The development of iterative verbal periphrases in Romance

Abstract

This paper compares the diachronic development of $tornar(e) + a + \text{infinitive}$ (henceforth abbreviated RETURN + INF) constructions in Spanish, Catalan, and Italian, a topic that especially for Catalan and Italian has not received much attention. I develop and explore the hypothesis that due to their lexical origin, iterative constructions develop from a restitutive to a repetitive function. A diachronic analysis of a corpus of RETURN + INF tokens from the three languages suggests that the grammaticalization of RETURN + INF constructions can be measured in terms of (a) actionality and (b) restructuring as mirrored in the possibility of clitic climbing. A statistical analysis using generalized linear mixed-effects regression modeling demonstrates an interplay between restructuring and the actionality of the predicates in the development of RETURN + INF constructions: the grammaticalization process affects state, achievement, and accomplishment predicates before activity predicates because activity predicates exclude a restitutive meaning. The paper thus identifies a grammaticalization path for RETURN + INF constructions common to three Romance languages that suggests a link between typological and diachronic observations. At the same time, it identifies differences in the diachronic development of these periphrases between the Ibero-Romance languages and Italian. In addition, it proposes a statistical means of assessing quantitative differences in the degree to which a verbal periphrasis is grammaticalized across related languages.

Keywords: verbal periphrasis, Romance, iterativity, grammaticalization, clitic climbing

1. Introduction

In older stages of Spanish, Catalan and Italian, iterative verbal periphrases of the form $tornar(e) + a + \text{INF}$ (henceforth RETURN + INF constructions) are attested (1–3).¹

(1) Old Spanish

\begin{align*}
\text{Entonce} & \text{ comença-ron} & \text{los tribunos} & a & \text{aver} & \text{su} \\
& \begin{array}{l}
\text{then} \\
\text{begin-PST.PVF.3PL}
\end{array} & \text{the tribunes} & \text{to} & \text{have} & \text{their}
\end{align*}

\begin{align*}
\text{consejo por establecer} & \text{la ley e tornar a llamar el} \\
& \text{council for} & \text{establish} & \text{the law and} & \text{return to} & \text{call the}
\end{align*}

\begin{align*}
\text{pueblo que esta-va} & \text{arma-do} \\
& \text{people that} & \text{be-PST.IPVF.3SG} & \text{arm-PTCP.M.SG}
\end{align*}

‘Then the tribunes began to hold a council in order to apply the law and again call the people, who were up in arms’

(Las Décadas de Tito Livio, c. 1400, apud CORDE)

(2) Old Catalan

\begin{align*}
E & \text{puix} & \text{Moysès} & \text{torna-va} & a & \text{alçar} & \text{les mans,} \\
& \text{and} & \text{then} & \text{Moses} & \text{return-PST.IPVF.3SG} & \text{to} & \text{raise the hands}
\end{align*}

\begin{align*}
\text{e} & \text{los fills de} & \text{Israel venc-ien} \\
& \text{and} & \text{the sons of} & \text{Israel} & \text{win-PST.IPVF.3PL}
\end{align*}

‘And then Moses raised his hands again, and the sons of Israel won’

(Sermons, St. Vicent Ferrer, 1400–1450, apud CICA)

¹ The references to the corpora CORDE, CICA and OVI are given in the data section (Section 4).
Whereas the Spanish RETURN + INF construction was replaced by the synonymous construction volver + a + infinitive by the end of the 17th century (see Eberenz 1997; Stolova 2005), it was maintained in Catalan and Italian, as in examples (4–5).

(4) Catalan

El sector editorial catalán va tornar a caure un 10% el 2012
‘The Catalan editorial marked has dropped another ten percent in 2012’

(5) Italian

La nostra economia può tornare a crescere a un ritmo annuo dell’ordine del 3 per cento
‘Our economy could grow again at an annual rhythm of three percent’
(apud CORIS (Rossini Favretti 2014))

However, the productivity of the RETURN + INF constructions (including the Spanish successor volver + a + infinitive) in the three languages appears to differ. In particular, Modern Spanish volver + a + infinitive and Modern Catalan tornar + a + infinitive appear to be more productive than Modern Italian tornare + a + infinitive. This difference in productivity is reflected in the attention linguistic studies have given to these verbal periphrases. Spanish RETURN + INF constructions and their historical development have been analyzed in many studies (Yllera 1980: 196-198; Eberenz 1997; Olbertz 1998: 231-234; Stolova 2005; García Fernández et al. 2006; Melis 2006: 908-912; Garachana Camarero and Rosemeyer 2011). Catalan RETURN + INF constructions are analyzed in two standard Catalan grammars, i.e. Wheeler, Yates and Dols (1999: 175-176) and Solà et al. (2002: 2702-2703). In contrast, for Italian RETURN + INF constructions, there are only scattered mentions in the literature such as, e.g. Ross (2006: 457). RETURN + INF constructions are not discussed in the large section on verbal periphrases in the Grande grammatica italiana di consultazione (Bertinetto 1991: 129-161). Lamirioy and De Mulder (2011) briefly discuss Italian RETURN + INF constructions, arguing that they are of weak productivity. Likewise, there seems to be uncertainty about the historical development of Italian RETURN + INF constructions. There is no mention of tornare + a + infinitive in the Grammatica dell’italiano antico (Salvi and Renzi 2010). Giacalone Ramat (2001) argues that tornare is an “emergent auxiliary” whereas Parry (to appear) observes that Italian RETURN + INF constructions were more frequent in older stages of the language.

These observations suggest that although in all three languages, RETURN + INF constructions have acquired an iterative function, they differ with respect to the degree to which this
change was implemented. I aim to investigate these commonalities and differences in the diachronic development of RETURN + INF constructions in Spanish, Catalan and Italian, thus shedding light on an underresearched topic in Romance linguistics. Specifically, I develop and investigate the hypothesis that due to their lexical origin, iterative constructions develop from a restitutive function (the restoration of a previous state of affairs) to a repetitive function (the repetition of a previous event). In order to test this hypothesis, I investigate the development of RETURN + INF constructions with respect to two contextual parameters: the actionality of the predicate expressed by the infinitive and the possibility of clitic climbing. These two parameters influence the interpretation of a RETURN + INF construction as restitutive or repetitive in that (a) activity predicates exclude a restitutive interpretation and (b), clitic climbing appears to be correlated with the grammaticalization process of RETURN + INF constructions, also favoring a repetitive interpretation. I observe changes in the distribution of Spanish, Catalan and Italian RETURN + INF constructions with respect to these contextual parameters. These observations support the hypothesis that these constructions developed from a restitutive to a repetitive function. The results also illustrate how this change was implemented to a lesser degree in Italian than in the Ibero-Romance languages, suggesting that these differences in the degree of implementation of the grammaticalization process are correlated with functional differences in the use of the competing iterative –re/-ri prefix in the Romance languages.

The paper is structured as follows. Building on the existing literature on the development of Romance RETURN + INF constructions, Section 2 develops a model of the grammaticalization of Romance RETURN + INF constructions. In Section 3, I establish three hypotheses that make use of the influence of the contextual factors of actionality and clitic climbing on the interpretation of RETURN + INF constructions. In Section 4, I describe the extraction and coding procedures, as well as the analytical approach. Section 5 presents the results of the descriptive and inferential statistical analyses. I discuss these findings in Section 6 and explain their theoretical relevance in the concluding Section 7.

2. A model of the grammaticalization of Romance RETURN + INF constructions

When describing the function of Romance RETURN + INF constructions, it is first necessary to distinguish between RETURN + INF constructions with a lexical meaning and RETURN + INF constructions with a grammatical meaning. I illustrate this difference using the Italian examples in (6–7).

(6) Italian

<table>
<thead>
<tr>
<th>Italian</th>
<th>RETURN + INF construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sono</td>
<td>torna-to</td>
</tr>
<tr>
<td>be.PRS.1SG</td>
<td>return-PTCP.M.SG</td>
</tr>
<tr>
<td>ha</td>
<td>accol-to</td>
</tr>
<tr>
<td>have.PRS.3SG</td>
<td>receive-PTCP.M.SG</td>
</tr>
<tr>
<td>a</td>
<td>prendere</td>
</tr>
<tr>
<td>to</td>
<td>get</td>
</tr>
<tr>
<td>niccolò</td>
<td>that</td>
</tr>
<tr>
<td>che</td>
<td>me</td>
</tr>
<tr>
<td>mi</td>
<td></td>
</tr>
</tbody>
</table>

'I have returned to get Niccolò who has received me with great parties’ (apud CORIS)
The RETURN + INF token in (6) can be translated as ‘returning in order to do something’, and can thus be characterized as expressing a motion event. The verb tornare is interpreted in its lexical meaning ‘return’, whereas the prepositional phrase introduced by a expresses the subject referent’s motivation for returning. In contrast, the RETURN + INF token in (7) denotes the repetition of an earlier event. Thus, the verb tornare acquires a meaning that can be paraphrased using the adverb again in English. The prepositional phrase introduced with a no longer expresses the subject referent’s motivation, but rather the event that is repeated.

This change in meaning can be captured in terms of the presuppositions of the sentences in (6) and (7). Due to the lexical meaning of the verb tornar, the sentence in (6) presupposes that the subject referent has left at some previous point in time. It would be infelicitous to utter this sentence in a context in which the subject referent did not leave at a previous point in time. This presupposition does not hold in example (7). Rather, example (7) presupposes that the championship was discussed earlier. Note however that due to the difference between lexical and grammatical meaning, the presupposition in example (7) appears to be weaker than the presupposition in example (6). If (7) contrasts with the expectations of the reader or hearer in that no earlier event of speaking has taken place, s/he might be able to accommodate its meaning, maybe interpreting (7) in its lexical meaning (‘coming back to talk about X’). Such an accommodation process seems unlikely for sentence (6).

