided not only a wealth of data, but the motivation for the study of the problem. We completed this source of data by three other means: the realization of two surveys with native speakers, recollection of data from grammaticality judgements and finally, corpora analysis.

We shall explain each of these methods, but some words must be said beforehand regarding the nature of the study. In the first place, this is not a quantitative study. Although as much data as possible were gathered, and surveys tried to be as careful as possible, judgements provided here regarding the grammaticality of these structures are not the result of statistical analysis. Having extensive data provides support for the existence and productivity of the phenomena we analyze, but it does not make the analysis more sophisticated, nor does it give a deeper insight into the nature of the syntactic structures we find. In the second place, over-reliance on corpora at the expense of grammaticality judgements given by speakers, both in the two surveys and in personal interviews, would have been more a hindrance than an advantage. On the one hand because some of the corpora we use (especially historical corpora), do not contain an unlimited supply of data. On the other, because corpora, by their very nature, cannot provide negative evidence, that is, evidence as to what does not exist in language (McEnery & Wilson, 2001: 11). We consider negative evidence, however, crucial for syntactic analysis and we have used it extensively in this work.

2.1. Surveys

In order to expand the amount of data and test our initial hypotheses, we devised two surveys which contained mostly grammaticality judgements.\(^3\) For each sentence that speakers had to judge, a score between 1 and 4 was used to assess the acceptability of examples. The hypothesis we wanted to test was that some of the verbal complexes

---

\(^3\) The second survey also contained some questions about the interpretation of verbal complexes, namely whether speakers of Andean Spanish interpreted the action of the gerund as having taken place before the action in the inflected verb.
behaved like periphrases and some like instances of adverbial subordination. Therefore, we built a number of tests (see following section) which allowed us to discriminate between the two types of structures. For instance, we wanted to test whether the gerund could appear before the inflected verbs in these complexes. In this case we introduced in the survey cases in which both relative words orders appeared and asked speakers to assess them from 1 to 4.

Two surveys were carried out, in which a total of 64 native speakers of Highlands Ecuadorian Spanish participated. They were divided into two groups: a first group of 31 people took the first survey and a second group of 33 people took the second. They were all college students and aged between 17 and 20. After collecting the results of the surveys, we considered that sentences that received a score between 3 and 4 would be considered grammatical, those under 2 ungrammatical and those between 2 and 3 marginally acceptable, and we could see that these results corresponded very closely to those found in previous research.

2.2. Corpora analysis

Corpora analysis has been carried out so as to obtain Old Spanish data in order to prove that the anteriority value of gerunds was already attested in Peninsular Spanish in the Middle Ages. To this purpose we relied on CORDE (a diachronic corpus of Spanish, which contains data of Medieval and Golden Age Peninsular Spanish, among other stages of the language, as well as of some Hispano-American documents from the end of the 15th century onwards). Besides, with the aim of verifying that the anteriority value of Spanish gerunds had been transferred to the Spanish spoken in America and also of confirming its use among residents, we have undertaken some searches in CORDIAM (a diachronic corpus of Hispano-American Spanish) and CREA (a Reference Corpus of Current Spanish). Since they are not parsed corpora, it is difficult to do a quantitative study, despite the fact that they provide sufficient data to study any phenomenon concerning the evolution of Spanish grammar. Hence, we have used these corpora to extract data concerning the evolution of gerunds regarding the structures they display and the values they can encode. After examining in detail the examples provided by these corpora we reached several relevant conclusions for our study which corroborate the tendencies described by other authors (e.g. Pato 2014).
3. Two patterns of gerunds of anteriority

In this section attention will focus on the description of gerund constructions in Ecuadorian Spanish. As has been frequently observed, such constructions exhibit a non-canonical temporal value of anteriority –see Muysken (2005), Haboud (2005), Avellana (2012), Lipsky (2013), among other authors. This is illustrated in (1):4

(1) a. El doctor se fue dejándome todos los medicamentos [Haboud (2005: 17)]
   ‘The doctor went away after leaving me all the medicines’

   b. Acabando la sopita te invito a un Oporto [Haboud (2005: 28)]
   ‘After finishing the soup, I invite you to a Port wine’

   c. Saliendo de la escuela vamos a trabajar en el pueblo [Haboud (2005: 26)]
   ‘After leaving school, we go to work in the village’

   d. Me voy limpiando la casa y ni siquiera dice gracias [Lipsky (2013: 233)]
   ‘I leave after cleaning the house and s/he doesn’t even say ‘thank you’’

   e. Lloviendo voy al cine [Lipsky (2013: 233)]
   ‘After it rains, I’m going to the movies’

   f. Ya subo regando las plantas. [Haboud (2005: 17)]
   ‘I go up after watering the plants’ [Situation: a housekeeper that has watered the plants in her garden and then goes up to the second floor]

   g. ¿Por qué regresas enojándote?
   ‘Why do you come back being angry?’

According to Haboud (2005: 16), in this variety of Ecuadorian Spanish (ES) both verbs –the finite verb and the gerund- maintain their full lexical meaning and express sequential events. More precisely, as the glosses in (1) show, the event expressed by the gerund precedes the event denoted by the finite verb.

We will claim that, besides their apparent homogeneous behavior, gerunds of anteriority illustrated in (1) fall into two patterns. The first group qualifies as a case of adverbial

---

4 Regarding the lexical properties of adverbial gerunds, it has been observed that they are compatible with activities, achievements, and accomplishments, but do not allow states –see Avellana (2012: 311-312). Thus, the following example is ungrammatical:

(i) *Se olvidó de mí sabiéndolo que lo quería [Avellana (2012: 312)]
   ‘(she) CL3p. forgotten of me knowing that I CLAC3p.masc.sg. loved’
subordination –see (§ 3.1)-, whereas the second one is better approached in terms of periphrases –see (§ 3.2).

3.1. Adverbial gerunds

As noted above, gerund constructions appear in a variety of structures in Ecuadorean Spanish (ES), as well as in standard Spanish (SS). In fact, gerunds share a number of relevant properties in both varieties. In particular, they occur in adverbial subordinates with different semantic values (temporal, causal, conditional, etc.) –see Haboud (2005), Muysken (2005), and Avellana (2012), among other authors. However, it is worth noting that gerunds in SS habitually take a simultaneous aspectual value. Therefore, limpiando (‘cleaning’) in (2a) cannot adopt an anteriority reading, as in (2b); rather, the event of Pepe’s cleaning the house occurs at the same time Pepe broke his leg (2c):

(2) 

a. Limpiando la casa, Pepe se rompió una pierna
   cleaning the house, Pepe broke a leg
   ‘While cleaning the house, Pepe broke his leg’

b. Después de limpiar la casa… (*SS)
   After cleaning the house…

c. Mientras limpiaba la casa…
   While he was cleaning the house…

Putting aside their non-prototypical aspectual value, Ecuadorean gerunds usually behave like other kinds of adverbial clauses. A brief overview of the basic properties of the constructions under study is presented below.