These observations suggest that the change from the lexical meaning of RETURN + INF constructions in (6) to the grammatical meaning in (7) is an instance of grammaticalization (Meillet 1912; Lehmann 1995; Hopper and Traugott 2003). However, how can we motivate this meaning change in RETURN + INF constructions?

Analyses of the meaning of the semantic field of iterativity covered by the English adverb again and its cognates in German, Spanish, Catalan, and Italian assume a distinction between a repetitive and a restitutive meaning (Fabricius-Hansen 1980; Kamp and Rossdeutscher 1994: 190ff.; Fabricius-Hansen 2001; Wälchli 2006: 74-78). I illustrate this difference using the examples (8–9).

(8) We’ll meet again some sunny day.
(9) She is back at our flat again.

Like example (7), example (8) is an instance of a repetitive meaning; the earlier event (‘meeting’) is repeated in the future. In contrast, example (9) does not express the event of returning to the flat but rather the restitution of an earlier state (‘being at the flat’). Such a restitutive meaning can also be found when analyzing Italian RETURN + INF constructions (see example 10).
As noted by Kamp and Rossdeutscher (1994: 191), sentences with again such as (11) are ambiguous between a repetitive and restitutive meaning: in (11), again can be interpreted as expressing either the repetition of the event of recovering or the restitution of the previous state of being healthy.

(11) After three weeks he recovered again.

Crucially however, the restitutive meaning appears to be more basic than the repetitive meaning. In the words by Wälchli (2006: 75), it seems that “the restitutive reading is the more natural one in most contexts if both readings are possible”. Building on the work by Kamp and Rossdeutscher (1994), he (2006: 77) observes that it “often happens to be the case that repetitive ‘again’ is emphatic; and we have noted that it is often stressed in English and German”. This observation is corroborated by the examples in (8–9): whereas leaving out again in (8) would lead to a change in meaning, to some degree again seems to be redundant in (9). In a corpus study of German, Fabricius-Hansen (2001: 125) interpreted more than two thirds of the total number of sentences involving wieder ‘again’ as restitutive.

These observations can be used to motivate a model of the grammaticalization of Romance RETURN + INF constructions (see Melis 2006 for a similar, but much less explicit approach to the grammaticalization of these constructions). In particular, I propose that the first step in the grammaticalization of RETURN + INF constructions was the metonymical reanalysis of the original locative value of tornar(e) as in (6) – already restitutive in the sense that a previous spatial location is restored – to a more abstract type of restitution as in (10). The fact that verbs expressing a return have a high semantic potential for this type of reanalysis has already been described for typologically diverse languages in Lichtenberk (1991: 409-522), Heine and Kuteva (2002: 269-260), Wälchli (2006), and Moyse-Faurie (2012). In Wälchli’s words, “‘again’ expressions may develop from expressions of return etymologically, notably return verbs, by the way of the area of functional overlap between return and local restitution” (Wälchli 2006: 75).

The metonymical relationship between the source domain of return verbs and the repetitive meaning is much less direct: the event of returning as such does not presuppose the repetition of an earlier event. However, it is possible to propose a metonymical link between restitution and repetition: if a subject referent has returned to an earlier state, it is plausible that s/he has undergone the same process twice, only in opposing directionality. As an example, consider the early RETURN + INF token from Old Spanish in (12).
In the text passage in (12), the character Nemprot builds a flying machine by chaining four big vultures to a chest. Above the chest, he mounts pieces of meat on staffs out of immediate reach of the vultures. Nemprot steps into the chest and in their effort to reach the meat, the vultures lift up the chest. However, high up in the air, Nemprot becomes afraid of suffocation and therefore throws the meat towards the earth. Consequently, the vultures fly down again.

The RETURN + INF token tornaron a volar ayuso in (12) is ambiguous between a motion event reading and a restitutive iterative reading. Thus, it could be translated as either ‘they turned to fly downwards’ (motion event reading) or ‘they flew down again’ (restitutive reading). The restitutive reading could be described as follows. The vultures and Nemprot change location from a previous altitude to a higher altitude. Then an event occurs (the descent of the vultures, expressed by the RETURN + INF token) that leads to the restoration of the previous altitude.

Crucially, the token in (12) illustrates the metonymical link between the restitutive and the repetitive reading of RETURN + INF constructions. Specifically, the restitution of the previous height presupposes the repetition of an event, i.e. changing height. Schematically:
It stands to reason that the meaning change restitutive > repetitive exploits this presupposition. Note that this relationship is unidirectional, since we cannot assume that the repetition of an event (for instance, discussing an issue again, as in example 12) presupposes the restoration of a previous state of affairs. The unidirectionality of the relationship between restitutive and repetitive meaning strongly suggests that the meaning change originated in RETURN + INF tokens with a restitutive, not repetitive, meaning. On the basis of these considerations, I propose the model of the semantic change of RETURN + INF constructions in Romance in (13).

(13) Change of location > Restitution > Repetition

In the following sections, I explore the predictions of this diachronic model regarding the parameters of predicate class and clitic climbing.

3. Hypotheses

Semantic change is gradual. When a construction grammaticalizes, we typically do not observe an abrupt transition from one function to another function. Rather, the semantic change usually entails a transition period in which both functions co-exist. In such a transition period, we often find examples that can be interpreted as exhibiting either of these functions. The formalization of this state of affairs in functionalist historical linguistics is the notion of bridging viz. critical contexts (Diewald 2002; Heine 2002; Diewald 2006). To give an example from Traugott and Trousdale (2010: 36), English hell of a is developing into a degree modifier. However, “only context will determine whether, when a speaker describes something as a hell of a short journey, he means that the journey was unbearable, though short, or whether it was surprisingly short” (Traugott and Trousdale 2010: 36).

This observation has non-trivial consequences for quantitative analyses of processes of language change because it entails that linguists cannot always rely on introspection when measuring semantic change, particularly in historical data. It is therefore preferable to study semantic change by analyzing contextual parameters that can be regarded as indicators of the semantic change in question. In the remainder of this section, I propose two contextual...
parameters that are correlated to the function of RETURN + INF constructions and are therefore a good choice for this procedure: actionality and clitic climbing.

3.1 Actionality

It is well known that the interpretation of a sentence including an adverb expressing ‘again’ at least partly depends on the actionality of the predicate. In Fabricius-Hansen’s (2001: 102) words, “a genuine restitutive interpretation is allowed only with telic change-of-state predicates”. Thus, whereas with the telic change of location predicate *abreisen* ‘leave’ both a repetitive (14) and restitutive (15) reading of a sentence is possible (as indicated by the placement of *wieder* ‘again’ and the stress patterns), a restitutive reading is excluded in (16) due to the fact that *kritisieren* ‘criticize’ is an activity predicate.

(14) German

*German*

Heute ist **wieder ein Teilnehmer abgereist.**

*today be.PRS.3SG again a participant leave.PTCP*

‘Today again a participant left’ [repetitive reading]

(Fabricius-Hansen 2011: 103)

(15) German

*German*

Heute ist **ein Teilnehmer wieder abgereist.**

*today be.PRS.3SG a participant again leave.PTCP*

‘Today a participant left again’ [restitutive reading]

(Fabricius-Hansen 2011: 103)

(16) German

*German*

Arnim hat **wieder Chomsky kritisiert.**

*Arnim have.PRS.3SG again Chomsky criticize.PTCP*

‘Arnim has again criticized Chomsky’ [repetitive reading]

‘Arnim has criticized Chomsky again’ [*restitutive reading]

We can exploit this interplay between actionality and type of iterative meaning in order to measure the semantic change of RETURN + INF constructions in Romance. Assuming that the repetitive function of Romance RETURN + INF constructions is chronologically posterior to the restitutive function of these constructions, we can predict that RETURN + INF constructions should first appear with predicates allowing for restitutive readings, and only later with activity predicates. I summarize this first hypothesis in (17).

(17) **Hypothesis 1.** RETURN + INF constructions acquire a restitutive value earlier in time than a repetitive value. Consequently, RETURN + INF constructions first appear with state and achievement/accomplishment predicates, and only afterwards with activity predicates.

3.2 Clitic Climbing (CC)

It has been shown that clitic climbing – the fronting of clitic arguments of the infinitive, to the effect that these clitics are located before or on the finite verb – interacts with the possibility of a repetitive or restitutive reading of RETURN + INF constructions in Spanish and Catalan. In the presence of clitic climbing Modern Spanish *volver + a + infinitive* and Modern
Catalan tornar + a + infinitive exclude a motion event reading, as shown by (18–19) (Gómez Torrego 1999: 3376; García Fernández et al. 2006: 281).²

(18) a. Spanish

\[
\begin{align*}
\text{Volv-ió} & \quad \text{a redactar}=lo \\
\text{return-PST.PFV.3SG} & \quad \text{to formulate}=it
\end{align*}
\]

‘S/he formulated it again’

‘S/he came back to formulate it’

(García Fernández et al. 2006: 281)

b. Spanish

\[
\begin{align*}
\text{Lo volv-ió} & \quad \text{a redactar} \\
\text{it return-PST.PFV.3SG} & \quad \text{to formulate}
\end{align*}
\]

‘S/he formulated it again’

*‘He came back to formulate it’

(García Fernández et al. 2006: 281)

(19) a. Catalan

\[
\begin{align*}
\text{Va tornar a} & \quad \text{dir}=ho. \\
\text{go.PRS.3SG} & \quad \text{return to say}=it
\end{align*}
\]

‘He said again’

‘He came back to say...’

b. Catalan

\[
\begin{align*}
\text{Ho va tornar a} & \quad \text{dir.} \\
\text{it go.PRS.3SG} & \quad \text{return to say}
\end{align*}
\]

‘He said again’

*‘He came back to say...’

This interplay between the syntactic process of clitic climbing and the semantic interpretation of RETURN + INF constructions can be explained by recurring to the notion of syntactic restructuring, developed in Rizzi (1976). The fundamental idea is that in its locative reading ‘He came back to say’, sentences such as (18a, 19a) express two predicates (‘going to a place’ and ‘saying something’) and can thus be characterized as biclausal. In contrast, in their iterative reading ‘He said again’, the sentences in (18a, 19b) are monoclausal and volver / tornar has been reanalyzed as an auxiliary. This change can be visualized in terms of a syntactic rebracketing, as illustrated in (20).

(20) \([\text{tornar} \ [a \ \text{V}_{aux}] > [\text{tornar} \ a] \ [\text{V}_{aux}]\]

As noted by Parry (to appear: 26), this change is clearly an instance of a grammaticalization process, as the grammatical status of the verb tornar(e) viz. volver changes from lexical verb to auxiliary, leading to a decrease in its syntactic autonomy. When studying the historical development of clitic climbing in Spanish gerundial expressions, Torres Cacoullos (1999) found that the diachronic increase of clitic climbing is correlated with the fixation of the word order in the constructions, as well as with a decrease in intervening material. She (1999: 165) concludes that “CC is part of a series of reductive changes in the form of periphrastic expressions as they emerge as more fused units”. These syntactic changes should in turn be correlated to the semantic change from a locative to an iterative reading, as outlined above.

² In Modern Catalan, the verbal periphrasis anar ‘go’ + infinitive is used to express a past event (see, e.g., Pérez Saldanya and Hualde 2003; Jacobs 2011).
Crucially, this observation leads to a clear prediction regarding the diachrony of RETURN + INF constructions in Romance. If, as argued in Section 3.1, the grammaticalization process affects state and achievement/accomplishment predicates before activity predicates, this more advanced degree of grammaticalization for these predicates should be reflected by a quantitative preponderance of clitic climbing with these predicates in earlier stages of the change. In other words, clitic climbing should be attested earlier in RETURN + INF constructions with state and achievement/accomplishment predicates than in RETURN + INF constructions with activity predicates.

The notion that the repetitive or restitutive interpretation of RETURN + INF constructions depends on whether these constructions have undergone a process of restructuring also has explanatory potential for the fact that the productivity of RETURN + INF appears to be lower in Italian than in Spanish and Catalan. In contrast to the Spanish and Catalan data adduced in (18–19), it has been argued that clitic climbing does not lead to the exclusion of the locative reading in Italian RETURN + INF constructions (Giacalone Ramat 2001: 125). I illustrate this difference using Giacalone Ramat’s example (21).

(21)  

(a) Italian  
\text{torn-o} a \text{prendere=lo}  
\text{return-PRS.1SG} to \text{pick.up=it}  
‘I come back to pick it up’  
‘I pick it up again’  
(Giacalone Ramat 2001: 125)  

(b) Italian  
\text{lo torn-o a prendere}  
\text{it return-PRS.1SG} to \text{pick.up}  
‘I come back to pick it up’  
‘I pick it up again’

Arguably, if no restructuring process has taken place in the Italian RETURN + INF construction, it appears to be less grammaticalized than their Spanish and Italian counterparts. It has already been shown in Section 1 that several authors assume that the Italian RETURN + INF construction is weakly grammaticalized. In the vein of the model of the grammaticalization of RETURN + INF constructions established in the last section, it would thus be expected that Italian RETURN + INF tokens more frequently express a restitutive than a repetitive meaning.

These considerations, summarized in (22), suggest that the grammaticalization of RETURN + INF constructions, as well as the semantic change from a restitutive to a repetitive reading, can be measured in terms of clitic climbing.

(22)  

\textbf{Hypothesis 2.} The degree of grammaticalisation of RETURN + INF constructions can be measured using the parameter of clitic climbing. The increasing grammaticalization of RETURN + INF constructions is thus reflected in a growing probability of clitic climbing.

In addition, we can assume that the diachronic development of RETURN + INF constructions with regard to clitic climbing and their development regarding actionality are interrelated. If the shift from restitutive to repetitive meaning is mirrored in changes in the distribution of
RETURN + INF constructions regarding the infinitives (Hypothesis 1) and the grammaticalization of the constructions is mirrored in changes in their distribution regarding CC (Hypothesis 2), it can be assumed that clitic climbing should be attested earlier for RETURN + INF constructions with infinitives that refer to state or achievement/accomplishment predicates than for RETURN + INF constructions with infinitives that refer to activity predicates. I summarize this third hypothesis in (23):

(23) **Hypothesis 3.** Clitic climbing should be attested earlier for RETURN + INF constructions with infinitives that refer to state or achievement/accomplishment predicates than for RETURN + INF constructions with infinitives that refer to activity predicates.

### 4. Data and methodology

In order to test Hypotheses 1–3, a total number of 2469 tokens of RETURN + INF constructions were extracted from digital corpora of Old Spanish, Old Catalan and Old Italian and coded for a series of linguistic variables. In this section, I describe the extraction and coding procedures, as well as the analytical approach.

#### 4.1 Extraction procedure

The tokens were extracted from the *Corpus diacrónico del español* for Old Spanish (henceforth: CORDE, Real Academia Española 2014), the *Corpus informatitzat del català antic* for Old Catalan (henceforth: CICA, Torruella et al. 2013) and the *Corpus OVI dell’italiano antico* for Old Italian (henceforth: OVI, Istituto Opera del Vocabolario Italiano del Consiglio Nazionale delle Ricerche 2014), as well as the *Biblioteca Italiana Telematica* (henceforth: BIBIT, Centro Interuniversitario Biblioteca Italiana Telematica 2014).

The timeframe investigated was 1200–1699.³ Note that in the CICA, the source texts are not dated according to the (assumed) publication date, but according to the birth date of the authors. This means that in the remainder of this paper, when comparing the Catalan to the Spanish and Italian data, we will have to subtract around 30-40 years when considering the historical development of Catalan RETURN + INF constructions. However, since the hypotheses established in Section 2 are concerned with the relative, not absolute, chronology of the development of RETURN + INF constructions, this does not have a significant influence on the analysis.

I was interested not only in the distribution of RETURN + INF constructions, but also in the frequencies of use of RETURN + INF constructions relative to other tornar(e) + a constructions (such as Old Spanish tornar a Madrid ‘return to Madrid’). In the remainder of this paper, I will refer to this more general tornar(e) + a + X construction as the RETURN construction. In the corpus queries, all instances of the RETURN construction were searched for using the search strings torn* a (CORDE), torn% a (CICA), torn* a (OVI) and torn* (BIBIT); the relevant RETURN + INF tokens were isolated manually in a second step by excluding all tokens in which the element after the preposition a was not an infinitive. Note that in this fashion, only RETURN and RETURN + INF tokens were included in which no intervening

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³ There is some overlap between the BIBIT and the OVI with regard to the included texts. When tokens from one and the same text represented in the two corpora were found, preference was given to the tokens from the BIBIT.
material is present between the verb tornar and the preposition a (for an example with intervening material, cf. Example 24). This restriction is due to the fact that the CORDE is not lemmatized; to include cases with intervening material from the other two, lemmatized, corpora would thus have skewed the data.

(24) Old Italian

\( \text{ch’ egli torn-ino a mee a dir=ci novelle delo} \)

that they return-COND.3PLto me to tell.us news of.the

ree Arturi

king Arthur

‘That they would return to tell us news about king Arthur’

(Tristano Riccardiano, second half 13th c., apud OVI)

Additionally, the queries were restricted to narrative texts (both fictional and historiographical texts) in order to (a) obtain a sufficient number of cases and (b) ensure comparability of the data.

4.2 Coding procedures

In line with the assumption that semantic change is gradual and that, consequently, coding for the function of a grammaticalizing construction can potentially skew the analytical results (see the discussion at the beginning of Section 3), I coded the data token by token for actionality and clitic climbing. In the following, I describe these coding procedures.

4.2.1 Actionality

In coding actionality in the data, I used a reduced version of the standard model of actionality, as described in, e.g., Bertinetto (2001). Thus, I established a variable ACTIONALITY with three levels: “1=state”, “2=activity”, “3=achievement/accomplishment”. In a first step, these levels were coded in accordance with the two semantic features [±durative] and [±dynamic]. The actionality of a predicate interacts with transitivity and furthermore the definiteness of the direct object in a transitive sentence. Whereas in its intransitive use, a verb such as draw refers to an activity (see 25), in its transitive use it refers to an accomplishment if a determiner is present in the direct object (26). If the direct object is a bare noun, the verb refers to an activity (27). The coding of the variable ACTIONALITY was therefore changed accordingly in a second step.

(25) John draws.

(26) John draws a/three/several circle(s).

(27) John draws circles.

Note that in the regression model presented in Section 5, I condensed the variable ACTIONALITY into the variable ACTIVITY, collapsing the three-way distinction into a binary distinction between activity predicates and all other predicates.