To begin with, Ecuadorean adverbial gerunds (EAGs from now on), on par with canonical adverbial subordination, can both precede or follow the main verb, as illustrated in (1b), (1c), and (1a), (1d), respectively. We repeat the relevant contrast in (3) for the sake of clarity:

(3) 

a. Acabando la sopita te invito a un Oporto
   finishing the soup CLDAT 2p invite.1P.sg to a Porto
   ‘After finishing the soup, I invite you to a Porto wine’

b. El doctor se fue dejándome todos los medicamentos
   the doctor left leaving+CLDAT 1p. all the medicines
   ‘The doctor went away after leaving me all the medicines’

---

5 According to Haboud (2005: 10), both orders are possible in the constructions involved. The pattern Ger+V1 is especially frequent among bilingual speakers Quechua-Spanish, whereas the opposite order V1+Ger is primarily attested between monolingual speakers. We will not pursue this issue here, since we do not address sociolinguistic variables related to the syntactic behavior of the constructions under study.
The same distributional pattern holds for adverbial gerunds in SS, as expected. Compare, in this respect, (2a) with (4):

(4) Pepe se rompió una pierna limpiando la casa
    ‘Pepe broke his leg cleaning the house’

Secondly, EAGs can take a different subject from that of the main verb –see Muysken (2005: 41):

(5) En cambio matando ya te ponen preso  
    ‘In contrast if you kill someone, they put you in jail’
    [Muysken (2005: 41)]

Additionally, the subject of the gerund may also be overt, as observed by Batllori, Hernanz & Rubio-Alcalá (in press):

(6) a. Llegando el petróleo, todos querían irse
    ‘Once the oil arrived, everyone wanted to leave’
    \[Haboud (2005: 26)\]

    b. Terminando fiesta, todos duermen hasta tarde
    ‘Once the party was concluded, everybody slept till late’
    \[Haboud (2005: 26)\]

The ability of licensing their own subject shows that EAGs, like their correlates in SS – see (7)-, behave as true adverbial subordinates:

(7) Creyendo María que nadie la quería, intentó suicidarse
    ‘Since María believed that nobody loved her, she attempted to commit suicide’
    \[Adapted from Fernández Lagunilla (1999: 3473)\]

A third property of adverbial gerunds is its capability to be clefted, as shown in (8):

(8) a. Me robaron el bolso paseando por el parque
    ‘My purse was stolen while I was walking through the park’

    b. Fue paseando por el parque cuando me robaron el bolso
    ‘It was walking through the park when someone stole my handbag’

On the assumption that the nonfinite verb *paseando* and the finite verb *robaron* belong to different clauses in (8a), the grammaticality of (8b) follows in a straightforward way. And the same reasoning applies to EAGs:

\[As the glosses show, the gerund in (4) has a conditional interpretation rather than a temporal one. This fact is in agreement with the variety of readings that both EAGs and adverbial gerunds in SS, as noted above, can exhibit.\]
(9) a. Saliendo de la escuela vamos a trabajar en el pueblo
leaving the school, go.1P.pl to work in the village
‘After leaving school, we go to work in the village’
b. Es saliendo de la escuela cuando vamos a trabajar en el pueblo
is leaving the school when go.1P.pl to work in the village
‘It is after leaving school when we go to work in the village’

(10) a. Lavando la ropa recordaba a su madre
washing the clothes remembered.3P.sg to her mother
‘While she was washing clothes, she remembered her mother’
b. Era lavando la ropa cuando recordaba a su madre
was washing the clothes when remembered.3P.sg to her mother
‘It was washing clothes when she recalled her mother’

In the fourth place, in accordance with their temporal adjunct status, EAGs can be replaced by the interrogative adverb cuándo (‘when’):

(11) a. ¿Cuándo vamos a trabajar en el pueblo?
when go.1P.pl to work in the village?
‘When do we go to work in the village?’
b. ¿Cuándo recordaba a su madre?
when remembered.3P.sg to her mother?
‘When did she remember her mother?’

In the fifth place, given the biclausal nature of the sentences in which EAGs appear, it is expected that clitic climbing is not allowed in such constructions. This prediction is borne out, as illustrated in the following examples:

(12) a. Comprando la fritada comemos
buying the fritada eat.1P.pl
‘After buying the fritada (fried pork), we eat’
b. Comprándola comemos
buying CL AC fem.sg. eat.1P.pl

c. *La comemos comprando
CL AC fem.sg. eat.1P.pl buying.

(13) a. Vendiendo papas vengo de mercado
selling potatoes come.1P.sg from market
‘After selling potatoes, I come from the market’
b. Vendiéndolas vengo de mercado
selling CL AC fem.pl. come.1P.sg from market
‘After selling them, I come from the market’
c. *Las vengo de mercado vendiendo
CL AC fem.pl. come.1P.sg from market selling

7 The example in (10b) proves that EAGs taking a simultaneity aspectual value such as (10a) can also be clefted.
The ungrammaticality of (12c) and (13c) shows, in effect, that clitic pronouns cannot move from the gerund clause to the main clause.

Finally, EAGs, being adjuncts, behave like syntactic islands with respect to *wh*-movement. Consequently, the underlined elements in (14a) and (15a) cannot be extracted from the gerund domain:

(14) a. El profesor habló saliendo de la clase [Avellana (2012: 309)]
   ‘The teacher talked after leaving the classroom’
   ‘The teacher talked leaving the classroom’

   b. *¿Dónde habló el profesor saliendo?
    from where talked the teacher leaving

(15) a. El doctor se fue dejándome todos los medicamentos [= (1a)]
   ‘The doctor went away after leaving me all the medicines’

   b. *¿Qué se fue el doctor dejándome?
    What went away the doctor leaving

Summarizing, on the basis of the evidence discussed so far, we conclude that the basic properties of EAGs are basically parallel to those displayed by adverbial gerunds in SS adjuncts, the only relevant difference being their different aspectual value, as discussed above.

3.2. Pseudo-periphrases

As mentioned above, gerunds of anteriority in ES do not form a homogeneous paradigm. In addition to the constructions discussed in the previous section, a second group of gerunds must be considered. These gerunds, which we will label “pseudo-periphrastic gerunds” (PPGs), share a number of syntactic properties with canonical verbal periphrases, although both kinds of structures differ in relevant aspects. Some examples of PPGs are given in (16):

(16) a. Vengo preparando mi tarea de quichua [Haboud (2005: 31)]
   Come.1P.sg preparing my task on Quechua
   (SS Vengo de preparar /estuve preparando/ mi tarea de quichua)
   ‘I come just after finishing my Quechua homework’

   b. Vengo viendo una película buenísima⁸
   come.1P.sg seeing a film very good
   (SS Vengo de ver / acabó de ver una película buenísima)
   ‘I come after just having watched a very good film’

   c. (After coming back from a shopping center)

⁸ The examples in (16b) and (16c) are from an anonymous informant.
Susana viene comprándole un vestido a su hija
Susana comes buying+CLDAT 3p.sg. a dress to her daughter
(SS Susana viene de comprarle / acaba de comprarle un vestido a su hija)
‘Susana has just bought a dress to her daughter’

d. Me pasaron dejando [Bruil (2008: 96)]
CLAC 1.sg. passed.3P.pl dropping off
‘They dropped me off’
(SS Me dejaron en casa al pasar (ellos y yo) por aquí)
‘They left me at home when they passed around here’
e. Ya subo regando las plantas [Haboud (2005: 17)]  [= (1f)]
Now go-up.1P.sg watering the plants
‘I go up after watering the plants’
f. ¿Por qué regresas enojándote? [Haboud (2005: 17)]  [= (1g)]
why come-back.2P.sg being angry?
‘Why do you come back being angry?’