4 Note that Example (24) has a locative rather than an iterative reading. Although I cannot adduce quantitative data to support this claim here, it appears that the presence of intervening material between tornar(e) and the prepositional phrase disfavors the iterative reading.
4.2.2 Clitic Climbing

I identified four different syntactic configurations regarding the use and position of clitics in the three languages: (a) there may not be a clitic, (b) the clitic may be realized in the object position, (c) the clitic can be realized midway between the verb tornar(e), and (d) the clitic can be realized before the verb tornar(e).

In the old stages of all of the languages under study, clitics can be realized in the regular object position behind the verb, as in examples (28–29).

(28) Old Spanish

\[
\begin{align*}
\text{mas} & \quad \text{record-ó=se} & \quad \text{cómo no} & \quad \text{av-ía} \\
\text{but} & \quad \text{remember-PST.PFV.3SG=REFL} & \quad \text{how not} & \quad \text{have-PST.IPV.3SG} \\
\text{acaba-do} & \quad \text{su oración que cada día ora-va,} & \quad \text{e} & \quad \text{finish-PTCP his prayer that every day pray-PST.IPV.3SG and} \\
\text{torn-ó} & \quad \text{a comenzar=la de cabo} & \quad \text{return-PST.PFV.3SG} & \quad \text{to begin=it again} \\
\end{align*}
\]

‘But he remembered how he had not finished his prayer that he prayed every day, and presently began it again’

(Crónica del rey don Rodrigo, postrimero rey de los godos, first half 15th c., apud CORDE)

(29) Old Catalan

\[
\begin{align*}
\text{torn-ant} & \quad \text{a unir=se ab la cordillera} \\
\text{return-PTCP.PROG} & \quad \text{to unite=REFL from the mountain.range} \\
\text{que av-em descri-ta} & \quad \text{that have-PRS.1SG describe-PTCP.F.SG} \\
\end{align*}
\]

‘And they united again from the mountain range that we have described’

(l-lustracions dels comitats de Rosselló, Cerdanya y Conflent, second half 15th c., apud CICA)

However, in the time period under study clitic climbing is also already attested. As illustrated in the Catalan examples (30–31), both object pronouns and reflexive pronouns are affected by the phenomenon (Fischer 2002; 2003; Batllori, Iglesias and Martins 2004). According to Wanner (1987: 290-301), this pattern is similar for all Old Romance languages. For specific information on clitic climbing in Old Spanish, see Berta (2000) and Iglesias (2012), for Old Italian see Wanner (1981) and Russi (2008: chapters 3.4 and 4).

(30) Old Catalan

\[
\begin{align*}
\text{Emperó, passa-t} & \quad \text{lo temps, los godos los torna-ren} \\
\text{but pass-PTCP} & \quad \text{the times the goths them return-PST.PFV.3PL} \\
\text{a perseguir} & \quad \text{to pursue} \\
\end{align*}
\]

‘But after some time the Goths started again to pursue them’

(Llibre de les grandeses de Tarragona, first half 15th c., apud CICA)
In contrast to modern stages of these languages, it is possible to find examples where the clitic does not climb to the syntactic position before *tornar(e)*, but rather attaches itself to *tornar(e)* (see 32–33). Note however that no such example was found in the Catalan data.

(32) Old Spanish

\[
\begin{align*}
&\text{\&} \quad \text{torn-o=le} \quad \text{a} \quad \text{preguntar} \quad \text{muy} \quad \text{firme} \\
&\text{and} \quad \text{return-PST.PFV.3SG=him} \quad \text{to} \quad \text{ask} \quad \text{very} \quad \text{hard} \\
&\text{fasta} \quad \text{que} \quad \text{sopo} \quad \text{todo} \quad \text{el} \quad \text{fecho} \\
&\text{until} \quad \text{that} \quad \text{know-PST.PFV.3SG} \quad \text{all} \quad \text{the} \quad \text{fact} \\
&\text{‘And he asked him again resolutely until he knew all of the facts’} \\
&\text{(Sumas de la historia troyana de Leomarte, second half 14th c., apud CORDE)}
\end{align*}
\]

(33) Old Italian

\[
\begin{align*}
&e \quad \text{torn-o=ssi} \quad \text{a} \quad \text{sedere} \\
&\text{and} \quad \text{return-PST.PFV.3SG=REFL} \quad \text{to} \quad \text{seat} \\
&\text{‘And he sat down again’} \\
&\text{(Decameron, second half 14th c., apud OVI)}
\end{align*}
\]

In addition, it is possible to find cases in which the clitic only climbs to the position between the preposition and the infinitive, as in (34).

(34) Old Spanish

\[
\begin{align*}
&E \quad \text{en} \quad \text{this} \quad \text{way} \quad \text{these} \quad \text{two} \quad \text{towers} \quad \text{stay-PST.PFV.3PL} \\
&\text{sin} \quad \text{anparo} \quad […] \quad \text{el} \quad \text{tesorero} \quad \text{Ruy López,} \quad \text{con} \\
&\text{without} \quad \text{cover} \quad \text{the} \quad \text{treasurer} \quad \text{Ruy López with} \\
&\text{algunos} \quad \text{criados} \quad \text{del} \quad \text{Rey e de la Reyna,} \\
&\text{some} \quad \text{servants} \quad \text{of the} \quad \text{king} \quad \text{and} \quad \text{of the} \quad \text{queen} \\
&torna-ron \quad \text{a} \quad \text{las} \quad \text{conbatir} \\
&\text{return-PST.PFV.3PL} \quad \text{to} \quad \text{them} \quad \text{fight} \\
&\text{‘And (since) in this way the these two towers had lost its protection […] the treasurer} \\
&\text{Ruy López, with some servants of the King and the Queen, attacked them again’} \\
&\text{(Crónica de los Reyes Católicos de Hernando del Pulgar, second half 15th c., apud CORDE)}
\end{align*}
\]

I created a variable CLITIC CLIMBING representing these different syntactic configurations. The coding of the variable is represented in Table 2. The terminology is taken from Torres Cacoullos (1999).
**Table 2. Coding of the variable CLITIC CLIMBING**

<table>
<thead>
<tr>
<th>Level</th>
<th>Syntactic representation</th>
<th>Examples from the text</th>
</tr>
</thead>
<tbody>
<tr>
<td>0=no.clitic</td>
<td>tornar + a + infinitive</td>
<td>(1), (2), (10)</td>
</tr>
<tr>
<td>1=clitic.in.situ</td>
<td>tornar + a + infinitive=C</td>
<td>(24), (28), (29)</td>
</tr>
<tr>
<td>2=clitic.midway</td>
<td>tornar=C + a + infinitive ()</td>
<td>(32), (33), (34)</td>
</tr>
<tr>
<td>3=clitic.preposed</td>
<td>C tornar + a + infinitive</td>
<td>(3), (30), (31)</td>
</tr>
</tbody>
</table>

### 4.3 Analytical approach

I first analyzed the annotated data on the basis of the inspection of the frequency distributions and then validated the results from this descriptive analysis on the basis of an inferential statistical analysis. Drawing conclusions from the visual inspection of frequency distributions, or relying on distribution test statistics in frequency distributions is potentially misleading since they do not control for other factors that may explain these differences. Therefore, inferential statistical analysis must be applied to detect such associations. Consider the following example from Bortz and Schuster (2010: 339). Researchers want to analyze the relationship between the number of crimes and the number of policemen. The authors collect data in cities of more than 30000 inhabitants. A table comparing the number of crimes and the number of policemen displays a positive correlation: “the more crimes, the more policemen”, contradicting the assumption that a greater number of policemen will have a negative influence on the number of crimes. This apparent correlation is caused by a third variable not controlled for, the number of inhabitants in a city, because greater cities typically have both more crimes and more policemen. If this third variable had been controlled for, the study might show the assumed result (more policemen, fewer crimes). This example demonstrates that the inspection of data on the basis of 2x2 tables alone can be misleading because they do not control for other variables that might influence the distribution displayed in the table.

For this reason, I complemented the descriptive analyses with three generalized linear mixed-effects regression analyses (Pinheiro et al. 2015) in R (R Development Core Team 2015), measuring the changes over time in Spanish, Catalan, and Italian RETURN + INF constructions. Although each of the regression models was calculated for a different language, they had exactly the same statistical setup. The dependent variable TIME refers to the date of composition of the book containing the token. The variable received numerical values between 1 and 5, referring to time periods of 100 years. In accordance with the descriptive analysis, two main predictor variables were assumed: CC and ACTIVITY. Whereas CC, i.e. clitic climbing, was modeled exactly as described in Section 4.2.2, the variable ACTIVITY models actionality as a binary variable, distinguishing between activities (ACTIVITY =TRUE) and states, achievements and accomplishments (ACTIVITY =FALSE). This decision was made because of (a) the scarcity of the data for Catalan and Italian, which does not allow statistically powerful analyses on these samples and (b) because Hypothesis 2 and 3 concern the behavior of activity predicates as opposed to state, achievement and accomplishment predicates. I also included an interaction term between ACTIVITY and CC (ACTIVITY X CC) in order to measure the differences in the development of CC for activity predicates and other predicates.

---

5 R version used: 3.0.2, 64 bit.
As a random effect, I included the lemma of the infinitive (variable \textsc{infinitive}) appearing in the RETURN + INF construction. The advantage of mixed-effects modeling is that including random effects in the analysis allows one to control for variation that is constant with a variable (cf., e.g., Baayen 2008: 241-259). In this case, it could be assumed that the development of RETURN + INF constructions differs as a function of the development of the infinitive. Including \textsc{infinitive} as a random effect therefore effectively controlled for any possible idiosyncratic behavior of specific auxiliated verbs.

5. Results

Figure 2 illustrates the overall quantitative development of RETURN + INF constructions in the Spanish, Catalan, and Italian data. It plots the percentage of use of RETURN + INF constructions with respect to all cases of \textit{tornar(e)} + a constructions (i.e. RETURN constructions) found in the data. The proportion of use of RETURN + INF constructions in relation to all other uses of RETURN constructions is taken as an indicator of the development of the productivity of RETURN + INF constructions. The figure clearly indicates that, over time, in all three languages the relative frequency of RETURN + INF constructions increased. I interpret this rise in the relative frequency of RETURN + INF constructions as an indicator of the grammaticalization of these constructions. In addition, the figure reveals a difference in the quantitative development of RETURN + INF constructions in the Ibero-Romance languages Spanish and Catalan on the one hand, and Italian on the other hand. In Spanish and Catalan the relative proportion of use of RETURN + INF constructions is already more frequent in the 13th century (around 30 percent) than in Italian (under one percent). This discrepancy increases over time. In the 17th century, the relative proportion of use of RETURN + INF constructions lies at roughly 70 percent for the Ibero-Romance languages and at only 20 percent for Italian. This result can be taken to indicate that, first, the grammaticalization of RETURN + INF constructions appears to have taken place later in Italian than in the Ibero-Romance languages and second, that this process appears to have been slower, possibly leading to the difference in productivity of these verbal periphrases in Modern Spanish and Catalan on the one hand, and Italian on the other hand (see Section 1).
Having established the general development of the distribution of RETURN + INF constructions in the Spanish, Catalan, and Italian data, I now review the results from the analysis regarding the three hypotheses established in Section 3.

5.1 Hypothesis 1: Actionality

According to Hypothesis 1, state and achievement/accomplishment predicates appear earlier in RETURN + INF constructions than activity predicates. Table 3 illustrates the development of RETURN + INF constructions with respect to the distribution of the infinitives in the three languages under study.
Table 3. Development of RETURN + INF constructions as a function of actionality

<table>
<thead>
<tr>
<th></th>
<th>1200–1299</th>
<th>1300–1399</th>
<th>1400–1499</th>
<th>1500–1599</th>
<th>1600–1699</th>
</tr>
</thead>
<tbody>
<tr>
<td>1=state</td>
<td>3.51% (6)</td>
<td>13.04% (6)</td>
<td>6.03% (21)</td>
<td>4.08% (45)</td>
<td>4.43% (7)</td>
</tr>
<tr>
<td>2=activity</td>
<td>85.38% (146)</td>
<td>67.39% (31)</td>
<td>52.30% (182)</td>
<td>22.83% (252)</td>
<td>17.72% (28)</td>
</tr>
<tr>
<td>3=achievement/accompl.</td>
<td>11.11% (19)</td>
<td>19.57% (9)</td>
<td>41.67% (145)</td>
<td>73.10% (807)</td>
<td>77.85% (123)</td>
</tr>
<tr>
<td>Total</td>
<td>171</td>
<td>46</td>
<td>348</td>
<td>1104</td>
<td>158</td>
</tr>
</tbody>
</table>

Given that there are only three cases of RETURN + INF constructions in the 13th century Italian data, as well as in the 17th century Catalan data, I will disregard these data in the descriptive analysis in this section. The table suggests a very similar development in the distribution of RETURN + INF constructions with predicate types in all three languages that contradicts Hypothesis 1. In Spanish and Catalan, activity predicates are the most frequent predicate type in RETURN + INF constructions until the 16th century. In Italian, activity predicates remain the most frequent predicate type until the 17th century.

This finding clearly contradicts Hypothesis 1. In order to explain this surprising quantitative finding, it is necessary to take a closer look at the data. A qualitative analysis of the data revealed a function of RETURN + INF constructions that is related to the restitutive function described in Section 2, but is much more specialized. This function is particularly related to the use of RETURN + INF constructions with speech act verbs, as evident in Examples (35–39).

(35) Old Spanish

\[
\begin{align*}
\text{Mas} & \quad \text{agora} & \quad \text{dex-a} & \quad \text{ell} & \quad \text{estoria de} & \quad \text{fablar} & \quad \text{desto.} & \quad \text{&} \\
\text{but now} & \quad \text{stop-PRS.3SG} & \quad \text{the story of} & \quad \text{talk of} & \quad \text{this and} \\
\text{torn-a} & \quad \text{a} & \quad \text{contar} & \quad \text{de los} & \quad \text{fechos que} & \quad \text{fizo} & \quad \text{return-PRS.3SG} & \quad \text{to tell of} & \quad \text{the deeds that} & \quad \text{do.PST.PFV.3SG} \\
\text{Cipion en} & \quad \text{espanna} & \quad \text{Cipion in Spain} \\
\text{‘But now the story stops talking about this and again tells us about the deeds done by} & \quad \text{Cipion in Spain’} \\
\text{(Estoria de Espanna I, second half 13th c., apud CORDE)}
\end{align*}
\]
Old Spanish

Agora dex-a aquí la Estoria de contar destas;
now stop-PRS.3SG here the story of tell of these
razones & torn-a a dezir del Rey don Sancho
things and return-PRS.3SG to say of the King Don Sancho

‘Now the story here stops telling us about these things and again says things about
King Don Sancho’

(Estoria de Espanna II, second half 13th c., apud CORDE)

Old Catalan

Torn-a a parlar lo libre que quant les galees dels
return-PRS.3SG to talk the book that when the galeers of the
proenzals foren...
proenzals be.PST.IPFV.3PL

‘The book again talks to us about when the galeers of the proenzals were…’

(Crónica de B. Desclot, second half 13th c., apud CICA)

Old Catalan

di lui no parl-a ora il conto più qui
of him not talk-PRS.3SG now the story more here
indiritto, anzi torn-a a parlare di Nascens
exactly but return-PRS.3SG to talk of Nascens
e de la reina Saracinta...
and of the queen Saracinta

‘But now the story no longer talks about him, but again talks about Nascens and the Queen
Saracinta’

(Storia del San Gradale, first half 14th c., apud OVI)

Old Italian

Ora torn-eremo a dire d’=Adamo e segui-remo
now return-FUT.1PL to say of=Adam and continue-FUT.1PL
sua storia
his story

‘Now we again say things about Adam and continue his story’

(Libro di varie storie, second half 14th century, apud OVI)

Rather than denoting the repetition of an earlier action, the construction serves to resume
an earlier topic. In Example (39) this function is expressed explicitly (segui-remo sua storia).
When discussing the function of RETURN + INF constructions in Alfonsoine texts as
exemplified in (35–36), González Cobas (2010: 207-211) uses the term reactivación
‘reactivation’. He describes reactivation as follows:

... paragraphs that appear at the end of the chapters have an almost fixed structure and
either announce the information given in the next chapter or take up again a topic dealt with
before but momentarily suspended by the narrator. In both cases verbs of speech are used
(decir ‘say’, fablar ‘talk’, or contar ‘tell’), conjugated in either first person plural or third
person singular when the referent is la estoria ‘the story’... (González Cobas 2010: 208-209,
transl. MR)

We are thus dealing with a subtype of RETURN + INF constructions with a clear
metalinguistic value, related to what Wälchli (2006: 76) calls continuative ‘again’. The
meaning of continuative RETURN + INF constructions is of lexical nature. Thus, the RETURN +
INF tokens in (35–39) could be translated quite literally as ‘turn to speak of X’. In other words, they are similar to RETURN + INF tokens with a change-of-location meaning, but differ from these in that the domain of movement has been metaphorically transposed from LOCATION IN SPACE to LOCATION IN BOOK.⁶ In addition, like change-of-location RETURN + INF constructions, continuative RETURN + INF constructions do not seem to be subject to restructuring, as evidenced by the fact that the examples in (35–39) do not display clitic climbing.

Table 4 illustrates the development of the proportion of use of RETURN + INF constructions with speech act verbs vs. other verbs in the three languages under study. For Spanish, the speech act verbs encountered in the data were contar ‘tell’, fablar ‘talk’, decir ‘say’, for Catalan, parlar ‘talk’, and for Italian, parlare ‘talk’ and dire ‘say’.