A salient property of the examples in (16) is that the finite verb is always a verb of movement: *venir* (‘to come’), *pasar* (‘to pass’), *subir* (‘to go up’) and *regresar* (‘to go back’). This constraint does not hold for adverbial gerunds discussed in § 3.1, which can modify other verbs apart from verbs of movement –see, for instance, *invitar* (‘to invite’) in (1b), *querer* (‘to want’) in (6a), *dormir* (‘to sleep’) in (6b), *recordar* (‘to remember’) in (10a), etc. Putting aside this restriction, to which we will return later on, PPGs display a set of properties that clearly indicate they are monoclausal structures.

First of all, notice that PPGs cannot be topicalized. Consequently, the ungrammaticality of (17b), (18b) and (19b) can be taken as evidence that these constructions, contrary to adverbial gerunds, are monoclausal:

(17) a. Me pasaron dejando [(16d)]
    b. *Dejando me pasaron

(18) a. Ya subo regando las plantas [(16e)]
    b. *Regando las plantas ya subo

(19) a. ¿Por qué regresas enojándote? [(16f)]
    b. *¿Por qué enojándote regresas?

A second hallmark of PPGs is that they cannot be clefted:

(20) a. Vengo viendo una película buenísima [(16b)]
    b. *Es viendo una película buenísima como / cuando vengo
‘It is seeing a very good film how / when I come’

---

9 According to an anonymous informant, this gloss, which is proposed by Bruil (2008), does not adequately capture the interpretation of (16d). Instead, she proposes the paraphrase we indicate below.
As expected, the ill-formedness of (20b) and (21b) parallels that of (17b), (18b) and (19b).

Thirdly, on the assumption that PPGs are monoclausal structures, it would be predicted that clitic climbing is allowed in such structures. This expectation is fulfilled, as shown in (22)-(24):

(22)  
\[ a. \text{Vengo viéndola (una película buenaísima)} \]  
\[ \text{(16b)} \]  
\[ \text{Come.1P.sg seeing} + \text{CL}_{\text{AC}} 3p.fem.sg. (a very good film) \]  
\[ \text{‘I come seeing it’ / ‘I come after just having watched it’} \]  
b. \[ \text{La vengo viendo} \]  
\[ \text{CL}_{\text{AC}} 3p.fem.sg. \text{ come.1P.sg seeing} \]

(23)  
\[ a. \text{Susana viene comprándole un vestido a su hija} \]  
\[ \text{[(16c)]} \]  
b. \[ \text{Susana le viene comprando un vestido a su hija} \]  
\[ \text{Susana CL}_{\text{DAT}} 3p.sg. \text{ comes buying a dress to her daughter} \]

(24)  
\[ a. \text{Vengo preparándola (mi tarea de quichua)} \]  
\[ \text{[(16a)]} \]  
\[ \text{Come.1P.sg preparing} \text{ CL}_{\text{AC}} \text{ my task on Quechua} \]  
\[ \text{‘I come just after finishing my Quechua homework’} \]  
b. \[ \text{La vengo preparando} \]  
\[ \text{CL}_{\text{AC}} 3p.fem.sg. \text{ come.1P.sg preparing} \]

Notice that the behaviour of PPGs in this respect clearly contrasts with that of EAGs – see examples in (12)-(13), in which clitic climbing is precluded. On the contrary, as has been frequently observed, in canonical verbal periphrasis clitics easily move from the gerund domain to the auxiliary verb –see Yllera (1999: § 3399), García Fernández (2006: 15), and RAE (2010: § 28.1.2e), among others. This is illustrated in (25)-(26):

(25)  
\[ a. \text{La soprano estaba / seguía cantándola (el aria)} \]  
\[ \text{The soprano was / continued singing+ CL}_{\text{AC}} 3p.fem.sg. (the aria)\]  
b. \[ \text{La soprano la seguía / estaba cantando} \]

(26)  
\[ a. \text{Vengo recomendándosela (esta medicina a Julia) desde hace tiempo} \]  
\[ \text{I come recommending it to her (this medicine to Julia) for a long time} \]  
b. \[ \text{Se la vengo recomendando desde hace tiempo} \]

---

10 The examples in (22) and (23), as well as those in (27)-(28) have been provided by an anonymous informant.
Finally, given our claim that PPGs are monoclausal in nature, we would expect that no island effects arise in such structures. This prediction is borne out, as the following examples show:

(27)  a. Vengo viendo una película buenísima     [(16b)]
     b. ¿Qué vienes viendo?
        What come.2P.sg seeing?
        What do you come seeing?

(28)  a. Susana viene comprándole un vestido a su hija     [(16c)]
     b. ¿Qué viene comprándole Susana a su hija?
        what come.3P.sg buying+CLDAT.3p.sg. Susana to her daughter?

Notice that in (27b) and (28b) the wh-element qué, which corresponds to the direct object of the gerunds viendo and comprando, respectively, can be extracted from the gerund domain. This behavior sharply differs from that of the EAGs in (14) and (15).

In sum, the facts discussed in this section provide sufficient evidence to prove that PPGs, unlike EAGs, are monoclausal structures. If this suggestion is on the right track, the question arises whether a clear difference can be drawn between PPGs and canonical verbal periphrases –see (25)-(26). Leaving aside an in-depth discussion of this point, what is crucial for the purposes of this study is to stress the fact that the verb of movement in PPGs does not qualify as a TAM (Tense-Aspect-Mood) marker like in prototypical periphrases; instead, it retains its literal reading of movement. Compare, in this respect, (26) with (27). In (26) venir (‘to come’) is a true auxiliary verb that conveys an aspectual value: the recommendation of a medicine to Julia is an event that started in the past and has been successively repeated until the present. On the contrary, in (27) it does not make sense to analyze venir like a TAM marker: the speaker informs that she has just seen a very good film, but crucially the movement value of “coming” is preserved.11

On the basis of the previous discussion, we conclude that the role played by venir (and other verbs of movement) in PPGs is to add a “secondary movement predication” to the primary predication supplied by the finite verb. Accordingly, in (27) the primary predication is rendered by the gerund viendo (‘seeing’), whereas the finite verb vengo indicates that the event of seeing is framed within some sort of trajectory of coming by

---

11 As observed by an anonymous informant, in this example venir retains its basic reading (i.e., ‘to come’). Further support for this view is provided by examples such as (16a) –among other similar cases attested in Haboud (2005: 31), which have been elicited by means of a question like ¿Qué vienes haciendo? (Lit. What do you come doing?), where vienes (‘you come’) is used with its literal meaning.
Interestingly enough, a similar picture arises, mutatis mutandis, with regard to the –mu particle in Quechua, which has been analyzed as a verbal derivate denoting that the agent comes back from doing an action: Maña-mu-\=ni = ‘Vengo de pedir’; Micu-mu-\=rca-\=ni = ‘Vengo de comer’ (see Haboud 2005: 22). We do not pursue this issue here.

4. Towards an analysis of Ecuadorian gerunds

4.1. Adverbial gerunds

Instances of adverbial subordination will be analyzed following Haegeman (2007, 2010). There are three main initial issues we need to figure out in order to propose an analysis. The first is the point in which the adverbial clause joins the main clause to which it is subordinated. In Haegeman’s approach there are two kinds of adverbial clauses: peripheral and central. The first are less intimately connected to the matrix clause, whereas the second kind depends more on it. We can see them exemplified as:

(29) If (as you say) it is going to rain this afternoon, why don't we stay at home?
(30) If it rains, we will get terribly wet.