*Table 4.* Diachronic distribution of the use of speech act verbs vs. other verbs in Spanish, Catalan, and Italian RETURN + INF constructions

<table>
<thead>
<tr>
<th></th>
<th>1200–1299</th>
<th>1300–1399</th>
<th>1400–1499</th>
<th>1500–1599</th>
<th>1600–1699</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SPANISH</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other verbs</td>
<td>23.98% (41)</td>
<td>56.62% (26)</td>
<td>69.05% (241)</td>
<td>90.61% (994)</td>
<td>94.19% (146)</td>
</tr>
<tr>
<td>Speech act verbs</td>
<td>76.02% (130)</td>
<td>43.48% (20)</td>
<td>30.95% (108)</td>
<td>9.39% (103)</td>
<td>5.81% (9)</td>
</tr>
<tr>
<td>Total</td>
<td>171</td>
<td>46</td>
<td>349</td>
<td>1097</td>
<td>155</td>
</tr>
<tr>
<td><strong>CATALAN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other verbs</td>
<td>0.00% (0)</td>
<td>5.09% (3)</td>
<td>76.13% (118)</td>
<td>100.00% (37)</td>
<td>66.7% (2)</td>
</tr>
<tr>
<td>Speech act verbs</td>
<td>100.00% (9)</td>
<td>94.92% (56)</td>
<td>23.87% (37)</td>
<td>0.00% (0)</td>
<td>33.3% (1)</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>59</td>
<td>155</td>
<td>37</td>
<td>3</td>
</tr>
<tr>
<td><strong>ITALIAN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other verbs</td>
<td>100.00% (3)</td>
<td>65.98% (64)</td>
<td>84.62% (11)</td>
<td>89.32% (209)</td>
<td>87.50% (28)</td>
</tr>
<tr>
<td>Speech act verbs</td>
<td>0.00% (0)</td>
<td>34.02% (33)</td>
<td>15.38% (2)</td>
<td>10.68% (25)</td>
<td>12.5% (4)</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>97</td>
<td>13</td>
<td>234</td>
<td>32</td>
</tr>
</tbody>
</table>

Table 4 demonstrates another interesting contrast between Spanish and Catalan on the one hand, and Italian, on the other. It demonstrates that in the earliest RETURN + INF tokens in Spanish and Catalan, the use of speech acts verbs is the norm. However, over time the proportion of use of speech act verbs diminishes in favor of other verbs. This suggests that in these languages, the use of the RETURN + INF construction as a discourse marker decreased, becoming less frequent than the iterative function in the 14th century (Spanish) and 15th century (Catalan). In the modern stages of Spanish and Catalan, the use of RETURN + INF in this function is much less frequent than its use in the iterative function. The situation in Old Italian is rather different. Although RETURN + INF tokens with infinitives referring to speech acts make up a significant portion of the total number of tokens, they are much less frequent than in the older stages of the Ibero-Romance languages. In addition, there does not seem to be a significant diachronic trend from the use of speech act verbs in Italian RETURN + INF

---

⁶ As argued by one of the reviewers of this paper, the change from spatial to discourse deixis in RETURN + INF constructions with a continuative function parallels the change in the development from spatial deictic to anaphoric reference. In Diessel’s (2012) words, “discourse deixis is based on the metaphorical structuring of time as space” (Diessel 2012: 2425), which is why “across languages, demonstratives are used as discourse deictics” (Diessel 2012: 2426).
constructions towards the use of other verbs in these constructions.

5.2 Hypothesis 2: Clitic Climbing

There are at least two reasons to assume that the possibility of clitic climbing in RETURN + INF constructions is intertwined with the grammaticalization of these constructions. First, as in the modern stages of these languages (see Section 3.2), clitic climbing has a clear influence on the interpretation of earlier Spanish, Catalan and Italian RETURN + INF constructions in that clitic climbing typically coincides with an interpretation of the construction as restitutive or repetitive (40–42).

(40) Old Spanish
    el   día   siguiente   los   torna-uan   a   combater
    the   day   following   them   return-PST.IPFV.3PL   to   fight
    ‘The following day they fought them again’
    (Gran crónica de España III, second half 14th c., apud CORDE)

(41) Old Catalan
    E   per   ço   […]   vos   torn-∅   a   dir
    And   because.of   this   you   return-PRS.1SG   to   say
    que   ací   no   ña   fa   festa   ne   vigília
    that   here   not   REFLEX   make-PRS.3SG   party   nor   vigil
    ‘And I therefore tell you again that there we do not celebrate or have vigils here’
    (Decamerò, first half 15th c., apud CICA)

(42) Old Italian
    lo   torna-sse   a   vedere   un’altra   volta
    him   return-PST.SBJ.3SG   to   see   another   time
    ‘[that he would] see him again another time’
    (Storia di Merlino, first half 14th c., apud OVI)

Second, cases in which the clitic is not an argument of the infinitive (classified as "0=no.clitic") necessarily have a locative reading, as illustrated in the Spanish Examples (43–44).

(43) Old Spanish
    e   sal-ié   Aarón   con   él   a   escorrir=le   fasta
    and   leave-PST.IPFV.3SG   Aron   with   him   to   escape=DAT   until
    fuera   de   toda   la   hueste,   desí   que=s   torna-va
    away   from   all   the   army   after   that=REFLEX   return-PST.IPFV.3SG
    a   acabar   los   otros   sacrificios
    to   finish   the   other   sacrifices
    ‘And Aron left with him to help him escape away from the army, after he had returned to
    finish the other sacrifices’
    (General estoria I, second half 13th c., apud CORDE)
These observations appear to support Hypothesis 2, the assumption that over time, clitic climbing becomes more frequent in RETURN + INF constructions. Table 5 illustrates the historical development of RETURN + INF constructions in Spanish, Catalan and Italian as a function of clitic climbing.

*Table 5. Development of RETURN + INF constructions as a function of clitic climbing*

<table>
<thead>
<tr>
<th></th>
<th>SPANISH</th>
<th>CATALAN</th>
<th>ITALIAN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1200–1299</td>
<td>1300–1399</td>
<td>1400–1499</td>
</tr>
<tr>
<td>0=no.critic</td>
<td>92.40% (158)</td>
<td>86.96% (40)</td>
<td>74.71% (260)</td>
</tr>
<tr>
<td>1=clitic.in.situ</td>
<td>7.02% (12)</td>
<td>2.17% (1)</td>
<td>2.01% (7)</td>
</tr>
<tr>
<td>2=clitic.midway</td>
<td>0.58% (1)</td>
<td>8.70% (4)</td>
<td>8.33% (29)</td>
</tr>
<tr>
<td>3=clitic.preposed</td>
<td>0% (0)</td>
<td>2.17% (1)</td>
<td>14.94% (52)</td>
</tr>
<tr>
<td>Total</td>
<td>171</td>
<td>46</td>
<td>348</td>
</tr>
</tbody>
</table>

Table 5 illustrates that in Spanish and Catalan RETURN + INF constructions, clitic climbing (both to the midway position and preposed position) becomes more frequent over time, confirming Hypothesis 2. In Spanish, clitic climbing cases increase in relative frequency from a combined 0.58 percent in the 13th century to a combined 39.24 percent in the 17th century. In Catalan, clitic climbing increases in relative frequency from none in the 13th century to a combined 27.03 percent in the 16th century. Although the same tendency can be observed in the Italian data, the increase is smaller. In Italian, clitic climbing cases increase in relative frequency from a combined 10.87 percent in the 14th century to a combined 25 percent in the 17th century. The difference between the developments in the Ibero-Romance languages and Italian once again points to the difference in the degree to which RETURN + INF constructions have grammaticalized in Spanish and Catalan on the one hand, and Italian on the other.
5.3 Hypothesis 3: Interplay between actionality and CC

It was argued in Section 3.2 that in order to document the change from a restitutive to a repetitive iterative reading, it is necessary to measure the interplay between actionality and clitic climbing. If the repetitive function indeed evolved out of the restitutive function in RETURN + INF constructions, RETURN + INF constructions, formed from predicate classes that favor a restitutive reading (i.e. states, achievements, and accomplishments), should display restructuring earlier than RETURN + INF constructions formed from predicate classes that disfavor a restitutive reading (i.e. activities). Tables 6–8 illustrate the interplay between actionality and clitic climbing in the development of RETURN + INF constructions in Spanish and Catalan.

Table 6. Interplay between actionality and clitic climbing in the development of RETURN + INF constructions in Spanish

<table>
<thead>
<tr>
<th>ACTIVITY PREDICATES</th>
<th>1200–1299</th>
<th>1300–1399</th>
<th>1400–1499</th>
<th>1500–1599</th>
<th>1600–1699</th>
</tr>
</thead>
<tbody>
<tr>
<td>0=no.clitic</td>
<td>93.15% (136)</td>
<td>93.55% (29)</td>
<td>86.81% (158)</td>
<td>60.71% (153)</td>
<td>82.14% (23)</td>
</tr>
<tr>
<td>1=clitic.in.situ</td>
<td>6.16% (9)</td>
<td>3.23% (1)</td>
<td>3.06% (2)</td>
<td>18.83% (3)</td>
<td>5.67% (1)</td>
</tr>
<tr>
<td>2=clitic.midway</td>
<td>0.68% (1)</td>
<td>0.00% (0)</td>
<td>5.49% (10)</td>
<td>4.76% (12)</td>
<td>10.71% (3)</td>
</tr>
<tr>
<td>3=clitic.preposed</td>
<td>0% (0)</td>
<td>3.23% (1)</td>
<td>6.04% (11)</td>
<td>32.54% (82)</td>
<td>3.57% (1)</td>
</tr>
<tr>
<td>Total</td>
<td>146</td>
<td>31</td>
<td>182</td>
<td>252</td>
<td>28</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STATE / ACHIEVEMENT / ACCOMPLISHMENT PREDICATES</th>
<th>1200–1299</th>
<th>1300–1399</th>
<th>1400–1499</th>
<th>1500–1599</th>
<th>1600–1699</th>
</tr>
</thead>
<tbody>
<tr>
<td>0=no.clitic</td>
<td>88.00% (22)</td>
<td>73.33% (11)</td>
<td>61.45% (102)</td>
<td>49.18% (419)</td>
<td>49.23% (64)</td>
</tr>
<tr>
<td>1=clitic.in.situ</td>
<td>12.00% (3)</td>
<td>0.00% (0)</td>
<td>2.41% (4)</td>
<td>3.64% (31)</td>
<td>6.15% (8)</td>
</tr>
<tr>
<td>2=clitic.midway</td>
<td>0.00% (0)</td>
<td>26.67% (4)</td>
<td>11.45% (19)</td>
<td>8.80% (75)</td>
<td>6.15% (8)</td>
</tr>
<tr>
<td>3=clitic.preposed</td>
<td>0.00% (0)</td>
<td>0.00% (0)</td>
<td>24.69% (41)</td>
<td>38.38% (327)</td>
<td>38.46% (50)</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>15</td>
<td>166</td>
<td>852</td>
<td>130</td>
</tr>
</tbody>
</table>