The first kind, shown here in (29) is more related to the speech act (and can therefore often be paraphrased adding as you say, like in the example) and display a wider range of Main Clause Phenomena. The second type (30) does not display many Main Clause Phenomena (for example, in English and other Germanic languages, conditional clauses of this sort can contain no Topics or Foci between the complementizer if and the clause subject) and appears to be more closely related to the main clause.

---

12 It is worth noting that the role of movement verbs in PPGs reminds that of some morphemes attested in many languages expressing the meaning of ‘go’ and ‘come’. As has been observed by Cinque (2004: 166, footnote 4), “In many languages, ‘andative’ (‘itive/ventive’) or ‘distantive’ morphemes are attested which can be glossed in English as ‘go/come and.’ For example, the derivational suffix, -\=oy-, of Fula/Fulfulde (West Africa) has exactly this function (cf. Fagerli 1994:53):

(i) Min mabb-it-ir-an-\=ilaw-\=oy-\=I mo ngal sembe
we close-REVERS-\=INSTR\=BENEF\=CELER\=DISTANTIVE\=PAST him it strength
‘We went and opened it for him with strength quickly’
Under Haegeman’s (2012:170) proposal, peripheral adverbial clauses are generated as adjuncts to CP, whereas central adverbial clauses are generated in lower positions (TP, vP or below), “[d]epending on the particular type of central adverbial clause”.

If we want to propose an adjunction site for these adverbial clauses, in the first place we need to establish whether they belong to the first or to the second type. In order to determine that, we propose to check whether the adverbial clause can be generated in a position below the one in which it appears in the final sentence. By using reconstruction effects of possessives, we can show this is actually true.

(31) Saliendo sus papás de casa, Pedro tuvo mucho miedo.
    going-out his parents form home, Pedro was very scared.
    ‘After his parents left the house, Pedro got very scared’

We can show that the possessive sus (his) is bound by its antecedent in the main clause (in spite of its appearing below it in the linear order of the sentence), which we can take as evidence for a low generation of the adverbial clause before it moves to the final position to the left of the main clause. Under the standard assumption that subjects are generated as specifiers of vP, the initial adjunction point of the adverbial clause should be below it. We therefore propose an initial adjunction site at VP, so that the subject of the matrix clause can bind an anaphora inside the adverbial clause by c-commanding it. A prototypical case of gerunds as adverbial clauses is example (13a), repeated here as (32):

(32) Vendiendo patatas vengo de mercado.
The second crucial issue we need to establish is the internal structure of the adverbial clause (which we have represented in a simplified fashion as a CP in the previous scheme). In this we also follow Haegeman (2007, 2010). We know from our data two facts that are important to establish the aforementioned internal structure: (1) subjects of the adverbial clause (that is to say, the gerund) must appear post-verbally (2) and the left periphery of these clauses seems to be very impoverished, since they do not allow Foci or Topics. The first of these observations is a general fact about gerunds in Modern Spanish and therefore does not provide information about sentences under study in particular.

(33)  a. Comiendo pollo venimos de mercado.
      eating chicken come-1P.PL from market

     b. *Pollo comiendo, venimos de mercado.
        chicken eating come-1P.PL from market

As a result of observing that these clauses do not seem to have positions for Topics we have two alternatives:

1) The adverbial clause has a defective structure with the gerund as its head, lacking a fully-fledged left periphery which can accommodate extra material above the gerund.

2) The movement of the gerund to the left periphery is accompanied (or consists in) movement of an operator which prevents further movements to peripheral positions since they would give rise to intervention effects. This is the approach adopted in Haegeman (2007) and subsequent work.

The analysis we propose here is close to the first alternative. We propose that the gerund moves through a lower Aspect Phrase (AspP) to ForceP, thereby blocking the possibility of having extra material to its left (since it would sit on the uppermost position in the structure) and providing the syntactic interface with the main clause. An additional desired consequence of ForceP as the proposed landing site of the gerund is that this prevents overt complementizers from appearing in these structures, which is indeed what we find.
Therefore, the analysis for adverbial gerunds we propose would be as follows for the same adverbial gerund in (24), \textit{vendiendo papas}, “selling potatoes”:

(34) \textit{Vendiendo papas}

\begin{itemize}
\item \textit{vendiendo papas}
\end{itemize}

Finally, we need to establish the final landing position of the adverbial clause in cases when it precedes the main clause. We propose here that this is a Topic position in the periphery of the main clause. One reason to propose this is that speakers who accept this position seem to be more influenced by Quechua, and these clauses are marked with the Topic marker –\textit{ka} in this language. Besides, the subject of the main clause, unlike that of the embedded clause, can be pre- or post-verbal, showing that movement of the adverbial clause to the left periphery does not pied-pipe the verb to C (and therefore ruling out other options such as Focus).

4.2 Pseudo-periphrases

The second category of verbal complexes containing gerunds in Ecuadorian Spanish are those which we propose are better analysed as pseudo-periphrases (PPGs), as explained in section 3.2. For this second pattern, the analysis is not done in terms of a clause subordinated to the other, but in terms of a single syntactic structure in which the inflected verb is generated as an auxiliary in a functional projection\textsuperscript{13} and later moves to TP to check its features with those of the subject, whereas the gerund is born under VP, where it establishes its thematic relations before landing at vP. This matches the

\textsuperscript{13} With regards to the functional position under which the inflected verb is originally generated, we propose, following Cinque’s (1999) proposal, an Andative Phrase (AndP) which would be closely related to the fact that auxiliary verbs in these sentences are consistently movement verbs. However, until more research had been done, we limit ourselves to call it FP\textsubscript{m} here.
observed fact that from a thematic viewpoint the gerund is the main verb of the sentence.

For a sentence like (16a) Vengo preparando mi tarea de quichua, repeated here as (35), the proposed analysis is therefore as follows:

(35) Vengo preparando mi tarea de quichua
Come.1P.sg. preparing my task of Quechua
‘I’ll come after preparing my Quechua homework’

5. Converbs in Quechua and their Spanish equivalents

Many structures with gerunds in Ecuadorian Spanish (and other varieties of Spanish in contact with Quechua) have been proposed to be the result of borrowed structures from Quechua into Spanish.

In particular, here we shall see a number of structures in Quechua that have been proposed to correspond to Spanish gerunds, and then see their Spanish counterpart in order to form a paradigm which can shed light on the data. These morphemes are often called converbs in the bibliography, because they fulfill the following criteria (Bruil, 2008: 1):

1. The form has to be part of the verbal paradigm.
2. It is a non-finite form.
3. It is used adverbially, that is, to modify the verb.
4. It is a subordinated form.
There are two main types of morphemes that have been identified with gerunds in Quechua: those that codify simultaneity between two actions and those used to create adverbial subordinate clauses, which can codify anteriority of one action with respect to another or simultaneity like in the previous kind.

5.1. Morphemes of simultaneity/progressive tense

Ecuadorian Quechua possesses a morpheme of progressive tense, \(-ju-\), which we can see in the following example:

(36) Shamu-\(ju\)-ni. [Cole (1982:150)]
    Come-progr-1P.
    ‘I am coming.’

In Peruvian Quechua, morphemes with a similar function are \(-chka/-shka/-sha\) (differing according to different varieties; Avellana, 2012:301). These morphemes indicate simultaneity with the speech act:

(37) a. Amun. \(Amuchkan\).
    ‘He comes. \(He’s\) coming’

    b. Apani \(Apachkani\).
    ‘I carry. \(I’m\) carrying’

This is equivalent to the Spanish progressive tense. However, varieties of Spanish in contact with Quechua have been shown to exhibit this progressive tense in contexts which are impossible in Standard Spanish, most notably stative verbs (Avellana, 2012: 299-300; following Vidal de Battini, 1980; and Kany, 1969):

(38) a. La urpilíta, la palomita chica, llora cuando nace un varón, porque está sabiendo que el varón es el que la mata al cazarla.
    ‘The urpilíta, the small dove, weeps when a male is born, because she is knowing that it is the male who kills it when hunting’. [Avellana, 2012: 299-300]

    b. Eran la gente mala que tenían plata y siempre estaban queriendo más.
    ‘Those were evil people who had money and they were always wanting more’.
    [Avellana, 2012: 299-300]
c. Tú no más estás sabiendo las penas que estoy pasando.
   ‘Only you are knowing the sorrows I’m going through’. [Avellana, 2012: 299-300]

Cole (1982) also mentions how the morpheme in (36) “is used with both active and stative verbs” (1982:150), which links with the previously observed facts in contact with Spanish.

5.2. Morphemes of adverbial subordination

In Ecuadorian Quechua there are two morphemes that indicate adverbial subordination (according to Cole, 1982), which in turn depend on whether the subjects in the matrix and the embedded clause are identical or not. In the basic structure, they are interpreted as time clauses:

**Identical subjects. Morpheme -shpa**

(39) Kitu-man chaya - **shpa** - mi rijsi - ta riku-rka-ni.
    Quito-to arrive-adverbial -validator acquaintance-acc see-past-1P
    ‘When I arrived in Quito, I saw a friend.’

**Non-identical subjects. Morpheme -jpi**

(40) Ñuka Kitu-man chaya - **jpi** - mi rijsi riku-wa-rka
    I Quito-to arrive-adverbial-validator acquaintance see - 1-past 3
    ‘When I arrived in Quito, a friend saw me.’

Other varieties of Quechua use a different morpheme –**spa** or simply –**s** in its short form (Avellana, 2012:316; following Albarracín et al, 2002:112):

(41) a. Ñan-ta puri-ni maska-su-**spa**.
    road-ACC walk-1 seek-2AC-**SPA**
    ‘I walk on the road looking for you.’

    b. Qayna amu-s tare-ra-yki
    yesterday come-**SPA** find-PAS-12
    ‘I found you yesterday while coming.’

An important feature of these morphemes is that they bear no time marking. Therefore, they often admit two aspectual readings: simultaneity with the verb in the matrix clause
or succession of events one after the other. Hence, we can have two interpretations, as in (42):

(42) Taki-spa hamu-n
    sing-SPA come-3
    ‘He came singing / He came after singing’ (Courthès 1999)

This would explain while it has been claimed that Spanish in contact with Quechua admits both interpretations of gerunds:

(43) Value of simultaneity (from Avellana, 2012:305; following Merma Molina, 2007:313)

    a. Lavando la ropa recordaba a su madre.
       ‘Washing the clothes he remembered his mother’.

    b. Carlos bañándose cantaba una bonita canción.
       Carlos [while] washing sings a pretty song.

    c. Haciendo las tareas, hablaba y hablaba con Marisol.
       ‘Doing her housework, she talked and talked with Marisol’.

(44) Value of anteriority (from Haboud, 2005:26)

    a. Vendiendo papas vengo de mercado.
       Selling potatoes I come from [the] market.
       ‘After selling potatoes, I come from the market.’

    b. Saliendo de la escuela vamos trabajar en el pueblo.
       Getting-out from the school we go to work in the village.
       ‘After going out from school we go to work in the village’

Putting aside their aspectual value, these morphemes can give rise to other readings in sentences in which they appear, like conditional and causal. This is not a particularity of Quechua: in the same way Spanish gerunds have been shown to appear in conditional, causal and other types of adverbial clauses, the combination of these Quechua morphemes with stative verbs, or past or future tenses produces these readings as a result of compositionality. This requires additional morphemes in Ecuadorian Quechua, but not in other varieties of Quechua:

Conditional value

(45) a. yacha-spa ri-nki
know-**SPA** go-2
‘If you know, you’ll go.’ (Lit.: Knowing, you’ll go.)

b. muna-**spa**-qa re-n-qa
want-**SPA**-TOP go-3- TOP
‘If he wants to, he’ll go.’ (Lit.: Wanting to, he’ll go.)

(46) Utavalu-man ri - shpa - ka ruwana - ta randi – sha  (**Ecuadorian Quechua**)  
Otavalo-to go -adverbial -topic poncho -acc buy-future 1  
‘If I go to Otavalo, I will buy a poncho.’

**Causal value**

(47) a. qollqe-ta mana api-s, mana miku-ni  
money-AC NEG have-SPA NEG eat-1  
‘Since I don’t have any money, I don’t eat.’ (Lit.: Not having any money, I don’t eat.)

b. mancha-ku-s mana amo-ra  
be scared-REFL-SPA NEG come-PAS  
‘Since he was scared, he didn’t come.’ (Lit.: Being scared, he didn’t come.)

An important part of the values these morphemes have in Quechua is that their translation as gerunds into Spanish also admits most of the values it has in Quechua, even independently of linguistic contact.

Summing up different morphemes in Quechua and the different interpretation they may receive in Spanish we would obtain something like:

<table>
<thead>
<tr>
<th>Quechua morphemes of simultaneity</th>
<th>Spanish gerunds</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ecuadorian Quechua</strong> –ju-</td>
<td><strong>Stative verbs</strong></td>
</tr>
<tr>
<td>Shamu-ju-ni.</td>
<td>Eran la gente mala que tenían plata y siempre <strong>estaban queriendo</strong> más.</td>
</tr>
<tr>
<td>Come-progr-1P.</td>
<td>‘Those were evil people who had money and they <strong>were always wanting</strong> more’.</td>
</tr>
<tr>
<td>‘I am coming.’</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Other Quechua</strong> -chka/-shka/-sha</th>
<th><strong>Event verbs</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Apachkani.</td>
<td>Estoy viniendo.</td>
</tr>
<tr>
<td>I’m carrying.</td>
<td>‘I am coming’.</td>
</tr>
</tbody>
</table>
Quechua morphemes of subordination

<table>
<thead>
<tr>
<th>Ecuadorian Quechua</th>
<th>Spanish gerunds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kitu-man chaya - shpa - mi rijsi - ta riku-rka-ni.</td>
<td><em>Basic aspectual values</em></td>
</tr>
<tr>
<td>‘When I arrived in Quito, I saw a friend.’</td>
<td><em>Simultaneity</em></td>
</tr>
<tr>
<td>Ñuka Kitu-man chaya - jpi - mi rijsi riku-wa-rka</td>
<td><em>Lavando</em> la ropa recordaba a su madre.</td>
</tr>
</tbody>
</table>
| ‘When I arrived in Quito, a friend saw me.’ | ‘Washing the clothes he remembered his mother’.