Table 7. Interplay between actionality and clitic climbing in the development of RETURN + INF constructions in Catalan

<table>
<thead>
<tr>
<th>ACTIVITY PREDICATES</th>
<th>1200–1299</th>
<th>1300–1399</th>
<th>1400–1499</th>
<th>1500–1599</th>
<th>1600–1699</th>
</tr>
</thead>
<tbody>
<tr>
<td>0=no.clitic</td>
<td>100% (9)</td>
<td>100% (57)</td>
<td>79.59% (78)</td>
<td>66.67% (8)</td>
<td>0.00% (0)</td>
</tr>
<tr>
<td>1=clitic.in.situ</td>
<td>0.00% (0)</td>
<td>0.00% (0)</td>
<td>0.00% (0)</td>
<td>8.33% (1)</td>
<td>0.00% (0)</td>
</tr>
<tr>
<td>2=clitic.midway</td>
<td>0.00% (0)</td>
<td>0.00% (0)</td>
<td>2.04% (2)</td>
<td>0.00% (0)</td>
<td>0.00% (0)</td>
</tr>
<tr>
<td>3=clitic.preposed</td>
<td>0.00% (0)</td>
<td>0.00% (0)</td>
<td>18.37% (18)</td>
<td>25% (3)</td>
<td>100% (2)</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>57</td>
<td>98</td>
<td>12</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STATE / ACHIEVEMENT / ACCOMPLISHMENT PREDICATES</th>
<th>1200–1299</th>
<th>1300–1399</th>
<th>1400–1499</th>
<th>1500–1599</th>
<th>1600–1699</th>
</tr>
</thead>
<tbody>
<tr>
<td>0=no.clitic</td>
<td>NA (0)</td>
<td>50% (1)</td>
<td>57.89% (33)</td>
<td>60.00% (15)</td>
<td>100% (1)</td>
</tr>
<tr>
<td>1=clitic.in.situ</td>
<td>NA (0)</td>
<td>0.00% (0)</td>
<td>3.51% (2)</td>
<td>12.00% (3)</td>
<td>0.00% (0)</td>
</tr>
<tr>
<td>2=clitic.midway</td>
<td>NA (0)</td>
<td>50% (1)</td>
<td>1.75% (1)</td>
<td>0.00% (0)</td>
<td>0.00% (0)</td>
</tr>
<tr>
<td>3=clitic.preposed</td>
<td>NA (0)</td>
<td>0.00% (0)</td>
<td>36.84% (21)</td>
<td>28.00% (7)</td>
<td>0% (0)</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
<td>2</td>
<td>57</td>
<td>25</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 8. Interplay between actionality and clitic climbing in the development of RETURN + INF constructions in Italian

<table>
<thead>
<tr>
<th>ACTIVITY PREDICATES</th>
<th>1200–1299</th>
<th>1300–1399</th>
<th>1400–1499</th>
<th>1500–1599</th>
<th>1600–1699</th>
</tr>
</thead>
<tbody>
<tr>
<td>0=no.clitic</td>
<td>0.00% (0)</td>
<td>94.11% (48)</td>
<td>16.67% (1)</td>
<td>65.74% (71)</td>
<td>66.67% (12)</td>
</tr>
<tr>
<td>1=clitic.in.situ</td>
<td>0.00% (0)</td>
<td>1.96% (1)</td>
<td>33.33% (2)</td>
<td>13.89% (15)</td>
<td>11.11% (2)</td>
</tr>
<tr>
<td>2=clitic.midway</td>
<td>100.00% (1)</td>
<td>0.00% (0)</td>
<td>16.67% (1)</td>
<td>1.85% (2)</td>
<td>5.56% (1)</td>
</tr>
<tr>
<td>3=clitic.preposed</td>
<td>0.00% (0)</td>
<td>3.92% (2)</td>
<td>33.33% (2)</td>
<td>18.51% (20)</td>
<td>16.67% (3)</td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
<td>51</td>
<td>6</td>
<td>108</td>
<td>18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STATE / ACHIEVEMENT / ACCOMPLISHMENT PREDICATES</th>
<th>1200–1299</th>
<th>1300–1399</th>
<th>1400–1499</th>
<th>1500–1599</th>
<th>1600–1699</th>
</tr>
</thead>
<tbody>
<tr>
<td>0=no.clitic</td>
<td>50.00% (1)</td>
<td>58.70% (27)</td>
<td>57.14% (4)</td>
<td>56.35% (71)</td>
<td>50.00% (7)</td>
</tr>
<tr>
<td>1=clitic.in.situ</td>
<td>0.00% (0)</td>
<td>13.04% (6)</td>
<td>14.29% (1)</td>
<td>22.22% (28)</td>
<td>21.42% (3)</td>
</tr>
<tr>
<td>2=clitic.midway</td>
<td>0.00% (0)</td>
<td>6.52% (3)</td>
<td>14.29% (1)</td>
<td>3.18% (4)</td>
<td>7.14% (1)</td>
</tr>
<tr>
<td>3=clitic.preposed</td>
<td>50.00% (1)</td>
<td>21.74% (10)</td>
<td>14.29% (1)</td>
<td>18.25% (23)</td>
<td>21.43% (3)</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>46</td>
<td>7</td>
<td>126</td>
<td>14</td>
</tr>
</tbody>
</table>

For Spanish, Table 6 shows that activity predicates acquire clitic climbing later than other predicate types. For instance, whereas in the 14th century Spanish texts clitic climbing is attested in 26.67 percent of RETURN + INF constructions with state/achievement/accomplishment predicates, but with activity predicates this number drops to 3.23 percent. In the Catalan data in Table 7, RETURN + INF constructions only start appearing with state/achievement/accomplishment in the 15th century. However, already at this point clitic climbing is attested in a total of 38.59 percent of RETURN + INF constructions with state/achievement/accomplishment predicates, while for activity predicates clitic climbing is only attested in a total of 20.41 percent of the cases. The same trend can be found in the Italian data in Table 8. Looking at the 14th century, we find that whereas clitic climbing is attested in a total of 28.26 percent of RETURN + INF constructions with state/achievement/accomplishment predicates, for activity predicates clitic climbing is only attested in 3.92 percent of the cases.

5.4 Inferential statistical analysis

As pointed out in Section 4.3, due to the fact that frequency distributions can always be epiphenomenal, the inspection of the frequency distributions in itself is not sufficient to prove whether the relevant predictions apply. Table 9 summarizes the results from the regression models. The crucial values in the description of the results are the coefficient (Est.) and the p-value (p).\(^7\) The coefficient indicates the influence of the predictor variable on the dependent variable time (in comparison to the reference level). For instance, in the regression model for Spanish, the coefficient of −0.396 for the variable ACTIVITY indicates that in comparison to states, achievements and accomplishments (ACTIVITY=FALSE), activities (ACTIVITY=TRUE) occur earlier in RETURN + INF constructions (specifically, to the degree of 0.396 on the TIME variable, i.e. around 40 years). The p-value refers to whether or not the influence of the dependent variable is statistically significant, where a p-value smaller than .05 indicates statistical significance, thus ruling out the possibility that the observed effect is due to chance. In the Spanish regression model, the variable ACTIVITY shows a p-value of <.001, indicating high statistical significance.

\(^7\) The p-values were calculated using the R-package lmerTest by Alexandra Kuznetsova, Per Bruun Brockhoff, and Rune Haubo Bojesen Christensen.
Table 9. Generalized linear mixed-effects regression analysis for Spanish, Catalan, and Italian

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>LEVEL</th>
<th>SPANISH Est.</th>
<th>p</th>
<th>CATALAN Est.</th>
<th>p</th>
<th>ITALIAN Est.</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>FALSE</td>
<td>3.791</td>
<td>0.000</td>
<td>3.346</td>
<td>0.000</td>
<td>3.676</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>TRUE</td>
<td>-0.396</td>
<td>0.000</td>
<td>-0.254</td>
<td>0.018</td>
<td>-0.107</td>
<td>0.467</td>
</tr>
<tr>
<td>Activity</td>
<td>0=no.clitic</td>
<td>Reference level</td>
<td></td>
<td>Reference level</td>
<td></td>
<td>Reference level</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1=clitic.in.situ</td>
<td>0.076</td>
<td>0.522</td>
<td>0.354</td>
<td>0.128</td>
<td>0.115</td>
<td>0.520</td>
</tr>
<tr>
<td></td>
<td>2=clitic.midway</td>
<td>0.001</td>
<td>0.988</td>
<td>-0.809</td>
<td>0.028</td>
<td>-0.281</td>
<td>0.377</td>
</tr>
<tr>
<td></td>
<td>3=clitic.preposed</td>
<td>0.182</td>
<td>0.000</td>
<td>-0.055</td>
<td>0.662</td>
<td>-0.037</td>
<td>0.834</td>
</tr>
<tr>
<td>CC x activity</td>
<td>0=no.clitic x ActivityTRUE</td>
<td>Reference level</td>
<td></td>
<td>Reference level</td>
<td></td>
<td>Reference level</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1=clitic.in.situ x ActivityTRUE</td>
<td>-0.449</td>
<td>0.034</td>
<td>0.554</td>
<td>0.357</td>
<td>0.325</td>
<td>0.244</td>
</tr>
<tr>
<td></td>
<td>2=clitic.midway x ActivityTRUE</td>
<td>0.119</td>
<td>0.497</td>
<td>0.858</td>
<td>0.084</td>
<td>0.330</td>
<td>0.534</td>
</tr>
<tr>
<td></td>
<td>3=clitic.preposed x ActivityTRUE</td>
<td>0.214</td>
<td>0.035</td>
<td>0.479</td>
<td>0.004</td>
<td>0.629</td>
<td>0.015</td>
</tr>
</tbody>
</table>

The results from the regression analysis can be described as follows. First, as indicated by the negative coefficients of Activity (−0.396 and −0.254), Spanish and Catalan RETURN + INF constructions appear significantly earlier with activity predicates than with other predicates. In the model for Italian, this effect does not reach statistical significance. This might reflect the observation from the quantitative survey in Section 5.1 that Italian RETURN + INF constructions are bound to activity predicates considerably longer than Spanish and Catalan RETURN + INF constructions.