Other Quechua

| Ñan-ta puri-ni maska-su-spa. | *Anteriority* |
| road-ACC walk-1 seek-2AC-SPA | *Vendiendo* papas vengo de mercado. |
| ‘I walk on the road looking for you.’ | ‘Selling potatoes I come from [the] market’. |

### 6. Gerunds in pre-contact Spanish

In Early Spanish, *en+gerund* is already attested expressing different adverbial values. Moreover, it is worth pointing out that, there seems to be free variation between the use of *en+gerund* and that of the gerund without preposition (48).  

(48) **viníen, en ffurtando, en ascondiendo, e tolliendo** a los ssennores ssu derecho 

| came PREP stealing, PREP hidding, and leaving-without to the sirs their right |
| e la tierra donde eran naturales e **menguándoles** ssus onrras quanto podían 

| and the earth where be natural and diminishingCL<sub>DAT</sub>3p.pl their honour as could |

| [...] Otrosí **metiéndose** por ffijos dalgo los que lo non eran nin podrían sser, 

| Also appearingCL<sub>REFL</sub> for noble-people the that CL<sub>AC</sub>3p.sg not be nor might be |

---

14 In this paper we include data of *en+gerund* for most historical data on methodological grounds. Historical corpora like CORDE and CORDIAM are not parsed, which means extracting data is difficult if every gerund is included in the search. Looking for instances of *en+gerund* simplifies the search while providing us with the desired readings at the same time.
e los malos metiéndose por buenos, e los ssin entendimiento por entendidos.

and the bad appearingCLREFL for good and the without knowledge for experts

“They came stealing, hiding and taking the rights of sirs away, and the earth from where they were native, and depriving them of their honour as much as they could […] Besides, the ones that were not noble and those who might never be, came there pretending to be noble, and the bad ones pretending to be good and the ones that were ignorant pretending to be experts.”

[CORDE: c 1252 – 1270. Alfonso X, Setenario, ESPAÑA, 10.Tratados jurídicos, Kenneth H. Vanderford, Instituto de Filología de la Facultad de Filosofía y Letras de la Universidad de Buenos Aires (Buenos Aires, 1945)]

Gerunds are frequent in all types of documents: in charters, in legal documents and notarial deeds, and in narrative, historiographical, scientific and religious prose, as well as in epic poetry and all poetry in general.

As for the aspectual values that gerunds can encode, from Early Spanish onwards they can express anteriority, simultaneity and posteriority. The most frequent one, though, seems to be the meaning of simultaneity, followed by the anteriority one.

[SIMULTANEITY]

(49) a. Clerigo o lego o menestral que tenga aprentiz pora en sennar clerezia o Clerk or layman or artisan who has apprentice to teach clerical-work or su menester & castigando lo o en sennando lo le firiere de fferida, qual its activities & punishing CLAC or teaching CLAC CLDAT hurt of injury that deue como con correa o con palm o con uerdugo delgado o con otra cosa ligera, must like with belt or a palm-leaf or with whip thin or with other thing light & daquellas feridas muriere por [f. 83r] occasion, non sea tenjdo por omezillo, & of-those injuries died for occasion not be considered as homicide

“In case a scholar or layman or artisan who has an apprentice so as to teach him clerical work or its activities, injured him when punishing him or teaching him, as he must, either with a belt or a palm leaf or a thin whip or another light thing,

15 Precisely, the charters in which they are attested are: Fuero de Soria, Fuero de Zorita de los Canes, Fueros de Escalona por Fernando III, Fuero de Viguera y Val de Funes, Fuero de Cuenca; Fuero de Alcaraz, Fuero de Alarcón, Fuero de Navarra, Fuero viejo de Castilla, Fuero General de Navarra, etc.

16 Some of the legal documents and notarial deeds in which they can be found are: Setenario, Primera partida, Espéculo de Alfonso X, Cortes de Toro or Cortes de Segovia.

17 Among the works in which gerunds are used, we can mention: General Estoria, Estoria de España, Gran conquista de Ultramar, Historia Troyana, Libro del Cavallero Cifar, El conde Lucanor, Biblia (Escorial I.j. 8), Sevillana Medicina de Juan de Aviñón, Crónica de veinte Reyes, Sumas de la historia troyana, Biblia Escorial or Cancionero de Baena, for example.

18 See Suñer (2017) for more information concerning the word order of medieval Spanish gerund clauses and their simultaneity and anteriority reading in relation to different adverbial values.
and the apprentice actually died due to these injuries, it should not be considered a homicide.”

[CORDE: c 1196. Anónimo, Fuero de Soria, ESPAÑA, 10.Ordenamientos y códigos legales, Galo Sánchez, Centro de Estudios Históricos (Madrid), 1919]

b. las vnas ante del baptismo e las otras en baptizando e las otras

the ones before the baptism and the others while-baptizing and the others
despúes del baptismo.

after the baptism

“these ones before baptism and the other while baptizing, and the other ones after baptism”

[CORDE: c 1252 – 1270. Alfonso X, Setenario, ESPAÑA, 10.Tratados jurídicos, Kenneth H. Vanderford, Instituto de Filología de la Facultad de Filosofía y Letras de la Universidad de Buenos Aires (Buenos Aires), 1945]

c. &quien en la defesa segare yerua, peche çinco sueldos […]; pero por el ganado & who in the meadow reaped grass pay five coins but for the cattle

que en pasando por el camino, paciendo en la dehesa, non peche

that passing through the path, grazing in the meadow not pay

ningunna calonna

any duty

“And who reaped grass in the meadow, should pay five coins, except for the cattle which would not pay any duty for going through the path or grazing in the meadow.”

[CORDE: 1284 – 1295, Anónimo, Fuero de Cuenca, ESPAÑA, 10.Ordenamientos y códigos leg Rafael de Ureña y Smenjaud, Academia de la Historia (Madrid), 1935]

d. Et ssi matare o fferiere en tomando lo o en rrobanando lo muera por ello

and if killed or hurt grabbing CLAC or preparing striking CLAC died for it

ssi rrico omne non ffuere

if rich man not be

“And if anyone killed or injured someone when grabbing him or when stealing something from him, he should die because of it unless he was a rich man.”


[ANTERIORITY]

(50) a. E estonce deue mandar […] que los echen de fuera / della. E en and then must order (them) to CLAC3p.pl. turn-out of-outside of-it and PREP
“And then they must tell them to turn them out, and after turning them out, the clergymen must go after them saying a prayer for the dead.”


b. quando morio su muger mando quela vntasen [...] segund su costunbre when died his wife ordered that-CLAC put-ointment according to his tradition

para la quemar enel fuego E en vntando la llego alli & to CLAC burn in-the fire and PREP putting-ointment CLAC arrived there and

començo de llorar & besarla & metiose la espada por el cuerpo & cayo muerto started of cry & kiss+CLAC & putCLREFL the sword for his body & fell dead

“When his wife died, he ordered to spread ointment on her according to tradition so as to burn her on a funeral pyre. After spreading the ointment on her, he got there and started to cry and kiss her, and he drove his sword into his body and fell dead.”


c. & en acabando dezir estas / palabras ally delante del rrey cayo su and PREP finishing say these words there before of-the king fell his

hermano muerto dela ferida / que auja rresçebido brother dead of-the wound that had received

“And after saying these words, his brother fell dead there, before the king, due to the wounds he had suffered.”


d. En falleçiendo su hermano el inclito rrey don Johan. luego […] PREP dying his brother, the illustrious king sir John, then

leuaron al palacio real dela ciudad […] a la señora duquesa brought to-the palace royal of-the city to the lady duchess

“Then, after dying his brother, Sir John, the illustrious king, they moved the lady duchess to the royal palace.”
(51) a. E fazer les deuen onra; **en besando les** las manos todos / los xpiitianos. & do **CL-DAT** must honour PREP kissing **CL-DAT** the hands all the Christians

“And they must honour them; all Christians must kiss their hands.”

b. ¿No entendedes que toda cosa que entre en el ombre nol puede ensuziar not understand2p.pl. that all thing that get in the man not**+CL-AC** can dirty ca no entra en el corazón sino en el uientre, e sale fuera **en alimpiando** todas since not get in the heart but in the guts goes out **PREP** cleaning all las uiandas? the intestines

“Don’t you understand that what gets into the human being cannot get him dirty because it does not get into his heart but into his guts, and it goes out and leaves all the intestines clean?”

c. Adam non fue engannado, mas la mugier fue engannada **en quebrantando** Adam not was misled, but the wife was misled PREP breaking el mandamiento de Dios, the commandment of God

“Adam was not misled, but his wife was misled and broke God’s Commandment.”

The data contained in **CORDE** shows that the use of **en+gerund** and the **gerund** alone increases significantly until up to the 17th century and that after that period there is a remarkable decrease in the use of this structure. This conclusion is the same as the one reached by Pato (2014: 838), who illustrates the increase of these constructions in the
16th and 17th century that we have corroborated by close examination of the data contained in CORDE.

Table 1. Prepositional gerund: its evolution in Peninsular Spanish (Pato 2014:838)

<table>
<thead>
<tr>
<th></th>
<th>XIII</th>
<th>XIV</th>
<th>XV</th>
<th>XVI</th>
<th>XVII</th>
<th>XVIII</th>
<th>XIX</th>
<th>XX</th>
<th>TOTALES</th>
</tr>
</thead>
<tbody>
<tr>
<td>en + gerundio</td>
<td>531</td>
<td>282</td>
<td>634</td>
<td>3640</td>
<td>3348</td>
<td>615</td>
<td>545</td>
<td>21</td>
<td>9616</td>
</tr>
<tr>
<td>% totales</td>
<td>6%</td>
<td>3%</td>
<td>7%</td>
<td>38%</td>
<td>35%</td>
<td>6%</td>
<td>6%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>peso palabras</td>
<td>79.07</td>
<td>105.64</td>
<td>77.68</td>
<td>213.69</td>
<td>271.13</td>
<td>62.65</td>
<td>28.24</td>
<td>0.92</td>
<td></td>
</tr>
<tr>
<td>posición</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>1-8</td>
</tr>
</tbody>
</table>

As explained by this author, from the beginning of the 18th century onwards Peninsular Spanish develops several other strategies to express the same values encoded by Medieval and Golden Age gerunds (i.e., después de + infinitive and en cuanto + finite verb in the 18th century; al + infinitive and una vez que + finite verb in the 19th century; and nada más+ infinitive in the 20th century). Therefore, the use of gerund constructions in general decreases from the 18th century onwards in Peninsular Spanish.

Table 2. Decreasing frequency in the 18th century (Pato 2014:851)

<table>
<thead>
<tr>
<th></th>
<th>XIII</th>
<th>XIV</th>
<th>XV</th>
<th>XVI</th>
<th>XVII</th>
<th>XVIII</th>
<th>XIX</th>
<th>XX</th>
<th>TOTALES</th>
</tr>
</thead>
<tbody>
<tr>
<td>en llegando</td>
<td>29</td>
<td>14</td>
<td>89</td>
<td>447</td>
<td>443</td>
<td>102</td>
<td>79</td>
<td>2</td>
<td>1205</td>
</tr>
<tr>
<td>% totales</td>
<td>2.4%</td>
<td>1.16</td>
<td>7.38</td>
<td>37</td>
<td>36.76</td>
<td>8.46</td>
<td>6.55</td>
<td>0.16</td>
<td>100</td>
</tr>
<tr>
<td>peso palabras</td>
<td>4.32</td>
<td>5.24</td>
<td>10.90</td>
<td>26.24</td>
<td>35.88</td>
<td>10.39</td>
<td>4.09</td>
<td>0.09</td>
<td></td>
</tr>
<tr>
<td>llegando</td>
<td>417</td>
<td>63</td>
<td>322</td>
<td>1373</td>
<td>1266</td>
<td>530</td>
<td>548</td>
<td>437</td>
<td>4956</td>
</tr>
<tr>
<td>% totales</td>
<td>8.41</td>
<td>1.27</td>
<td>6.49</td>
<td>27.70</td>
<td>25.54</td>
<td>10.69</td>
<td>11.05</td>
<td>8.81</td>
<td>100</td>
</tr>
<tr>
<td>peso palabras</td>
<td>62.09</td>
<td>23.60</td>
<td>39.45</td>
<td>80.60</td>
<td>102.52</td>
<td>53.99</td>
<td>28.40</td>
<td>19.15</td>
<td></td>
</tr>
<tr>
<td>al llegar</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>27</td>
<td>61</td>
<td>69</td>
<td>735</td>
<td>436</td>
<td>1329</td>
</tr>
<tr>
<td>% totales</td>
<td>-</td>
<td>-</td>
<td>0.07</td>
<td>2.03</td>
<td>4.58</td>
<td>5.19</td>
<td>55.30</td>
<td>32.80</td>
<td>100</td>
</tr>
<tr>
<td>peso palabras</td>
<td>-</td>
<td>-</td>
<td>0.12</td>
<td>1.59</td>
<td>4.94</td>
<td>7.03</td>
<td>38.09</td>
<td>19.10</td>
<td></td>
</tr>
</tbody>
</table>
In accordance with the previous data, **CORDE** shows that in Peru and Colombia, prepositional gerunds are also used in the 16th and 17th century and, what is more, the prevailing reading is that of anteriority since their structures are equivalent to temporal embedded clauses. The simultaneity one is also available, but we will leave it aside because it is a homogeneous characteristic of all varieties of Spanish, and we will focus on anteriority.

(52) a. **En muriendo** hasta cinco días no le enterrauan.
PREP dying until five days not CLDAT buried

“Once he had died, he was not buried until five days after his dead.”


b. **En acauando el yndio chasqui su tarea**, conforme al tiempo
PREP finishing the Indian messenger his task, according to-the-time

que se le abía señalado […], benía otro […] y entraba en su lugar
that CLPASSIVE CLDAT had remarked came another & entered in his place

“Once the Indian Messenger had finished his task, according to what had been established, there came another one and took his place.”


c. **En acabando de leer** se bolvía al Convento
PREP finishing of read CLREFL went-back-to-the-monastery

“Once he finished reading, he went back to the monastery.”


d. **En saliendo de aquellos cenagales / Y montañas de gran desabrimiento**, 
PREP going-out of those swamps and mountains of great roughness

Hallaron luego rastros y señales,
found then trails and traces.

“After leaving those swamps and the rough mountains, they found trails and traces.”