Second, Spanish RETURN + INF constructions with preposed clitics appear significantly later in time, with a positive coefficient of 0.182. No comparable significant effects are found for Catalan and Italian. Note however that the lack of the main effect for CC can be explained by reference to the interaction between CC and Activity, which reduces the effect strength of the main effect CC. A second regression analysis for Catalan and Italian in which the interaction effect was left out indeed revealed statistical significance for the level “3=clitic.preposed” in both languages in the same way as in Spanish. This strongly suggests that with more data, the effect would acquire statistical significance in the complete model as well.

Third, the results coincide for all three languages regarding the interaction between CC and Activity. In the RETURN + INF constructions from all three languages, activity predicates start appearing with preposed clitics significantly later than state, achievement, and accomplishment predicates. In addition, it is interesting to note that the strength of the effect (in terms of the value for Est.) differs. Thus, the effect size is smallest for Spanish (0.214) and greatest for Italian (0.629), with Catalan in between (0.479). This can be taken to suggest differences in the speed of grammaticalization of RETURN + INF constructions in the three languages: the lexical expansion from state / achievement / accomplishment predicates to activity predicates was fastest for Spanish (around 21 years), slower for Catalan (around 48 years) and slowest for Italian (around 63 years).\(^8\) These differences in the

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\(^8\) Linear regression models like the one conducted in this study differ from logistic regression models in that they are not affected by omitted variables (see Mood 2010). This means that in contrast to logistic regression
The chronology of the development of RETURN + INF constructions are apparently once again correlated with productivity differences in the modern stages of these languages.

The inferential analysis presented in this section has thus added to the overall analysis in that it has demonstrated that most of the results from the descriptive analysis are not due to chance but are robust trends that show statistical significance.

6. Discussion of results

From the descriptive and inferential analyses presented in the last section, the following panorama of the development of RETURN + INF constructions emerges. Hypothesis 1 (RETURN + INF constructions are attested earlier state/achievement/accomplishment predicates than with activity predicates) was clearly not confirmed by the analysis. Rather, the analysis demonstrated that in older stages of Spanish, Catalan and Italian, most RETURN + INF constructions express either a motion event meaning, or a “continuative” meaning that serves to resume a previous topic in the text and that might be metaphorically derived from the motion event meaning. However, the analysis confirmed the expectation of a diachronic trend towards the use of clitic climbing in Romance RETURN + INF constructions (Hypothesis 2). This finding suggests that the grammaticalization of Romance RETURN + INF constructions was accompanied by a restructuring process mirroring the loss of syntactic autonomy of the verb tornar(e) in these constructions. Most importantly, however, the analysis provided empirical evidence for the assumption that the expansion of the use of clitic climbing affected state/achievement/accomplishment predicates before activity predicates. This goes to show that the semantic change from the motion event reading to the iterative reading did not start in the type of early RETURN + INF constructions characterized as “continuative” nor in other early RETURN + INF constructions with activity predicates. Rather, the analysis suggests that the first type of RETURN + INF tokens that allowed for an iterative interpretation were RETURN + INF tokens with state, achievement or accomplishment predicates, such as the early token in (12) at the end of Section 2. In the grammaticalized iterative function, RETURN + INF occurred later with activity predicates than with these other predicates. In other words, the grammaticalization of RETURN + INF was bound to its use with predicates that allow for both a restitutive and a repetitive reading. The grammaticalization of RETURN + INF with activity predicates occurred at a later point in time. This finding supports the assumption of a grammaticalization path in which the restitutive iterative meaning preceded the repetitive iterative meaning, as illustrated in (45).

(45) Change of location > Restitution > Repetition

The analyses from the last section also suggest that this grammaticalization process was much slower in Italian than in Spanish and Catalan. It can be hypothesized that these differences in the historical development of iterative constructions can also be explained by recurring to the distinction between restitutive and repetitive. In Romance languages, three major types of iterative expressions can be identified: RETURN + INF constructions, re-prefixes and again-adverbials. Interestingly, there appears to be an inverse correlation between the possibility for re-prefixes and RETURN + INF constructions to express
restitution and repetition. Consider the following examples from Catalan (Gavarró and Laca 2002: 2702):

(46) Catalán
Van re=obrir un procès contra aquest polític.
go.PRS.3PL again=open a trial against this politics
‘They reopened a trial against these politics’
* ‘They again opened a trial against these politics’

(47) Catalán
Van tornar a obrir un procès contra aquest polític.
go.PRS.3PL return to open a trial against this politics
‘They reopened a trial against these politics’
‘They again opened a trial against these politics’

According to Gavarró and Laca, un procès in (46) can only refer to the same trial and not a new, different, trial:

…the verbs with the prefix –re do not admit variation regarding the reference of the indefinite expressions: in Van recobrir un process contra aquest politic, the speaker is necessarily referring to the same trial, whereas in Van tornar a obrir un procès contra aquest politic it is possible that the speaker refers to two different trials. (Gavarró and Laca 2002: 2702, transl. MR)

In other words, the re– prefix appears to exclude a repetitive reading in Modern Catalan, whereas the RETURN + INF construction in (47) can receive either reading. However, it appears that in Modern French (48) and Italian (49) the re– prefix appears to allow a repetitive reading:

(48) French
il pen-sait que cela pou-vait ré=ouvrir un
he think-PST.IPV.3SG that this can-PST.IPV.3SG again=open a
nouveau procès sur l’Affaire Dreyfus
new trial about the=affair Dreyfus
‘he thinks that this will again open a new trial about the Dreyfus affair’
(http://lewebpedagogique.com/affairejudiciaire, accessed 14 April 2015)

(49) Italian
...si può solo ri=aprire un nuovo processo
REFL can.PRS.3SG only again=open a new trial
‘…one can only again open a new trial’

Consequently, it appears that in Romance languages, there is a paradigmatic opposition between prefixation with re– and RETURN + INF constructions that concerns the distinction between restitutive and repetitive readings: if a language has a highly productive RETURN + INF construction, prefixation with re– can be applied in fewer usage contexts. This hypothesis might have explanatory potential for the finding from this paper that in comparison to Spanish and Catalan, the grammaticalization of Italian RETURN + INF
constructions was a slower and weaker process. It would be very interesting for future studies to address this topic in depth.

It is also important to address the limitations of the approach taken in this study. First, it should be noted that especially the Catalan and Italian corpora of RETURN + INF constructions used in this study are rather small in size. As shown in the section on the inferential statistical analysis (5.2), it is possibly because of the small size of these corpora that in the regression models for Catalan and Italian, some of the levels of “clitic climbing” did not reach statistical significance after the inclusion of the interaction between clitic climbing and actionality. Collecting further data, possibly from other text genres, of Catalan and Italian RETURN + INF constructions could remedy this problem. A second point that is also due to the limited size of the corpora used concerns the range of contextual variables that were investigated. Specifically, it is possible that the effects observed in the analysis change if other contextual variables are included. For instance, it might be interesting to analyze aspectual morphology (in particular, perfective vs. imperfective aspect) on the auxiliary, since aspect may have an influence on the interpretation of a RETURN + INF construction as restitutive or repetitive.

7. Conclusion and outlook

This paper has established and validated the hypothesis that in the grammaticalization of three Romance RETURN + INF constructions, restitutive meanings preceded repetitive meanings. Besides the first exhaustive description of the historical trajectory of these constructions, the paper has raised at least three points that might serve to further advance our knowledge of language change.

First, the hypothesis of the restitutive – repetitive pathway in the grammaticalization of RETURN + INF constructions was partly based on the observations by Fabricius-Hansen (2001) and Wälchli (2006) that the restitutive meaning appears to be more primary for adverbials with the meaning ‘again’ than the repetitive meaning. Consequently, the results of this study could be taken to suggest that the historical tendency observed for RETURN + INF constructions might also apply to AGAIN-adverbials.

Second, I observed a potential correlation between the degree to which the semantic change from restitutive to repetitive meanings was implemented in RETURN + INF constructions and the possibility to use prefixation with –re viz. –ri in the Romance languages with a repetitive meaning. It would be interesting for further studies to test the validity of this assumption, as well as its implications for the historical development of the prefixation with –re viz. –ri in Romance and other languages.

Third, the paper has suggested a new and innovative methodology that combines functional and formal explanations of language change in order to describe the grammaticalization of a construction. It has also elaborated a statistical method that makes use of this combination of parameters to model functional change in constructions and compare these processes of change across languages.
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