Along the same lines as CORDE, CORDIAM offers a wide range of data illustrating the anteriority value, which is still attested in 20\textsuperscript{th} century Ecuadorian Spanish, (Xe).

(53a) me dijo Pedro López que en comiendo yria a casa de vn amigo
CL\textsubscript{DAT} said Pedro López that PREP eating would-go to house of a friend

“Pedro López told me that, after eating, he would go to a friend’s house.”


b. se me / deben cerca de cuatro mil pesos de oro / en pidiendo
CL\textsubscript{PASSIVE} CL\textsubscript{DAT} owe about of four thousand pesos of gold PREP asking-for

a quien me debe luego acuden / a me azer mal
to whom CL\textsubscript{DAT} owe immediately come to me do harm

“They owe me at about four thousand gold pesos; when I ask who owe them to me to pay for them, they come immediately to harm me.”


c. en pasando / la esquina desparece
PREP going-round the corner, disappears

“Once he goes round the corner, he disappears.”


d. Estas cautelas de nuestros enemigos […] no van encaminadas sino a sacarnos
this caution of our enemies not go directed-towards but to take-away CL\textsubscript{DAT}

el tesoro que ellos piensan que está en el Quito, para en apoderándose de ello
the treasure that they think that is in the Quito for PREP taking-possession of it

hacer lo mismo de nuestras mujeres e hijos
do the same of our wifes and soons

“The carefulness of our enemies aims but at taking away the treasure they think there is in Quito so as to do the same with our wifes and soons once they have taken possession of it.”


To sum up, the corpora provide us with evidence of the fact that gerund constructions, either introduced by a preposition or without it, displayed high frequency in 16\textsuperscript{th} and
17th century Peninsular Spanish. Besides, we can see that Spaniards who settled in the area of the viceroyalty of Peru preserved the same structures and that in the 17th century mestizos also used them (53c). A detailed analysis of the data in CORDIAM also shows that these constructions were better preserved in America (53d) than in Spain, where other strategies substituted for them.

7. Linguistic contact, transfer, SLA and convergence

Once we have proven that gerund complexes retained the anteriority reading in Hispano-American varieties, we should explore the mechanisms that triggered the activation of this aspectual value in Ecuadorian gerunds due to contact between Quechua and Spanish.

Ecuadorian Highlands are representative of a language contact environment in which we basically have 4 types of speakers: Quechua monolinguals, bilinguals with Quechua as their main language, bilinguals with Spanish as their main language, and Spanish monolinguals (see Muysken 2005). With the aim of understanding the acquisition of the functional category involved in the linguistic change we have described in the previous sections by comparing Standard Spanish with Ecuadorian Spanish, we are going to focus in the acquisition of Spanish by Quechua speakers.

Prototypically, it can be said that the first generation of speakers acquire Spanish as a Second Language (L2), in which case they may grammaticalize functional categories that belong to the interlanguage they develop to acquire the L2.

According to Heine and Kuteva (2005: 229), “in establishing equivalences across languages, speakers appear to draw preferably on semantic […] rather than on syntactic or other structural parameters”. Thus, it could be said that equivalence and structural isomorphism concerning functional categories and their features would bring about the contact-induced change undergone in Ecuadorian Spanish. The process could be described as follows:

**CONTACT-INDUCED CHANGE:**
1. Speakers notice that in their L1 there is a grammatical category ASP_{L1}
2. The PLD of the L2 they are exposed to provide the L2 learners with robust cues of the existence of a grammatical category with the feature ASP_{L2} comparable to those of ASP_{L1}
3. The learner draws on universal strategies of grammaticalization, using construction ASP_{L3} in order to develop ASP_{L2}.
4. The learner grammaticalizes ASP_{L3} to ASP_{L2}.
In the preceding schema, ASP\textsubscript{L3} is a property of the interlanguage representation on the L2 initial state which is eventually grammaticalized as ASP\textsubscript{L2}.

The second generation of speakers would be the bilingual who had been exposed to the INPUT of the language of the first generation, which in fact was an L2 (see Tsimpli, Sorace, Heycock y Filiaci 2003). Furthermore, language contact may have involved an additional massive influence of monolingual Quechua and monolingual Spanish Primary Linguistic Data (see Weerman 1993).

These bilingual speakers would acquire functional categories in a particular way. As stated by Sánchez (2003:8), “in second language and bilingual acquisition, attainment of a complete specification for functional categories involves higher levels of complexity”. There seem to be two systems of specific features of functional categories competing in the bilingual mind that converge and eventually become part of the two grammars attained by means of inter-linguistic transfer. In terms of Sánchez (2003: 10) “there is a subset of cases of cross-linguistic interference that result in convergence in the feature specification of the same functional categories in the two languages”.

Thus, in order to explain the nature of the linguistic transfer that has taken place in Ecuadorian Spanish aspectual categories, we embrace Sánchez’s (2003) Functional Convergence Hypothesis (FCH) to explain the conditions under which a fusion of functional features takes place in the bilingual mind:

**Functional Convergence Hypothesis.**

- “Convergence, the specification of a common set of features shared by the equivalent functional categories in the two languages spoken by a bilingual individual, takes place when a set of features that is not activated in language A is frequently activated by input in language B in the bilingual mind.”
- “Convergence may be the result of the fusion of features associated with a functional category in language A with other features associated with that category in language B or, in certain cases, it may be the result of the emergence of a new functional category in one of the languages that is not present in the syntactic representation of monolingual speakers of that language.”
  [Sánchez 2003: 15]

From the data examined and analyzed in the preceding sections, though, we establish that in the case of Ecuadorian Gerund structures, both languages in contact (i.e., Spanish and Quechua) display the activation of anteriority features. Therefore, in this case,
convergence must necessarily be taken as the second part of Sánchez’s FCH, which describes it as the fusion of features associated to a particular functional category both in language A and in language B. That is, Ecuadorian periphrastic gerunds are the result of a fusion of features already activated in the languages in contact (Spanish and Quechua), resulting in the emergence of new uses in monolingual Ecuadorian Spanish which contrast significantly with those of Standard Spanish.

8. Conclusion

In this paper we have provided an analysis for verbal complexes with gerunds in Ecuadorian Spanish, showing how the two existing patterns (adverbial subordination and semi-periphrases) correspond to two very different syntactic structures, and perhaps more importantly, how the properties of gerunds in Ecuadorian Spanish, like its “anomalous” anteriority reading in fact stem from general properties of the gerund in Spanish.

Therefore, an important conclusion of this work is the reflection of how superficially opaque data, like the gerunds we have studied (which are impossible to even interpret for speakers of other varieties of Spanish) can in fact be predicted when core properties of those data are combined in novel ways.

This work has also attempted to show the kind of difficulties that arise when we try to elicit or obtain data from sources that present particular problems: either because they are somewhat inaccessible, like when they pertain to linguistic varieties that are very different from those of researchers’, or when we have to account from the diachronic dimension of how syntactic structures emerge in language. In this sense, we attempted to provide different methodologies and their contribution to our research.

References


Toscano Mateus, H. 1953. El español en el Ecuador, Revista de Filología Española, Anejo 61, Madrid, CSIC.


Sources


CORDE. Corpus Diacrónico del Español: http://www.rae.es

CORDIAM. Corpus Diacrónico y Diatópico del Español de América: http://www.cordiam.org

CREA. Corpus de Referencia del Español Actual: http://corpus.rae.es/creanet.html